



www.venusohs.com

Comfort & Fit

Wherever you are...

The Company

VENUS Safety & Health Pvt. Ltd. is a global quality manufacturer of Personal Protective Equipments (PPE) based in Navi Mumbai.

- VENUS, a 100% Indian company has grown manifold in volume and revenues since its inception in year 1986.
- A continuous urge to improve the performance of existing products & development of new products is a driving force for its experienced team of professionals. This combination has helped the company stay ahead in this competitive industry.



OUR MISSION

"To deliver occupational safety and healthcare products through ingenious use of technology and research."



NECK UP SPECIALIST

Our Neck-up product range includes:

- **Respiratory Protective Devices:**
Particulate filtering masks, half masks, full face masks, chemical filters, PAPR, SCBA & airline apparatus
- **Hearing Protective Devices:**
Ear plugs and ear-muffs
- **Head Protective Devices:**
Helmets
- **Eye & Face Shield Devices:**
Spectacles, goggles and face shields



SALES CAPABILITY

- The needs of our global partners for design and development of new products / packaging are supported by our sales office in UAE & product realisation team in India.



- We support market development activities of 200+ distributor partners across India.

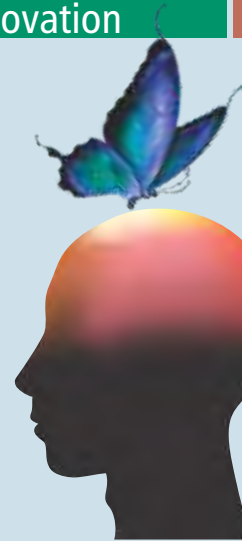
R&D, PATENTS

We are among the foremost specialist respirator manufacturers in India.

We constantly keep abreast of the latest global standards, to develop the new products.

Our product design team has developed and incorporated several patented features in products for customer benefits.

Innovation



We endeavor to pre-empt customer needs and study how our products and services must be worked on to deliver the requirement when it arises. Our team of innovators then pushes itself to fill in the gap.

“Stay Cool Butterfly Vent Valve”

Our latest innovation is inspired by the butterfly. The **Stay Cool Butterfly Vent Valve**, now incorporated in the disposable respirator series, is widely preferred by users. The design facilitates easy and comfortable breathing. The Valve efficiently expels warm exhaled air high in CO₂% & allows fresh air to enter through the filter maximizing the comfort to the user. This seemingly simple invention is the most dynamic change we have brought about in the respirators.

The Butterfly Vent Valve is part of our endeavour to combine inspiration from mystique nature with value-based innovations to our products.



FACTORY CAPABILITY

- Over a million units manufacturing per day
- Cost competitive products
- Primary materials manufacturing: nonwovens, plastics parts processing
- Independent tool room
- Balance of dedicated young trained workforce and experienced leaders
- International sea / air port proximity & Logistics capability
- Proximity to National transport and logistics hub.



NORMS & PROTECTING PEOPLE

VENUS manufacturing plants operates as per the safety standards.

VENUS adheres to the National Factories Act & Rules in all its manufacturing plants and ensures compliance with these regulations through its entire supply chain.



SUPPLY CHAIN

VENUS has long-standing, strategic partners for development, manufacture and supply of materials and intermediate products. On-site representatives ensure that high quality practices are adhered to consistently.

The products comply to:

- Quality Management Systems
- Free from harmful substances
- Social standards
- Green approach



QUALITY ASSURANCE



- Quality Assurance practices at VENUS meet exacting standards.
- There are stringent check points at all stages: incoming material, intermediate stages of manufacturing and stages of outgoing products.



TESTING CAPABILITY

Our laboratory is equipped with modern equipments to test neck up products for:

- Respiratory protection
- Hearing protection
- Head protection
- Eye protection



APPROVALS

The processes and procedures in all VENUS manufacturing plants have been certified in accordance with ISO 9001:2008 and are audited annually by BUREAU VERITAS.

The certified facilities produce and supply products conforming to:

American Standards 42 CFR Part 84

European Standards EN 149 EN140 EN143 EN14387

Malaysian SIRIM Standards

AS/NZS Standards 1716:2012

Indian Standards IS 9473 IS 14746 IS 14166 IS 15323

IS 10245(II) IS 10245(III) IS 2925 IS 9167

IS 5983

Respiratory Protection

Respiratory Protection Need:

Workplace concentration of contaminants (dust, mist, smoke, vapour or gases) should be reduced or minimized by adopting appropriate engineering control measures. Subject to effective engineering control being not feasible, suitable performing respirators shall be used.

The purpose of respiratory protection is to ensure that the workers are adequately protected from inhaling excessive airborne contaminants or oxygen deficient air.

Workers should not be exposed to airborne contaminants in excess of their permissible exposure levels, wherever possible.



Health Effects

Respiratory Hazard and their Effects

Oxygen deficiency

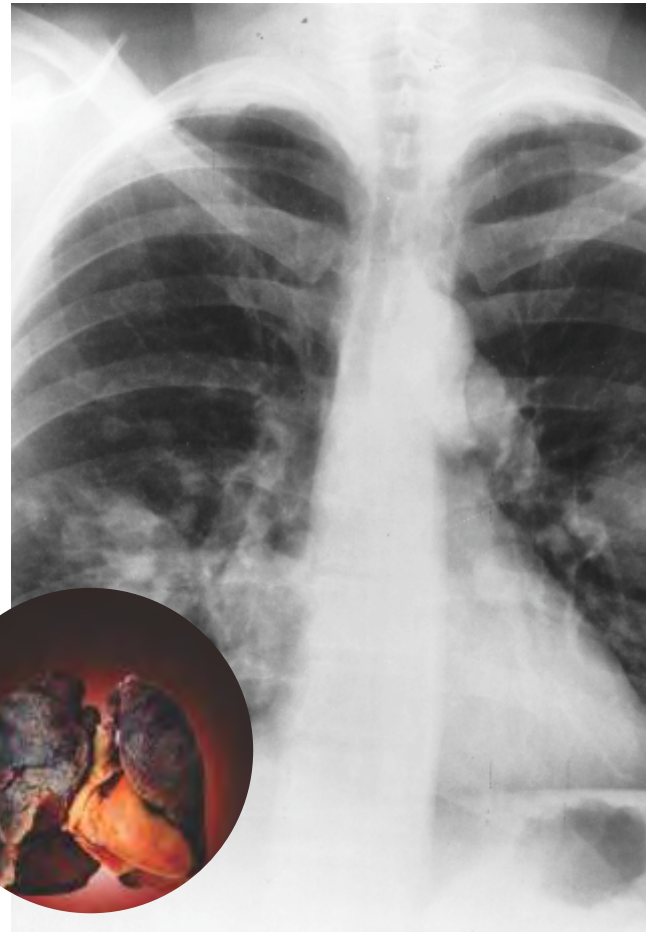
- Normal - 21% by Vol. in air
- Breathing - 17%
- Dizziness - 13%
- Unconsciousness / Death - 8 to 10%

Gaseous & Vapour contaminants

Affect supply of oxygen to body, damage organs and cause respiratory paralysis, inflammation, unconsciousness &/or death

Particulate contaminants

- **Relatively inert** - (Gypsum, Marble): Minor irritation and discomfort
- **Pulmonary Fibrosis producing** - (Quartz, Crystalobalite, Tridymite, Coal, Asbestos): Nodulation and fibrosis in the lungs
- **Cancer producing** - (Asbestos, Chromates, Radioactive particulates): Causing cancer after 20 to 40 years
- **Chemical irritants** - (Acid mist, Alkali mist): Irritation, Inflammation, Ulceration in upper respiratory tract
- **Systemic poison** - (Lead, Manganese, Cadmium): Pathologic reactions
- **Allergy producing** - (Pollens, Isocyanates, Spices) Itching, sneezing and asthma
- **Febrile reaction producing** - (Zinc, Copper): Chills and fever



Common Definitions

Respiratory Protection Definitions

Particulate: The generic name of dust, mist, smoke and fumes.

Fume: Fine solid aerosol which may be chemically generated or of metallic origin.

Aerosol: Suspension of solid, liquid or solid and liquid particles in a gaseous medium, having a negligible falling velocity (generally considered to be less than 0.25 microns).

Vapour: Gaseous phase of a substance which is liquid or solid at 20°C and 1 bar (absolute).

Gas: An air-like fluid substance which expands freely to fill any space available, irrespective of its quantity.

Fog: An atmosphere in which visibility is reduced because of a cloud of some substance.

Mist: General term denoting liquid aerosols.

Smoke: General term denoting an aerosol generated by incomplete combustion.

Hazardous Atmosphere: An atmosphere that contains a contaminant in excess of its permissible exposure level or that is oxygen deficient.

Contaminant: Undesirable solid, liquid or gaseous substance in the air.

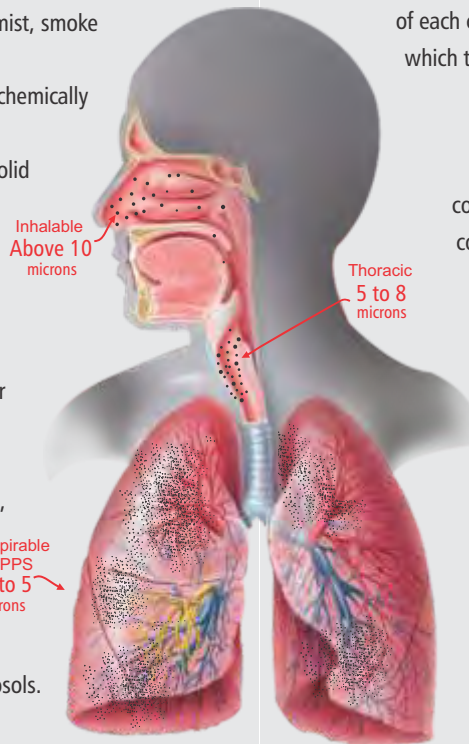
Dust: General term denoting solid particles (see also Fume and Smoke).

Nuisance Dust: These dust may dissolve and pass into the blood stream or may remain in the lungs either producing local or systemic effects. Dust or grain, flour, wood, etc, are common examples. But these dust may cause irritation or produce allergy.

Values

Immediately Dangerous to Life or Health

(IDLH) Level: Any atmosphere that poses an immediate hazard to life or poses immediate irreversible debilitating effects on health or impairs the ability to escape.



Time Weighted Average (TWA): The concentration of a contaminant in air determined by adding together the products of each concentration and the corresponding time over which that concentration was measured, and dividing the sum by the total time over which the measurements were taken.

Threshold Limit Value (TLV): Air-borne concentration of toxic substances and represents conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect.

Protection Factor: Ratio of the concentration of contaminant present in the ambient atmosphere to its concentration in the air inhaled by the wearer of a respiratory protective device.

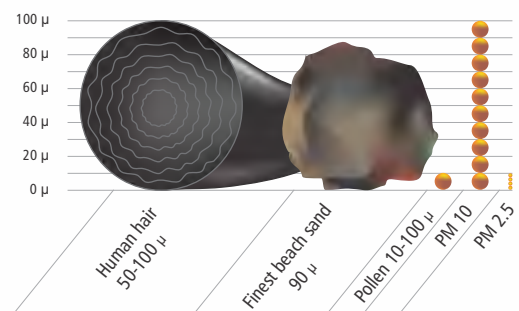
Types of RPD

Negative Pressure Respirator: A respirator in which the air pressure inside the respiratory inlet covering is less than the ambient air pressure during inhalation.

Positive Pressure Respirator: A respirator in which the pressure inside the respiratory inlet covering is higher than the ambient air pressure.

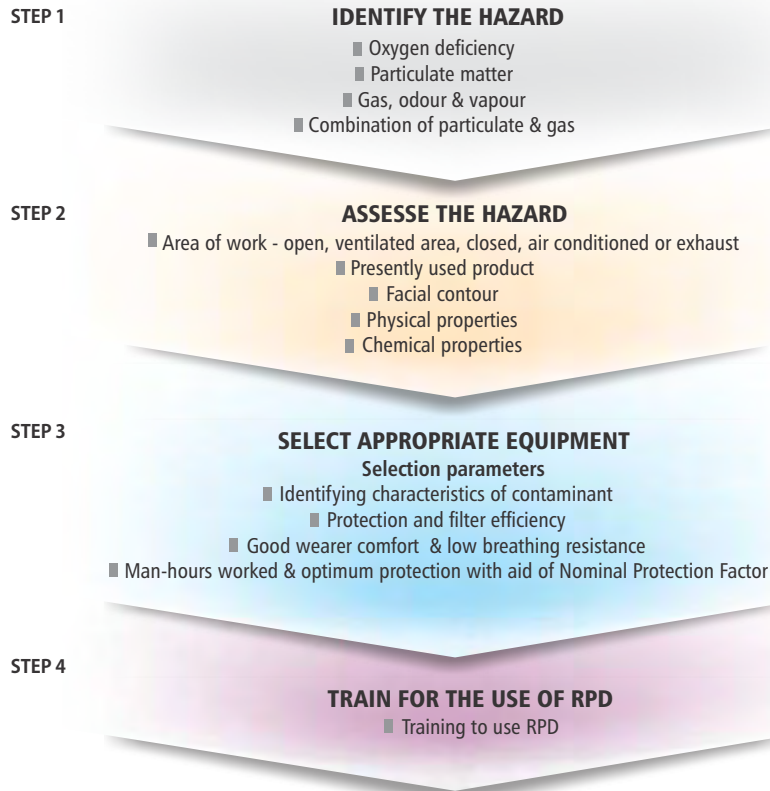
M.U.L.: Maximum Usage Level

Particles Visible to Human Eye
Greater than or equal to 10 micron (μ)



How to choose the appropriate RPD

'4' STEPS FOR SELECTION OF RPD



User Selection Guide

Basic Type	Design	Comments
Filtering devices dependent on ambient atmosphere	Disposable half mask respirator (the classic 'dust mask' design). In Low P1, Medium P2, High efficiency P3	For various types of particulates such as dust, fibres, mist and fumes Some are fitted with exhalation valves to make breathing easier
	Re-usable half mask respirator. In Low-1, Medium-2, High-3 efficiency or capacity	For various types of particulates or vapours and gases depending on fitted filter cartridge. Some have combination filters
	Re-usable full face mask	As above, but incorporates visor for face protection
	Powered hood/helmet with hip mounting unit. Positive pressure respirator	Powered fan and filter worn on a belt and connected via a hose to the face piece
Breathing Apparatus (BA) supplying breathable air. Positive pressure respirator. Independent of ambient atmosphere.	Constant flow airline BA	For all contaminants <ul style="list-style-type: none"> ● Usually uses a full face mask/hood with long hose ● Continuous supply of air from a compressor
	Self Contained BA Could be open or close circuit	For all contaminants <ul style="list-style-type: none"> ● Usually full face mask has a demand valve arrangement ● Compressed air supply is carried in cylinder on the wearer's back ● Sometimes worn inside a gas-tight suit

Types of Filtering devices dependent on ambient atmosphere

Disposable Respirator



Reusable half & full face respirators



Powered air and supplied air systems



Guide to feature icons

Composite filter media

Prefilter coarse dust

- Does not clog the filter
- High dust holding capacity
- Can be used over longer period of time

Outer filter media

- Sheds minimum lint
- Application friendly

Soft Inner layer

- Comfort to the wearer
- Skin friendly even when perspiring

Superior technology Micro fine filter media

- Protects from respirable suspended particulate matter
- Composite of multiple layers pre-filter, fine filter and skin comfort layer

StayCool
BUTTERFLY VENT VALVE

Effectively removes
CO₂ & heat
build-up

Promotes easy
communication

Provides
breathing comfort

Unique Adjuster Beads

- Gives customized fitting option based on size of the user's head and preference of positions
- Provides optimum comfort

Transparent Valve

Transparent valve clearly demonstrates the performance of valve

It also indicates fogging levels
Fogging indicates good fitting of RPD

Full foam seal
For leak proof comfortable fit

Half Foam Seal
The soft material of the foam cushions the nose bridge thereby providing comfort as well as fit

Nose liner
Provides fit and comfort
Prevents leakage

User instructions in multiple languages / Bi-lingual
For easy acceptance by different wearers

Pharma-Food industry variant available
No Metal exposure
Minimum lint minimizes the risk of product contamination

Anti Clogging (NR D)
Having passed dolomite test, they resist clogging even in very high dust environments.

Drop Down
Can be dropped down hanging when not in use

Activated carbon layer
For absorption of Nuisance level of odour and vapour

Outer flame retardant layer
Protects from welding sparks

Colour coded Headband

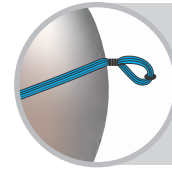
- FFP1
- FFP2
- FFP3

Compatibility
Compatible with Venus head protection and eye protection devices

V-44 +

User friendly pocket design

Entry level value product



Unique fit adjusters
 ■ Provides optimum protection & comfort



ISI Approved

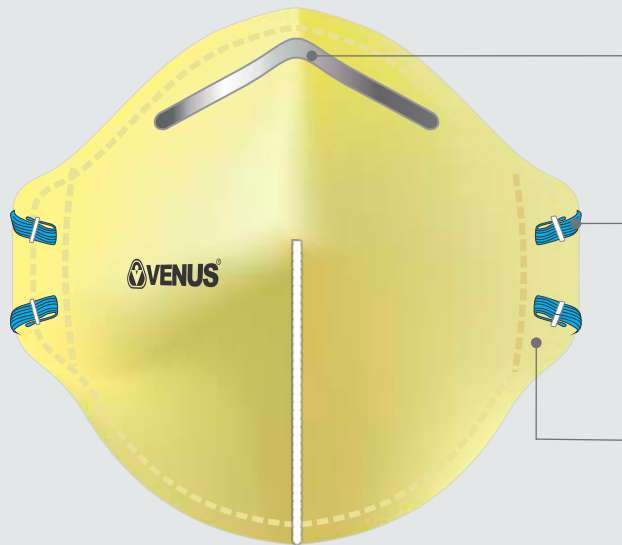
- FFP1 Class
- Filters at least 80% solid particles

Flat fold "V" style

- User friendly pocket design
- Easy to store while not in use
- "V" style for large surface area

Superior technology micro fine filter media

- Protects from respirable suspended particulate matter
- Composite of multiple layers- pre-filter, fine filter and skin comfort layer



Special aluminium nose clip

- For snug fit
- Avoids fogging of eyewear

Knitted textile elastic


- Long life
- Skin friendly
- Does not deform in high temperature

Stapled outside filter area

- Leakproof
- Avoids puncture



VENUS V-44 +

CLASS: FFP1 S 
 Protection: Solid Dust / Mist
 M.U.L: Upto 4 x TLV

Item #	Colour	Elastic
14337	YELLOW	STAPLED



<p>Multi-layered</p> 	<p>Bi-lingual User Instructions</p> 	<p>Adjustable Beads</p> 	<p>Compatibility</p> 	<p>Drop down</p> 
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Application examples

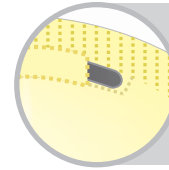
Agriculture	Pesticides, Insecticides, Grain dust
Construction	Sanding, Drilling, Cutting
Ceramics	Material mixing
Mining	Drilling, Material handling
Textiles	Spinning, Weaving



V-44 ++ Style Flat Fold "C"

Pocket style with inside nose clip

Held securely in place within the layers
Entry level value product



Embedded nose clip inside media
No loose parts, so no risk to safety in production



CML-0007143057

ISI Approved

- FFP1 Class
- Filters at least 80% solid particles

Flat fold "C" style

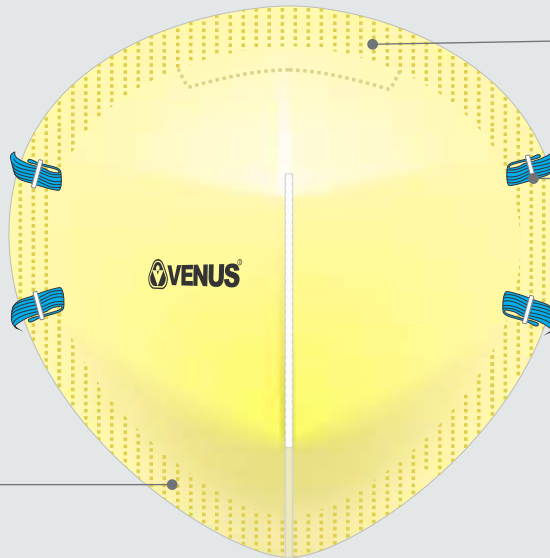
- User friendly
- Stylish low profile design
- Easy to store while not in use

Superior technology micro fine filter media

- Protects from respirable suspended particulate matter
- Composite of multiple layers- pre-filter, fine filter and skin comfort layer

Dot pattern edges

- For soft feel



Latex free knitted textile elastic

- Long life
- Skin friendly
- Does not deform in high temperature

Stapled outside filter area

- Leakproof
- Avoids puncture

Unique fit adjusters (44++ & 4400)

Provides optimum protection & comfort



New! 2016

DHUL RAKSHAK

CLASS: FFP1 S

Protection: Solid Dust / Mist

M.U.L: Upto 4 x TLV

Item #	Colour	Rubber
14375	YELLOW	STAPLED H/BAND
14384	GREY	STAPLED H/BAND
14385	WHITE	EAR LOOP ELASTIC



VENUS V-44 ++

CLASS: FFP1 S

Protection: Solid Dust / Mist

M.U.L: Upto 4 x TLV

Item #	Colour	Elastic
14320	YELLOW	STAPLED
14340	GREY	STAPLED

VENUS V-4400

CLASS: FFP1 S

Protection: Solid Dust / Mist

M.U.L: Upto 4 x TLV

Item #	Colour	Elastic
14324	LIGHT BLUE	SEWN
14344	WHITE	SEWN

Application examples

Agriculture	Pesticides, Insecticides, Grain dust
Construction	Sanding, Drilling, Cutting
Ceramics	Material mixing
Mining	Drilling, Material handling
Textiles	Spinning, Weaving

Bi-lingual User Instructions



Compatibility



Multi-layer



Drop down

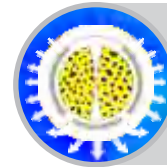


Adjustable Beads



V-410 Style Flat Fold BIG

User friendly large pocket design
Easy to store while not in use



- Stay cool butterfly vent valve**
- Provides breathing comfort and promotes easy communication
 - Effective removal of heat build-up



ISI Approved

European Approval

Anti Clogging (NR D)

Having passed dolomite test, they resist clogging even in very high dust environments

Superior microfibre media

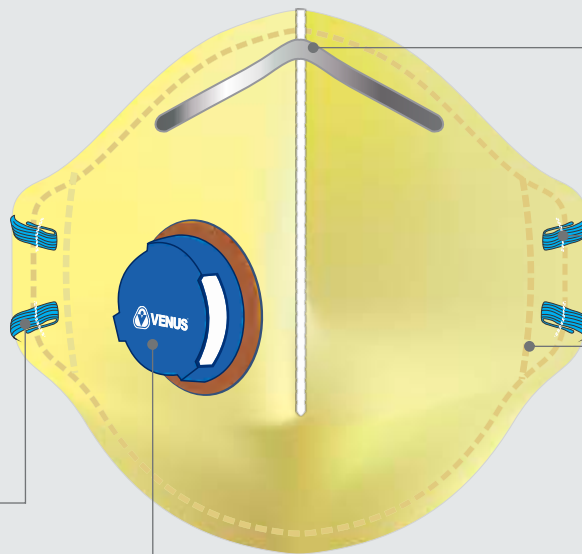
Provides protection against sub-micron particles, fine dusts, water/oil based liquid mist and biological agents e.g. TB, SARS and pandemic influenza

Color coded fittings

- Allows easy identification
- Denotes the level of protection

Flat Fold style

- Large pocket style design
- Easy and compact to store while not in use
- Enhanced protection & comfort



Aluminum nose clip

- Leak-proof fit
- Disallows fogging of eyewear

Unique fit adjusters

Provides optimum protection & comfort

Latex free textile elastic

- Long life
- Skin friendly
- Does not deform in high temperature

Elastic fitted outside filter area

- Leakproof
- Avoids puncture

Nose liner (V-430 SLV)

- Prevents leakage
- Provides fit and comfort

Choice of different colours

To suit user conditions

Compatibility

Compatible with Venus head protection and eye protection devices

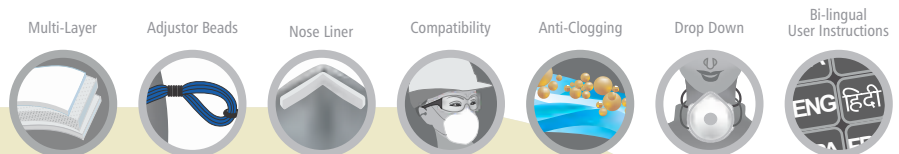
Bi-lingual user instructions

For easy acceptance by different wearers



Stay cool butterfly vent valve

- Provides breathing comfort and promotes easy communication
- Effective removal of heat build-up



Application examples

Agriculture
Cement
Ceramics
Construction

Pesticides, Insecticides, Grain dust
Crushing, Bagging, Cement handling
Material mixing
Sanding, Drilling, Cutting

Engineering

Mining
Pharmaceuticals
Textiles
Tyre

Sand Blasting, Powder coating,
Buffing, Cutting
Drilling, Material handling
Bulk drugs, Material handling
Spinning, Weaving
Carbon black





VENUS V-410 S

CLASS: FFP1 S

Protection: Solid Dust / Mist

M.U.L: Upto 4 x TLV

Item #	Colour	Elastic
14146	YELLOW	STAPLED
14147	GREY	STAPLED

VENUS V-410 SL

CLASS: FFP1 NR D

Protection: Solid Dust / Oil Mist

M.U.L: Upto 4 x TLV

Item #	Colour	Elastic
14015	YELLOW	SEWN
14010	GREY	SEWN

VENUS V-420 SL

CLASS: FFP2 NR D

Protection: Solid Dust /Oil Mist

M.U.L: Upto 12 x TLV

Item #	Colour	Elastic
14036	WHITE	SEWN



VENUS V-410 V

CLASS: FFP1 S

Protection: Solid Dust / Mist

M.U.L: Upto 4 x TLV

Exhalation Vent Valve

Item #	Colour	Elastic
14153	YELLOW	STAPLED
14148	GREY	STAPLED

VENUS V-410 SLV

CLASS: FFP1 NR D

Protection: Solid Dust / Oil Mist

M.U.L: Upto 4 x TLV

Exhalation Vent Valve

Item #	Colour	Elastic
14026	YELLOW	SEWN
14019	GREY	SEWN

VENUS V-420 SLV

CLASS: FFP2 NR D

Protection: Solid Dust /Oil Mist

M.U.L: Upto 12 x TLV

Exhalation Vent Valve

Item #	Colour	Elastic
14039	WHITE	SEWN
14038	GREY	SEWN

VENUS V-430 SLV

CLASS: FFP3 NR D

Protection: Solid Dust / Oil Mist

M.U.L: Upto 50 x TLV

Exhalation Vent Valve

Item #	Colour	Elastic
14056	GREY	SEWN
14339	WHITE	SEWN



VENUS V-9420-V

CLASS: FFP2 V

Protection: Solid Dust / Mist

M.U.L: Upto 12 x TLV

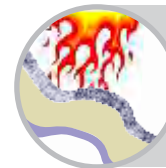
Net reinforcement shell

Exhalation Vent Valve

Item #	Colour	Elastic
14353	GREY	SEWN

V-425 / V-414 Style Flat Fold BIG

Flame retardant + Granular activated carbon with particle filter



Activated carbon & Flame retardant outer layer
 ■ Protects from welding sparks



EN 149:2001+A1:2009

European Approval

Anti Clogging (NR D)

Having passed dolomite test, they resist clogging even in very high dust environments

Color coded fittings

- Allows easy identification
- Denotes the level of protection

Low profile design

Fits wide range of face contours

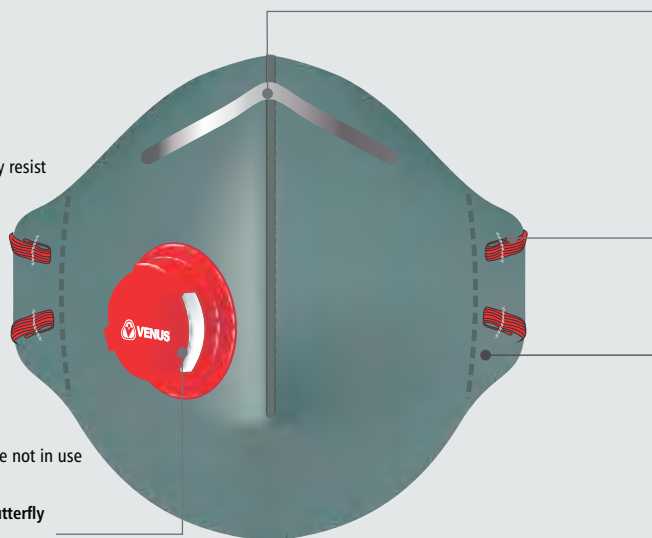
Flat Fold style

- Large pocket style design
- Easy and compact to store while not in use



Stay cool butterfly vent valve

- Provides breathing comfort and promotes easy communication
- Effectively removes heat build-up



Aluminum nose clip

- Leak-proof fit
- Disallows fogging of eyewear

Compatibility

Compatible with Venus head protection and eye protection devices

Latex free textile elastic

- Long life
- Skin friendly
- Does not deform in high temperature

Elastic fitted outside filter area

- Leakproof
- Avoids puncture

Nose liner

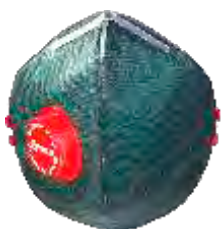
- Prevents leakage
- Provides fit and comfort

Unique fit adjusters

Provides optimum protection & comfort

Bi-lingual user instructions

For easy acceptance by different wearers



VENUS V-4214 SLOV-V

CLASS: FFP1 NR D CE

Protection: Solid Dust / Oil Mist / Nuisance Level of odour, Painting application

M.U.L: Upto 4 x TLV

Exhalation Vent Valve

Activated Carbon Layer



Item #	Colour	Elastic
14394	GREEN	SEWN

VENUS V-414 SLOV-V

CLASS: FFP2 NR D CE

Protection: Solid Dust / Oil Mist / Nuisance Level of odour, Painting application

M.U.L: Upto 12 x TLV

Transparent Exhalation Vent Valve

Activated Carbon Layer

Item #	Colour	Elastic
14370	GREEN	STAPLED
14211	GREEN	SEWN

VENUS V-425 SLOV-V

CLASS: FFP2 NR D CE

Protection: Solid Dust / Oil Mist / Nuisance Level of odour, Welding application

M.U.L: Upto 12 x TLV

Transparent Exhalation Vent Valve

Activated Carbon & Flame Retardant Outer Layers

Item #	Colour	Elastic
14371	GREY	STAPLED
14212	GREY	SEWN
14392	WHITE	SEWN

Transparent Valve



Multi-Layer



Adjustor Beads



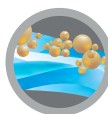
Nose Liner



Compatibility



Anti-Clogging



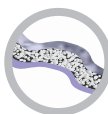
Drop Down



Bi-lingual User Instructions



Activated Carbon Layer



Flame Retardant



Application examples

Engineering

Welding, Sand Blasting, Powder coating, Buffing, Painting, Cutting

**Pharmaceuticals
Other Application**

Bulk drugs, Material handling
Painting

Agriculture

Pesticides, Insecticides

**Battery
Ceramics
Chemical**

Lead handling
Material mixing
Material handling

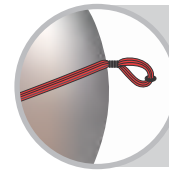
**Automobile
Maintenance work
Shipbuilding
Other Application**

Welding
Welding
Welding
Welding

V-210 Style Convex Seam

Classic collapse resistance shell, seamed filter cover

Maintains the shape for fit and provides high protection



Unique fit adjusters
 ■ Provides optimum protection & comfort



0121
EN 149:2001+A1:2009

European Approval

Advanced technology micro fine filter media

- Provides protection against sub-micron particles, fine dusts, water/oil based liquid mist and biological agents e.g. TB, SARS and pandemic influenza
- Tested for Dolomite clogging test

Color coded fittings

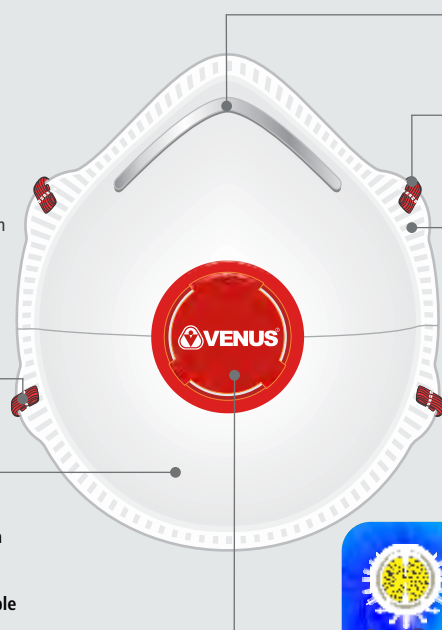
- Easy to identify
- Indicates the level of protection

Convex seam style

- Classic collapse-resistant shell with seamed filter cover
- Maintains high integrity of filter media

Pharma-Food industry variant available

- No Metal exposure
- Minimum lint
- Minimizes the risk of product contamination
- Soft & does not pull/entangle hair



Aluminum nose clip

- Leak-proof fit
- Disallows fogging of eyewear

Braided textile elastic

- Diminishes the risk of reactions to skin allergy
- Does not deform with repeat wears, high temperature
- Soft and does not entangle / pull hair

Elastic sewn outside filter area

- Leakproof
- Avoids puncture

Anti clogging (NR D)

Having passed dolomite test, they resist clogging even in very high dust environments

Compatibility

Compatible with Venus head protection and eye protection devices

Bi-lingual user instructions

For easy acceptance by different wearers

Stay cool butterfly vent valve

- Quickly releases hot, humid exhaled breath
- Provides breathing comfort even in work situations involving heat, humidity, or long periods of wear



VENUS V-210 SL

CLASS: FFP1 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 4 x TLV

Item #	Colour	Elastic
12047	WHITE	SEWN

VENUS V-210 SLV

CLASS: FFP1 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 4 x TLV

Exhalation Vent Valve

Item #	Colour	Elastic
12086	WHITE	SEWN

VENUS V-220 SL

CLASS: FFP2 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 12 x TLV

Item #	Colour	Elastic
12108	WHITE	SEWN

VENUS V-220 SLV

CLASS: FFP2 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 12 x TLV

Exhalation Vent Valve

Item #	Colour	Elastic
12109	WHITE	SEWN

VENUS V-2430 SLV

CLASS: FFP3 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 50 x TLV

Exhalation Vent Valve

Half foam seal

Item #	Colour	Elastic
12268	WHITE	SEWN

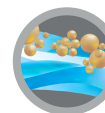
Multi-Layer

Adjustor Beads

Nose Liner

Anti-Clogging

Bi-lingual User Instructions



Application examples

Agriculture
Cement
Ceramics
Textiles
Tyre

Pesticides, Insecticides, Grain dust
 Crushing, Bagging, Cement handling
 Material mixing
 Spinning, Weaving
 Carbon black

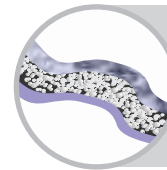
Construction
Engineering
Mining
Pharmaceuticals

Sanding, Drilling, Cutting
 Sand Blasting, Powder coating, Buffing, Cutting
 Drilling, Material handling
 Bulk drugs, Material handling



V-2400 Style Convex Seam

Flame retardant + Granular activated carbon with particle filter



Activated Carbon Layer
 ■ For absorption of nuisance level of odour and vapour



CML-0007143057

ISI Approved

Superior technology

micro-fine filter media

- Protects micro-fine respirable suspended particulate matter
- Higher dust holding capacity
- Doesn't let the filter clog thereby increasing the respirator's life

Color coded fittings

- Allows easy identification
- Denotes the level of protection

Low profile design

Fits wide range of face contours

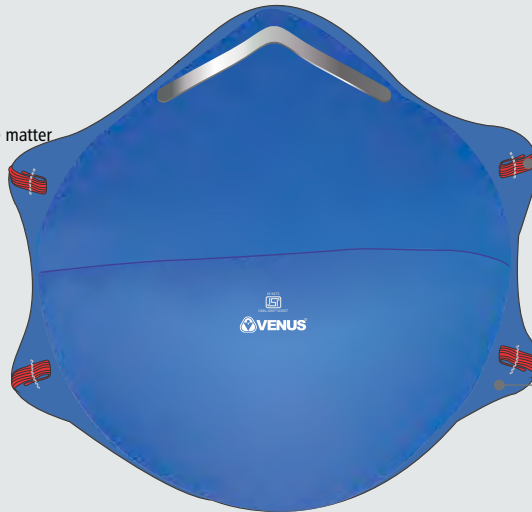
Tough shell

Well-integrated structure maintains the shape disallowing collapse



Stay cool butterfly vent valve

- Provides breathing comfort and promotes easy communication
- Effectively removes heat build-up



Aluminum nose clip

- Leak-proof fit
- Disallows fogging of eyewear

Unique fit adjusters

Provides optimum protection & comfort

Latex free textile elastic

- Long life
- Skin friendly
- Does not deform in high temperature

Compatibility

Compatible with Venus head protection and eye protection devices

Elastic sewn outside filter area

- Leakproof
- Avoids puncture

Bi-lingual user instructions

For easy acceptance by different wearers



VENUS V-2424 SLOV-V

CLASS: FFP2 SLOV

Protection: Solid Dust / Oil Mist
Nuisance Level of Paint mist & odour < TLV

M.U.L: Upto 12 x TLV

Transparent Exhalation Vent Valve

Item #	Colour	Elastic
12215	GREY	SEWN



VENUS V-2426 SL-AC

CLASS: FFP2 SL

Protection: Solid Dust / Oil Mist
Nuisance Level of Acid gas < TLV

M.U.L: Upto 12 x TLV

Item #	Colour	Elastic
12076	BLUE	SEWN



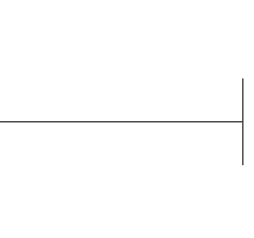
VENUS V-2427 SL-HF

CLASS: FFP2 SL

Protection: Solid Dust / Oil Mist
Nuisance Level of HF-AC odour < TLV

M.U.L: Upto 12 x TLV

Item #	Colour	Elastic
12199	LIGHT BLUE	SEWN



VENUS V-2428 SL-AM

CLASS: FFP2 SL

Protection: Solid Dust / Oil Mist
Nuisance Level of Ammonia < TLV

M.U.L: Upto 12 x TLV

Item #	Colour	Elastic
12216	DARK GREEN	SEWN



VENUS V-2425 SLOV-V

CLASS: FFP2 SLOV

Protection: Solid Dust / Oil Mist
Nuisance Level Of odour
Flame retardant outer layer

M.U.L: Upto 12 x TLV

Transparent Exhalation Vent Valve

Item #	Colour	Elastic
12185	GREY	SEWN



Application examples

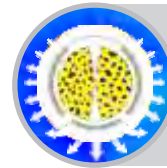
Engineering	Welding, Sand Blasting, Powder coating, Buffing, Painting, Cutting	Agriculture	Pesticides, Insecticides
Pharmaceuticals	Bulk drugs, Material handling	Battery	Lead handling
Other Application	Painting	Ceramics	Material mixing
		Chemical	Material handling



CN 95 Style Convex Seam

Classic collapse resistance shell, seamed filter cover

Maintains the shape for fit and provides high protection



- Stay cool butterfly vent valve**
- Provides breathing comfort and promotes easy communication
 - Effective removal of heat build-up

NIOSH Approved N95 respirators

With American Approval

- N95 Class
- Filters >95% solid particles

Superior microfibre media

Provides protection against sub-micron particles, fine dusts, non oil based liquid mist and biological agents e.g. TB, SARS and pandemic influenza

Convex seam style

- Classic collapse-resistant shell with seamed filter cover
- Maintains high integrity of filter media

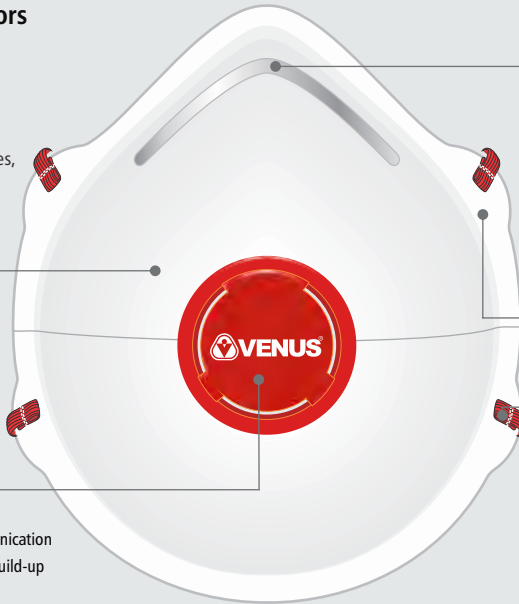
Bi-lingual user instructions

For easy acceptance by different wearers



Stay cool butterfly vent valve

- Provides breathing comfort and promotes easy communication
- Effectively removes heat build-up



Aluminum nose clip

- Leak-proof fit
- Disallows fogging of eyewear

Nose liner

- Prevents leakage
- Provides fit and comfort

Unique fit adjusters

(except CN95+ & CVN95+) Provides optimum protection & comfort

Elastic sewn outside filter area

- Leakproof
- Avoids puncture

Braided textile elastic

- Diminishes risk of reactions to skin allergy
- Does not deform with repeat wears, high temperature

Compatibility

Compatible with Venus head protection and eye protection devices



New! 2016

New! 2016

New! 2016

VENUS CN95+

CLASS: N95
TC- 84A-7516
Protection: Solid Dust / Non oil based liquid mist

Item # Colour Elastic
12260 WHITE STAPLED RUBBER

VENUS CN95

CLASS: N95
TC- 84A-5492
Protection: Solid Dust / Non oil based liquid mist

Item # Colour Elastic
12095 WHITE SEWN

VENUS CVN95+

CLASS: N95
TC- 84A-7514
Protection: Solid Dust / Non oil based liquid mist
Exhalation Vent Valve

Item # Colour Elastic
12261 WHITE STAPLED RUBBER

VENUS CVN95

CLASS: N95
TC- 84A-5631
Protection: Solid Dust / Non oil based liquid mist
Exhalation Vent Valve

Item # Colour Elastic
12096 WHITE SEWN

VENUS CN95 ME

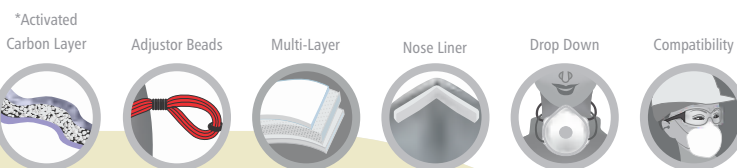
CLASS: N95
TC- 84A-5634
Protection: Solid Dust / Non oil based liquid mist
Half Foam Seal
Blister pack of 3 Nos.

Item # Colour Elastic
12266 WHITE SEWN

VENUS CN95 OV

CLASS: N95
TC- 84A-5632
Protection: Solid Dust / Non oil based liquid mist / Nuisance Level of odour
Activated carbon layer

Item # Colour Elastic
12128 GREY SEWN



Application examples

Agriculture
Cement
Construction

Pesticides, Insecticides, Grain dust
Crushing, Bagging, Cement handling
Sanding, Drilling, Cutting

Ceramics
Mining
Pharmaceuticals

Mixing
Drilling, Material handling
Bulk drugs, Material handling



V-20 Style CONVEX

Double shell

Primary filter supports high dust retention capacity and long duration wears



Half foam seal
 ■ Provides a leak-proof and comfortable fit



CM/L-0007143057

ISI Approved

Superior technology micro-fine filter media

- Protects micro-fine respirable suspended particulate matter
- Higher dust holding capacity
- Doesn't let the filter clog thereby increasing the respirator's life

Multiple Shells

- The design aids use for multiple shifts
- Lasts longer

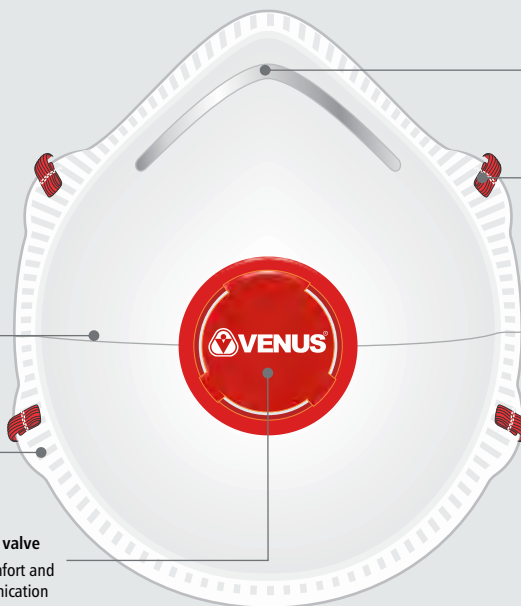
Elastic sewn outside filter area

- Leakproof
- Avoids puncture



Stay cool butterfly vent valve

- Provides breathing comfort and promotes easy communication
- Effectively removes heat build-up



Aluminum nose clip
 Mouldable clip to get comfortable and perfect fit

Braided textile elastic
 ● Diminishes risk of reactions to skin allergy
 ● Does not deform with repeat wears, high temperature

Unique fit adjusters
 Provides optimum protection & comfort

Color coded fittings
 ● Allows easy identification
 ● Denotes the level of protection

Compatibility
 ● Compatible with Venus head protection and eye protection devices

Bi-lingual user instructions
 For easy acceptance by different wearers



VENUS V-2210 V

CLASS: FFP1 S Protection: Solid Dust / Mist
 M.U.L: Upto 4 x TLV
 Exhalation Vent Valve
 Nose Liner

Item #	Colour	Elastic
12269	WHITE	SEWN



VENUS V-20 V

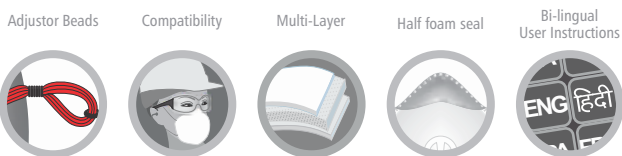
CLASS: FFP2 S Protection: Solid Dust / Mist
 M.U.L: Upto 12 x TLV
 Exhalation Vent Valve
 Half Foam Seal

Item #	Colour	Elastic
12253	WHITE	STAPLED
12254	GREY	STAPLED
12071	WHITE	SEWN
12072	GREY	SEWN

VENUS V-2230 SLV

CLASS: FFP3 SLV Protection: Solid Dust / Oil Mist
 M.U.L: Upto 50 x TLV
 Exhalation Vent Valve
 Full Foam Seal

Item #	Colour	Elastic
12070	WHITE	SEWN



Application examples

Cement
Ceramics
Chemical
Construction
Tyre

Crushing, Bagging, Cement handling
 Material mixing
 Material handling
 Sanding, Drilling, Cutting
 Carbon black

Engineering
Mining
Pharmaceuticals
Textiles

Sand Blasting, Cutting
 Drilling, Material handling
 Bulk drugs, Material handling
 Spinning, Weaving



V-2500 Style Convex Nose Form

Metal free respirator

Suitable for pharma / food industry application



- Pharma-Food industry variant available**
- No metal exposure
 - Minimum lint
 - Minimizes the risk of product contamination



0121

EN 149:2001+A1:2009

European Approval

Anti Clogging (NR D)

Having passed dolomite test, they resist clogging even in very high dust environments

Superior microfibre media

Provides protection against sub-micron particles, fine dusts, non oil based liquid mist and biological agents e.g. TB, SARS and pandemic influenza

Color coded fittings

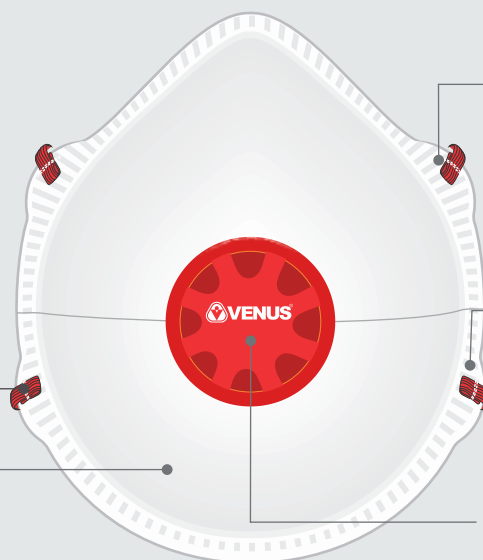
- Allows easy identification
- Indicates the level of protection

Tough shell

Well-integrated structure maintains the shape disallowing collapse

Low Profile Design

Fits wide range of face contours



Unique fit adjusters

Provides optimum protection & comfort

Braided textile elastic

Does not deform with repeat wears, high temperature

Bi-lingual instructions

For easy acceptance by different wearers

Compatibility

Compatible with Venus head protection and eye protection devices

Elastic sewen outside filter area

- Leakproof
- Avoids puncture



Stay cool butterfly vent valve

- Provides breathing comfort and promotes easy communication
- Effectively removes heat build-up



VENUS V-2510

CLASS: FFP1 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 4 x TLV

VENUS V-2520

CLASS: FFP2 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 12 x TLV

VENUS V-2510 SLV

CLASS: FFP1 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 4 x TLV

Exhalation Vent Valve

VENUS V-2520 SLV

CLASS: FFP2 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 12 x TLV

Exhalation Vent Valve

VENUS V-2524 SLOV-V

CLASS: FFP2 NR D CE

Protection: Solid Dust / Oil Mist
Nuisance level of odour
M.U.L: Upto 12 x TLV

Transparent Exhalation Vent Valve
Activated Carbon Layer

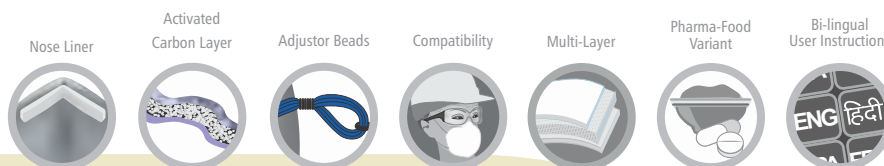
Item #	Colour	Elastic
12256	WHITE	SEWN

Item #	Colour	Elastic
12265	WHITE	SEWN

Item #	Colour	Elastic
12267	WHITE	SEWN

Item #	Colour	Elastic
12238	WHITE	SEWN

Item #	Colour	Elastic
12234	GREY	SEWN



Application examples

Agriculture
Cement
Ceramics
Construction
Tyre

Pesticides, Insecticides, Grain dust
Crushing, Bagging, Cement handling
Material mixing
Sanding, Drilling, Cutting
Carbon black

Engineering
Mining
Pharmaceuticals
Textiles

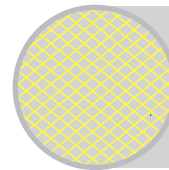
Sand Blasting, Buffing, Cutting
Drilling, Material handling
Bulk drugs, Material handling
Spinning, Weaving

V-90 Style Convex Mesh

Net reinforced shell

Retains shape in tough conditions

Primary filter supports high dust retention capacity and long duration wears



- Net reinforced shell**
- Well-integrated structure maintains the shape disallowing collapse
 - Suits rough handling



ISI Approved

European Approval

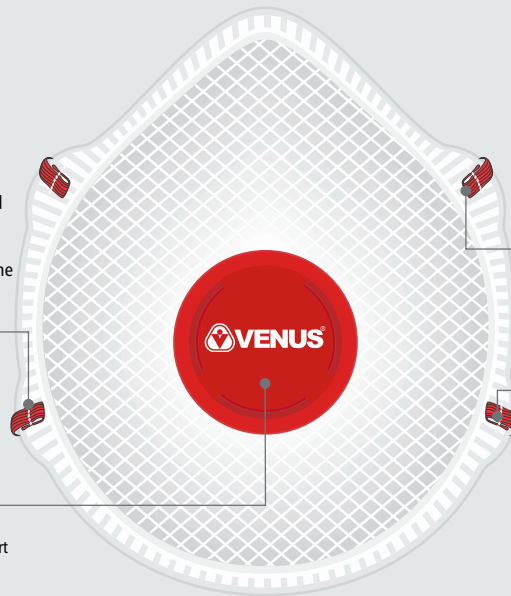
- Superior technology micro-fine filter media**
- Protects from micro-fine respirable suspended particulate matter
 - Higher dust holding capacity
 - Doesn't let the filter clog thereby increasing the respirator's life

- Color coded fittings**
- Easy to identify
 - Denotes the level of protection

Low Profile Design
Fits wide range of face contours



- Stay cool butterfly vent valve**
- Provides breathing comfort and promotes easy communication
 - Effectively removes heat build-up



Embedded nose clip inside media
No loose parts, so no risk to safety in production

Half foam seal
Provides a leak-proof and comfortable fit

Unique fit adjusters
Provides optimum protection & comfort

Braided textile elastic

- Diminishes risk of reactions to skin allergy
- Does not deform with repeat wears, high temperature

Elastic sewen outside filter area

- Leakproof
- Avoids puncture

Compatibility
Compatible with Venus head protection and eye protection devices

Bi-lingual user instructions
For easy acceptance by different wearers



VENUS V-90 V

CLASS: FFP2 S

Protection: Solid Dust / Mist
M.U.L: Upto 12 x TLV

Transparent Exhalation Vent Valve

Item #	Colour	Elastic
19016	YELLOW	SEWN
19017	GREY	SEWN
19021	YELLOW	STAPLED
19025	GREY	STAPLED



VENUS V-9210 SLV

CLASS: FFP1 NR D

Protection: Solid Dust / Oil Mist
M.U.L: Upto 4 x TLV

Transparent Exhalation Vent Valve

Item #	Colour	Elastic
19024	YELLOW	SEWN

VENUS V-9220 SLV

CLASS: FFP2 NR D

Protection: Solid Dust / Oil Mist
M.U.L: Upto 12 x TLV

Transparent Exhalation Vent Valve

Item #	Colour	Elastic
19023	GREY	SEWN

VENUS V-9230 SLV

CLASS: FFP3 NR D

Protection: Solid Dust / Oil Mist
M.U.L: Upto 50 x TLV

Transparent Exhalation Vent Valve

Item #	Colour	Elastic
19020	WHITE	SEWN

Transparent Valve

Adjustor Beads

Compatibility

Multi-Layer

Net Reinforced Shell

Bi-lingual User Instructions

Half Foam Seal



Application examples

Cement	Crushing, Bagging, Cement handling	Engineering	Sand Blasting, Cutting
Ceramics	Material mixing	Mining	Drilling, Material handling
Construction	Sanding, Drilling, Cutting	Tyre	Carbon black



V-2900 Style Convex Double Shell

Double outer Shell & soft inner shell
Suits tough conditions yet offers high comfort



- Pharma-Food industry variant available**
- No Metal exposure
 - Minimum lint
 - Minimizes the risk of product contamination



EN 149:2001+A1:2009
European Approval

Anti Clogging (NR D)

Having passed dolomite test, they resist clogging even in very high dust environments

Advanced microfibre media

- Restricts sub-micron particles, fine dust, water/oil based liquid mist and biological agents e.g. TB, SARS and pandemic influenza
- Tested for Dolomite clogging test

Color coded fittings

- Easy to identify
- Indicates the level of protection

Convex style double shell

- Classic collapse-resistant shell with seamed filter cover
- Maintains high integrity of filter media



Embedded nose clip inside media

No loose parts, so no risk to safety in production

Full foam seal (Only for V-2930)

- Absorbs perspiration offering more comfort
- Improves fitting and safety

Elastic welded outside filter area

- Leakproof
- Avoids puncture

Compatibility

Compatible with Venus head protection and eye protection devices

Bi-lingual user instructions

For easy acceptance by different wearers

Stay cool butterfly vent valve

- Provides breathing comfort and promotes easy communication
- Effectively removes heat build-up



VENUS V-2910 SLV

CLASS : FFP1 NR D CE

Protection : Solid Dust / Oil Mist
M.U.L :Upto 4 x TLV

Exhalation Vent Valve

Item #	Colour	Elastic
12239	WHITE	SEWN



VENUS V-2920 SLV

CLASS: FFP2 NR D CE

Protection: Solid Dust / Oil Mist
M.U.L:Upto 12 x TLV

Exhalation Vent Valve

Item #	Colour	Elastic
12240	WHITE	SEWN



VENUS V-2930 SLV

CLASS: FFP3 NR D CE

Protection: Solid Dust / Oil Mist
M.U.L: Upto 50 x TLV

Transparent Exhalation Vent Valve

Item #	Colour	Elastic
12236	WHITE	WELDED

Application examples

- Avian Flu
- Virus & Bacteria
- Battery
- Chemical
- Pharmaceuticals
- Lead handling
- Material handling
- Bulk drugs,
- Material handling

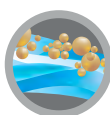
Transparent Valve



Compatibility



Anti-Clogging



Multi-Layer



Pharma-Food Variant



Bi-lingual User Instructions



Full Foam Seal



V-230 Style Convex BEY

*Large surface area due to pleated filters
For high breathing comfort*



- Full foam seal**
- Absorbs perspiration offering more comfort
 - Improves fitting and safety



EN 149:2001+A1:2009

European Approval

Anti Clogging (NR D)

Having passed dolomite test, they resist clogging even in very high dust environments

High microfibre media

Provides protection against sub-micron particles, fine dusts, water/oil based liquid mists and biological agents e.g. TB, SARS and pandemic influenza

Convex Big eye style

Large surface area due to pleated filters for high breathing comfort

Color coded fittings

- Allows easy identification
- Indicates the level of protection

Low Profile Design

Fits wide range of face contours



Aluminium nose clip

Strong mouldable clip to get customized fit around nose and avoid fogging of eyewear

Latex free braided textile elastic

- Provides comfortable fit
- Non allergic
- Does not reform in high temperature

Elastic welded outside filter area

- Leakproof
- Avoids puncture

Front adjuster

Broad cotton elastic gives fit & relieves strap pressure

Flame retardant outer layer (V-2735)

Protects from welding sparks

Compatibility

Compatible with Venus head protection and eye protection devices

Bi-lingual user instructions

For easy acceptance by different wearers



Stay cool butterfly vent valve

- Provides breathing comfort and promotes easy communication
- Effectively removes heat build-up



VENUS V-230 SLV

CLASS: FFP3 NR D CE

Protection: Solid Dust / Oil Mist

M.U.L: Upto 50 x TLV

Transparent Exhalation Vent Valve

Item # Colour Elastic

12080 WHITE WELDED



VENUS V-2735 SLOV-V

CLASS: FFP3 SLOV CE

Protection: Solid Dust / Oil Mist / Nuisance Level of odour

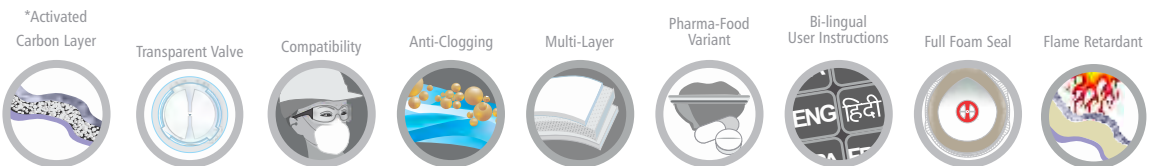
M.U.L: Upto 50 x TLV

Exhalation Vent Valve

Activated carbon & Flame retardant outer layer

Item # Colour Elastic

12235 GREY WELDED



Application examples

- Avian Flu
- Virus & Bacteria
- Battery
- Chemical
- Pharmaceuticals
- Lead handling
- Material handling
- Bulk drugs, Material handling

Respiratory Protection

Nominal Protection Factor Nominal Protection Factor (Clause 8.4.3 - IS 9623:2008)

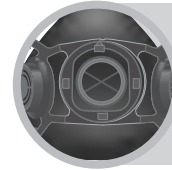
Device	Marking	Nominal Protection Factor
a) Filtering half mask	FFP1	4
	FFP2	12
	FFP3	50
b) Filter with quarter mask or half mask	FFP1	4
	FFP2	12
	FFP3	50
c) Filter with full face mask	FFP1	5
	FFP2	20
	FFP3	1000
Gas Filtering Devices		
a) Filter with quarter or half mask		20
b) Filter with full face mask		2000
Fresh Air Hose Breathing Apparatus		
a) With half mask		50
b) With hood(only powered)		1000
c) With full face mask		2000
d) With mouthpiece assembly		1000
Compressed Airline Breathing Apparatus		
a) With half mask		20
b) With hood		1000
c) With full face mask		2000
d) With mouthpiece assembly		10000
Self-contained Open Circuit Component Air Breathing Apparatus		
a) With full face mask		2000
b) With mouthpiece assembly		10000
c) With positive pressure		50000
Self-Contained Closed Circuits Oxygen Breathing Apparatus		
a) With full face mask**		2000
b) With mouthpiece assembly**		10000
c) With positive pressure**		50000
The re-circulation of the gas can reduce the protection factor.		

The nominal protection factors are given only for guidance.

**In closed circuit breathing apparatus, the exhaled breath is re-circulated to remove carbon dioxide. Any other contaminant present is also re-circulated and may reduce the effective protection given by the device.

V-500 Reusable Half Face Mask &

V-7500 Single Filters



Single filter
■ Light weight



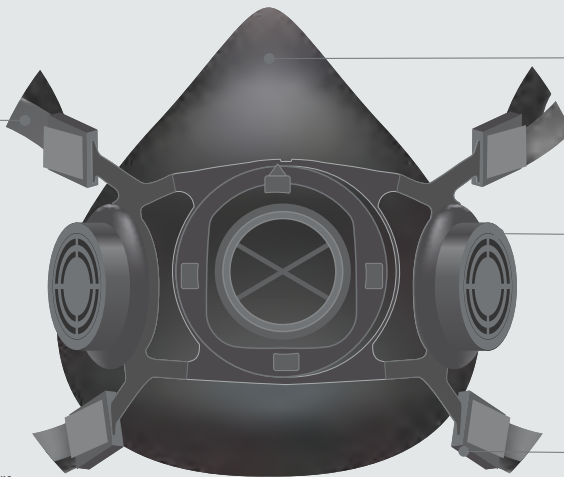
ISI Approved

Ajustable elastic band
Distributes weight evenly. Provides head support and good fit

4 point strap tightening with head cradle
Front pull strap tightening gives the required ergonomic fit

Threaded cartridge
Easy to fit and replace

Packing
Re-sealable bag makes it easy to store and re-use without compromising on hygiene and also avoiding wear and tear



Light weight body

- Made from soft thermoplastic elastomer, skin friendly
- Low maintenance
- Minimum hindrance in working

Exhalation vent valve
Allows efficient escape of CO₂ & hot exhaled air

Single filter

- Low profile & provides more peripheral view
- Does not hinder while working and makes the use more convenient

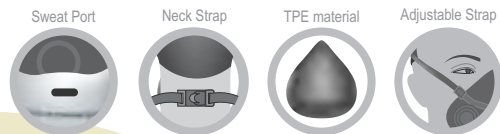
Latex-free elastic

- Braided textile elastic is skin friendly
- Lasts longer without deforming

VENUS V-500 SF Half Mask

For single filter Compatible with Venus V-7500 Filters

Item #	Colour	Size
15024	GREY	MEDIUM



Application examples

Pesticides
Paints
Pharmaceuticals
Ships
Sewage

Pesticides spraying
Paint spray, Mixing, Resins
Bulk drugs, Material handling
Tank cleaning
Drains

Battery
Chemical
Cold storage
Engineering
Foundries
Mining

Lead handling
Laboratory, Chemical spills
Warehouses
Welding, Powder coating, Painting
Foundry areas
Drilling

V-7500 Single Filters



VENUS single gas filters used in connection with the VENUS V-500 half masks

FILTER	COLOUR CODE	HAZARD TYPE	TEST GASES	MAXIMUM USER LEVELS
VENUS V-7500 A1P1S Filter  Item # Colour 17021 BROWN	 	Organic Vapour (OV)	Carbon Tetrachloride (CCl ₄)	1000 ppm or 20 X OEL whichever is lower
VENUS V-7500 B1 Filter  Item # Colour 17028 GREY		Inorganic Gases(IG)	Chlorine (Cl ₂), Hydrogen Sulphide (H ₂ S), Hydrogen Cyanide (HCN)	1000 ppm or 20 X OEL whichever is lower
VENUS V-7500 E1 Filter  Item # Colour 17020 YELLOW		Acid Gases(AG)	Sulphur Dioxide (SO ₂)	1000 ppm or 20 X OEL whichever is lower
VENUS V-7500 K1 Filter  Item # Colour 17022 GREEN		Ammonia(AM) & derivatives	Ammonia (NH ₃)	1000 ppm or 20 X OEL whichever is lower
VENUS V-7500 ABEK1 Filter  Item # Colour 17027 MULTICOLOUR		OV/IG/AG/AM	Carbon Tetrachloride (Ccl ₄), Chlorine (Cl ₂), Hydrogen Sulphide (H ₂ S), Hydrogen Cyanide (HCN), Sulphur Dioxide (So ₂), Ammonia (NH ₃)	1000 ppm or 20 X OEL whichever is lower
VENUS V-7500 P1 S Pre-Filter Item # Colour 13082 YELLOW RETAINER Item # Colour 13085 GREY	 	Particle Filter	Solid particles	4 X OEL
VENUS V-500 COMBO A1 P1S Filter  Item # Colour 15030 BROWN		Organic Vapour(OV)	Carbon Tetrachloride (CCl ₄)	1000 ppm or 20 X OEL whichever is lower
VENUS V-500 COMBO E1 Filter  Item # Colour 15053 YELLOW		Acid Gases(AG)	Sulphur Dioxide (SO ₂)	1000 ppm or 20 X OEL whichever is lower

V-800 Reusable Half Face Mask & V-7800 Dual filters



- Dual filters**
- Do not hinder while working and makes the use more convenient
 - Ergonomic balanced design



EN 140:1998

European Approval

Light weight body

- Made from soft thermoplastic elastomer, skin friendly
- Low maintenance
- Minimum hindrance in working

Exhalation vent valve

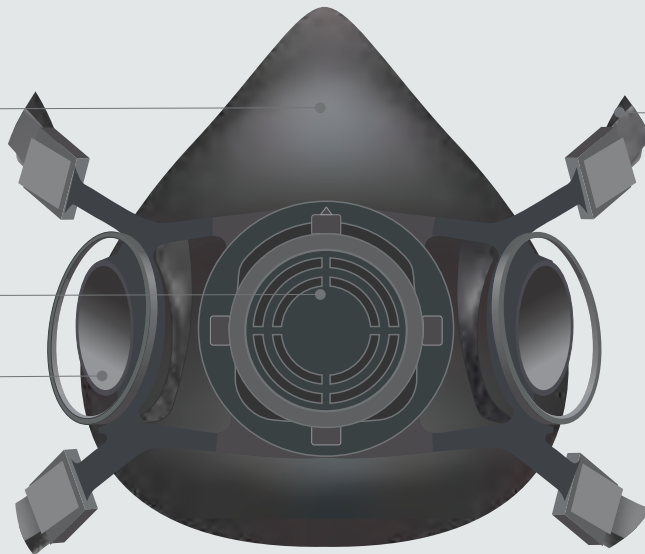
Allows efficient escape of CO₂ and exhaled air

Threaded cartridge

Easy to fit and replace

Size options

Available in small, medium and large sizes to facilitate better fit



Latex-free elastic

Braided textile elastic is skin friendly and lasts longer without deforming in high temperature

4 point Adjustable elastic band

- Distributes weight evenly
- Provides head support and good fit

Packing

Re-sealable bag makes it easy to store and re-use without compromising on hygiene and also avoiding wear and tear

Compatibility

Compatible with most other PPEs

VENUS V-800 DF

For dual filter

Compatible with Venus V-7800 Filters

Item #	Colour	Size
15076	GREY	SMALL
15025	GREY	MEDIUM
15132	GREY	LARGE

Sweat Port



Neck Strap



TPE material



Adjustable Strap



Application examples

Battery
Chemical
Cold storage
Engineering
Foundries
Mining

Lead handling
Laboratory, Chemical spills
Warehouses
Welding, Powder coating, Painting
Foundry areas
Drilling

Petrochemicals
Pesticides
Paints
Pharmaceuticals
Ships
Sewage

Unventilated areas
Pesticides spraying
Paint spray, Mixing, Resins
Bulk drugs, Material handling
Tank cleaning
Drains

V-7800

Dual filters

CE⁰¹²¹ EN 143 | CE⁰¹²¹ EN 14387

Venus dual gas filters pair-wise used in connection with the Venus V-800 half masks

FILTER	COLOUR CODE	HAZARD TYPE	TEST GASES	MAXIMUM USER LEVELS
VENUS V-7800 A1 Filter+ Pre-filter P2R Item # 17087		Organic Vapour(OV) + Particulate filter	Cyclohexane (C ₆ H ₁₂)	1000 ppm or 10 X OEL whichever is lower
VENUS V-7800 B1 Filter Item # 17091		Inorganic Gases(IO)	Chlorine (Cl ₂), Hydrogen Sulphide (H ₂ S), Hydrogen Cyanide (HCN)	1000 ppm or 10 X OEL whichever is lower
VENUS V-7800 E1 Filter Item # 17088		Acid Gases(AG)	Sulphur Dioxide (SO ₂)	1000 ppm or 10 X OEL whichever is lower
VENUS V-7800 K1 Filter Item # 17089		Ammonia(AM) & derivatives	Ammonia (NH ₃)	1000 ppm or 10 X OEL whichever is lower
VENUS V-7800 ABEK1 Filter+ Pre-filter P2R Item # 17090		OV/IO/AG/AM + Particulate filter	Cyclohexane (C ₆ H ₁₂), Hydrogen Sulphide (H ₂ S), Chlorine (Cl ₂), Hydrogen Cyanide (HCN), Sulphur Dioxide (SO ₂), Ammonia (NH ₃)	1000 ppm or 10 X OEL whichever is lower
VENUS V-7800 P3R HEPA Filter Item # 17026		Particle Filter	Non highly volatile liquid / solid particles	50 X OEL
VENUS V-7800 P3R PANCAKE Filter Item # 17129		Particle Filter	Non highly volatile liquid / solid particles	50 X OEL
VENUS V-7800 P3R OV PANCAKE Filter Item # 17178		Particle Filter with nuisance odour filter	Non highly volatile liquid / solid particles	50 X OEL
VENUS V-7800 A1 P3R Filter Item # 17062		Combined Filter OV+ Particle Filter P3	Cyclohexane (C ₆ H ₁₂) with Hepa particle filter	1000 ppm or 10 X OEL whichever is lower
VENUS V-7800 ABEK1 P3R Filter Item # 17059		Combined Multigas Filter (OV/IO/AC/AM) + Particle Filter P3	Cyclohexane (C ₆ H ₁₂), Hydrogen Sulphide (H ₂ S), Chlorine (Cl ₂), Hydrogen Cyanide (HCN), Sulphur Dioxide (SO ₂), Ammonia (NH ₃)	1000 ppm or 10 X OEL whichever is lower
VENUS V-800 COMBO ABEK1 +P2R Filter Item # 15054		Combined Multigas Filter OV/IO/AG/AM + P2 Particle Filter	Cyclohexane (C ₆ H ₁₂), Hydrogen Sulphide (H ₂ S), Chlorine (Cl ₂), Hydrogen Cyanide (HCN), Sulphur Dioxide (SO ₂), Ammonia (NH ₃)	1000 ppm or 10 X OEL whichever is lower
VENUS V-800 COMBO A1 Filter+P2R blister pack Item # 15047		Combined Filter OV+ P2 Particle Filter	Cyclohexane (C ₆ H ₁₂)	1000 ppm or 10 X OEL whichever is lower
VENUS V-800 COMBO ABEK1 Filter+P2R +Retail blister pack Item # 15133		Combined Multigas Filter OV/IO/AG/AM + P2 Particle Filter	Cyclohexane (C ₆ H ₁₂), Hydrogen Sulphide (H ₂ S), Chlorine (Cl ₂), Hydrogen Cyanide (HCN), Sulphur Dioxide (SO ₂), Ammonia (NH ₃)	1000 ppm or 10 X OEL whichever is lower

FAQs

1. How to calculate protection factor?

You should aim at reducing the concentration inside the respirator to below any applicable occupational exposure limit (OEL). RPE uses a system called Assigned Protection Factor (APF), the factor by which the equipment reduces the contaminant concentration. An APF of 4, for example, means that the contaminant concentration will reduce to a quarter. Choose the equipment that has an APF which exceeds the OEL, keeping margin for equipment error and other factors.

Example 1: Complete Equipment

Filtering half mask FFP1

Permitted total inward leakage = 22%

$$\text{Nominal Protection Factor} = \frac{1}{\text{Permitted total inward leakage}} = \frac{1}{22} \times 100 = 4.5$$

Example 2: Multi-component Equipment

Particle filter P1 and half mask

Permitted inward leakage through the filter 20%

Permitted inward leakage at the face seal and exhalation valve $\frac{2\%}{22\%}$

$$\text{Nominal Protection factor} = \frac{1}{22} \times 100 = 4.5$$

Example 3:

How to estimate the protection factor required?

Contaminant: Harmful airborne dust

Concentration: the time-weighted average is 20mg/m³

The occupational exposure limit: 0.2 mg/m³

The required minimum protection factor is 20/0.2 = 100

from the list of respiratory protection devices can be seen the types of equipment which may meet this requirement if used correctly.

Example 4:

The maximum allowed concentration of contaminant with P2 filter and full face mask:

Contaminant : Chlorine

Occupational exposure limit : 1 ppm

Full face mask gives a nominal protection factor

P2 + full mask gives a nominal protection factor 2000

2000x1ppm = 2000 ppm = 0.2% chlorine

2. How to assess respirator fitting?

Face fit for the wearer is critical as the face-fitting range relies on a tight face fit, to be effective. Facial features such as scars and beards, as well as the shape and size of the wearer's head and face can affect the fit. A formal fit test is essential.

3. When is respirator fit test required?

Fit testing of all negative or positive pressure tight-fitting face piece respirators is required prior to initial use, whenever a different respirator face piece is used, and at least annually thereafter. An additional fit test is required whenever there are changes in the user's physical condition that could affect respirator fit (e.g. facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight). The employee must be fit tested with the same make, model, style, and size of respirator that will be used.

4. What are the guidelines for Selection, Training, Use, Maintaining and Storing respirators?

Refer to IS 9623:2008 & IS 8347:2007

5. How long can a particulate respirator be used before it must be discarded?

Respirators with replaceable filters are reusable, and a respirator classified as disposable may be reused depending upon the intensity of particulate matter in the atmosphere. All filters must be replaced whenever they are damaged, soiled, or causing discomfort to the wearer (e.g. increased breathing resistance). Before each use, the exterior of the filter material should be inspected. If the filter material is physically damaged or soiled, the filter should be changed (in the case of respirators with replaceable filters) or the respirator discarded (in the case of disposable respirators). Always follow the respirator manufacturer user instructions. Employers must develop standard operating procedures for storing, reusing, and disposing of respirators that have been designated as disposable and for disposing of replaceable filter elements.

V-666 TPE / NP Full Face Mask

IS 14166



CML-0003715864

ISI Approved

6-Strap Head Harness

- Facilitates even distribution of weight and gives head support
- Good skin comfort in tough conditions.
- Provides leak-proof fit

Flame retardant textile cradle

Neck straps

Adjustable for better handling

Zero power hard coated visor

- PC lens impact resistant for face protection
- High clarity, durability and double anti-fog

Inner face piece silicone

Prevents fogging on visor

Option to use twin filters

Special Venus threads for superior ergonomic fit

Standard Thread

RD40 Thread for connection to any standard thread, canister as per IS 14138 (Part1): 1994



Adjustable Penta Belt

- Gives head support and even distribution of weight
- Good skin comfort in tough conditions
- Provides leakproof fit

Produced from TPE

- Easy to use
- Low maintenance

Inner face piece

Prevents fogging on visor

Speech diaphragm

For easy and audible communication

Compatible with Venus V-776 / V-7800 Filters for class 2 & class 1

Silicone exhalation valve

Efficient ventilation system with easy maintenance



VENUS V-666

Single Filter - NP

Compatible with Venus V-776 Gas Filters & breathing tube of SA & PAPR

Item #	Colour	Size
15012	BLACK	MEDIUM



VENUS V-668 DF

Dual Filter - TPE

Compatible with Venus V-7800 Gas Filters

Item #	Colour	Size
15014	GREY	MEDIUM



VENUS V-668 SF

Single Filter - TPE

Compatible with Venus V-776 Gas Filters & breathing tube of SA & PAPR

Item #	Colour	Size
15013	GREY	MEDIUM

Application examples

Petrochemicals
Pesticides
Paints
Pharmaceuticals
Ships
Sewage

Pesticides spraying
 Paint spray, Mixing, Resins
 Bulk drugs, Material handling
 Tank cleaning
 Drains

Battery
Chemical
Cold storage
Engineering
Foundries
Mining

Lead handling
 Laboratory, Chemical spills
 Warehouses
 Powder coating, Painting
 Foundry areas
 Drilling



V-777 Reusable Silicone Full Face Mask

IS 14166



CM/L-0003715864

ISI Approved

Flame retardant textile cradle

- Withstands high temperature
- Skin friendly

Produced from silicone rubber

Light in weight and comfortable to use

Head harness

Flame retardant material withstands high temperature

Inner face piece silicone

Prevents fogging on visor

Neck straps

Adjustable for better handling

Silicone exhalation valve

Efficient ventilation system with easy maintenance

Speech diaphragm

For easy and audible communication



5-Strap head harness

- Gives head support and even distribution of weight
- Good skin comfort in tough conditions
- Provides leakproof fit

Zero power hard coated Toric visor

- PC lens impact resistant for face protection
- High clarity, durability and double anti-fog
- For wide vision

Two point Adjusters

For quick fit

Standard Thread

RD40 Thread for connection to any standard thread, canister as per IS 14138 (Part1): 1994



VENUS V-777

Single Filter -Silicone

Compatible with Venus V-776 Gas Filters & breathing tube of SA & PAPR

Item #	Colour	Size
13151	GREY	MEDIUM

Application examples

Petrochemicals
Pesticides
Paints
Pharmaceuticals
Ships
Sewage

Pesticides spraying
 Paint spray, Mixing, Resins
 Bulk drugs, Material handling
 Tank cleaning
 Drains

Battery
Chemical
Cold storage
Engineering
Foundries
Mining

Lead handling
 Laboratory, Chemical spills
 Warehouses
 Powder coating, Painting
 Foundry areas
 Drilling



V-776 Class 2 Filters Chemical & Hepa Filters with standard connection

VENUS Gas filters in standard connection suitable for VENUS Full Face Masks or PAPR's.

IS 15323



CM/L-0007905889

FILTER	COLOUR CODE	HAZARD TYPE	TEST GASES	MAXIMUM USER LEVELS
VENUS V-776 A2 Filter  Item # 17014		Organic Vapour (OV)	Carbon Tetrachloride (CCl ₄)	5000 ppm or 2000 X OEL whichever is lower, 0.5% by volume
VENUS V-776 B2 Filter  Item # 17013		Inorganic Gas (IO)	Chlorine (Cl ₂) Hydrogen Sulphide (H ₂ S)	5000 ppm or 2000 X OEL whichever is lower, 0.5% by volume
VENUS V-776 E2 Filter  Item # 17011		Acid Gas (AC)	Sulphur Dioxide (SO ₂)	5000 ppm or 2000 X OEL whichever is lower, 0.5% by volume
VENUS V-776 K2 Filter  Item # 17012		Ammonia (AM) & derivatives	Ammonia (NH ₃)	5000 ppm or 2000 X OEL whichever is lower, 0.5% by volume
VENUS V-776  ABEK2 Filter  Item # 17037		Multigas (OV/IO/AC/AM)	Carbon Tetrachloride (CCl ₄) Chlorine (Cl ₂) Hydrogen Sulphide (H ₂ S) Sulphur Dioxide (SO ₂) Ammonia (NH ₃)	5000 ppm or 2000 X OEL whichever is lower, 0.5% by volume
VENUS V-776  A2 P3 Filter  Item # 17144		Combined Filter OV+ Particle Filter P3	Carbon Tetrachloride (CCl ₄) with HEPA particle filter	5000 ppm or 2000 X OEL whichever is lower, 0.5% by volume
VENUS V-776  ABEK2 P3 Filter  Item # 17143		Combined Multigas Filter (OV/IO/AC/AM) + Particle Filter P3	Carbon Tetrachloride (CCl ₄) Chlorine (Cl ₂) Hydrogen Sulphide (H ₂ S) Sulphur Dioxide (SO ₂) Ammonia (NH ₃) with HEPA filter	5000 ppm or 2000 X OEL whichever is lower, 0.5% by volume
VENUS V-776  P3 Hepa Filter  Item # 17179		Particle Filter P3	Non highly volatile liquid / solid particles	1000 X OEL

ESCAPE MASK

Smoke Escape Mask



EN 403

European Approval

Electrostatic particle filter

- Highly efficient
- Low pressure-drop enables easy breathing

Multi-valve breathing device

Enables easy communication while mask is worn

Better orientation

- Wide view.
- Transparent film on visor enables upto 95% light transmission

State-of-the-art filtration unit

- Multi layer impregnated activated carbon enables maximum absorption of toxic gases
- Works as a catalyst for carbon monoxide oxidation

High performance

- Fire resistant (as per NFPA 701)
- Flame retardant polychloroprene latex hood resists 200°C temperature
- Visor resists 150°C temperature

Packaging weight and shelf life

Less than 1 kg & lasts 5 years until opened

Filter capacity

Particulate matter,
Gases (HCl, HCN, CO, Propanol)



Ease of portability and storage

Small size and less weight makes it portable and easy to store

Universal adult size, complies inward leak test

- Lowers inventory
- No need to store multiple sizes
- Easy to distribute amongst workers as no size-wise bifurcation needed while distribution

User friendly instructions

- Easy to grasp instructions on package
- No advanced training required

Effortless wearing

Upto 8 times enlargeable elastic and resilient latex hood for easy and effortless wearing process

Ready for use

Pre-assembled and ready for use

Physiological comfort

Minimal dead space prevents buildup of heat vapors and CO₂

Packing



DURAM SMOKE HOOD

Item # 13183

Application examples

- Chemical / First responders
- Law enforcement agencies
- High-rise Buildings
- Hospitals
- Hotels
- IT office

VENUS Clean Air Basic Universal

Powered Air Purifying Respirator (PAPR)

A time-tested powered respiratory system determined for workplaces with air contaminated by particles. An easily exchangeable P3 particle filter protects against solid and liquid particles (eg. toxic dust, smoke, fibre, mist, fumes, bacteria and viruses).

Designed specially for particle filtration
Use for dust, non-toxic and toxic fumes, solid and liquid aerosols, bacteria and viruses

Light weight

- Can be used for long duration applications
- Good comfort to wearer



User-friendly design
Easy to use control panel with well-arranged pictograms

Compatibility

- Compatible with whole range of Venus headpieces
- Can be used in a wide range of applications

Technical specification	VENUS Clean Air Basic
Flow rate:	*140 l/min -160 l/min
Weight (incl. filter and battery):	900g
Filter type	PSL
Filer Efficiency:	99,998%
Noiseness:	Max. 61dB
Operating duration:	**6-9 h
Filter Certification:	EN 12941 TH1PSL

VENUS CleanAir Basic Universal

-Set includes Battery, Charger, PVC Breathing Hose, Basic filters
-Compatible with Venus Hoods

Item # 13165

Accessories



VENUS CleanAir Battery

Item # 13185



VENUS CleanAir Basic Filter

Item # 13192



Pre filters

Item # 13193



Flow Indicator

Item # 13184

Application examples

Battery	Lead handling
Chemical	Bulk drugs,
Engineering	Welding, Sand Blasting, Powder coating, Buffing, Painting, Paint spray, Mixing
Paints	
Pharmaceuticals	Bulk drugs, Material handling

CleanAir Chemical

Powered Air Purifying Respirator (PAPR)

A powered respiratory system for use against gaseous contaminants as well as their combination with particle pollutants. The unit is designed for standard filters with screw Rd40*1/7" acc. EN 148-1.



European Approval

Compatible

- With whole range of Venus hoods and chemical filters V-776 type, RD 40 thread
- Can be used in a wide range of applications

High Protection

- Protects from particles, gases & vapour
- Use for dust, non-toxic and toxic fumes, gases & vapours



Light weight

- Can be used for long duration applications
- Good comfort to wear

User-friendly design

Simple control panel with well-arranged pictograms

Rechargeable battery

Ensures operations for up to 10 hours

Technical specification	CA Chemical Dual Flow
Flow rate:	*140 l/min -160 l/min - ECO mode *180 l/min -200 l/min - TURBO mode
Battery type	NiMH 6V/4.5Ah
Weight (incl. filter and battery):	1050g
Noisiness:	Max. 62 dB
Operating duration:	**6.5 - 12 h
Filter Certification:	EN 12941

**with fully charged battery and clean filters.
**parameters depend on the chosen operating regime.

VENUS CleanAir Chemical

Set includes Battery, Charger, PVC Breathing Hose
Compatible with Venus Hoods & Venus V776 filters

Item # 13016

Accessories

VENUS CleanAir Battery

Item # 13186

Application examples

Battery	Lead handling
Chemical	Material handling
Engineering	Welding, Painting,
Paints	Paint spray, Mixing
Pharmaceuticals	Bulk drugs, Material handling

CleanAir Autoflow

Powered Air Purifying Respirator (PAPR)

CE

European Approval

High resistance

Mechanical and chemical resistance

Different modes

Can be used as HOOD or MASK

Decontamination

Can be decontaminated by a shower

Advanced electronic system

For warning the wearer

Service indicator

Informs the users about service interval expiration



New!
2016

Full colour TFT display

Clearly shows all the relevant information needed

Ip65

Resistance to intrusion of liquid and solid particles

Better airflow

120–235 lpm air flow allows easy breathing

Low battery alarm

Warns the user when battery goes low

High performance

Li-Ion battery

- Quick battery charger
- Charging time < 3 hours

Clogged filter alarm

Warns the user about insufficient air flow

Chemical 3F

- Set includes Battery, Charger, PVC Breathing Hose
- Compatible with Venus Hoods / Coverall & Venus V776 chemical filters

ITEM CODE 13401

Technical Specification

Airflow	120-235 LPM
Weight incl. battery	1420g
Noisiness	max 62 dB
Operating duration	8-10 h
Dimensions	320mm / 200mm / 150mm
Battery type	Li-ion 14,4V/2.6Ah
Certification	EN 12941 TH2/TH3, EN 12942 TM2/TM3



New!
2016

Particle 2F

- Set includes Battery, Charger, PVC Breathing Hose
- Compatible with Venus Hoods / Coverall & Venus V776 particle filters

ITEM CODE 13400

Technical Specification

Airflow	120-235 LPM
Weight incl. battery	960g
Noisiness	max 62 dB
Operating duration	7-10 h
Dimensions	240mm / 110mm / 120mm
Battery type	Li-ion 14,4V/2.6Ah
Certification	EN 12941 TH2/TH3, EN12942 TM2/TM3

Suggested Applications

Heavy industrial environments
Chemical industry
Laboratories
Pharmaceutical industry
Remediation operations

Supplied Air Respirator Unit (SA)

Powered Air Purifying Respirator

IS 10245 (Part 3)



CM/L-7800010911

As the name suggests, the Supplied Air Respirator Unit, supplies clean air to the wearer. The air is filtered after being supplied from a compressor. Hoods, helmets, full face pieces, half face pieces and loose-fitting face pieces can be worn to which this clean air can be supplied. The Supplied Air Respirator Unit increases comfort, productivity and protection while offering many advantages over other respiratory protection systems.

Air Purification Panel

Air Purification Panel is connected by the air hose to the rest of the apparatus.



Low Pressure Conditioner
Regulator, PC Bowl, Coalescing + Borosilicate 0.3 micron Particulate + GAC odour filter, Gauge and manual drain. Inlet Ø 6mm (For 3 users)

Item # 13097

Air Hose

Air Hose connects the Air purification Panel to the Air control device. Careful selection of the hose material is required as it could be vulnerable to the surrounding atmospheric contaminants.



Clean Air Basic Spiral Hose
10 Meter Length

Item # 13052

Air control Device

The Air Control Device ensures supply of constant amount of air into the hood. The unit allows air supply adjustment by a swivel control knob. The control knob can be locked into any position so that the set airflow will not vary.



Flow Control Valve -
Low pressure Connector CA40M

Item # 13156

CUSTOMER END

Oil & Moisture free Compressed Air Source + Safety pressure release valve



Air pre-filter-regulator
Metal bowl coalescing type for removal of liquid water Inlet / Outlet Ø 12 mm

Item # 13046



Airline PVC Braided Hose
10 Meter Length

Item # 13111



Airline PVC Braided Hose
30 Meter Length

Item # 13166



Pressure Control Valve -
High Pressure Connector CA40M EN 14594:05 2A

Item # 13045

Technical specification	CA Pressure Flow control
Air flow - adjustable	min. 160 l/min, max. > 400 l/min
Weight	250 g
Noisiness	max. 61 dB

* in use with Pressure Conditioner



High Pressure Conditioner
with metal container, high capacity combined filter inside for particulate and odour, gauge and manual drain. Inlet Ø12mm (For 4 users)

Item # 13055

Technical specification	CA Pressure flow control
Filter efficiency	*P3
Certification	EN 14594:05 2A

* in use with Pressure Conditioner

Breathing Tube

This tube delivers air to the face piece. Careful selection of material of breathing tube would be important since it could be more vulnerable to the surrounding atmospheric contaminants.



(Hood-Valve)
PVC Breathing Hose with Connector

CA40F & CA40M ITEM # 13160

Application examples

Engineering
Mining
Petrochemicals

Welding, Sand Blasting, Powder coating, Buffing, Painting, Cutting Drilling
Unventilated areas

Paints
Pharmaceuticals
Ships
Waste treatment

Paint spray, Mixing Bulk drugs, Material handling
Tank cleaning
Sewage handling, Cleaning drains

Hoods for SA & PAPR

Face pieces like hoods and full face pieces are attached with connectors to the pressure connectors. They are light in weight and are ideal for long wear periods.

Compatible with SA & Powered air respirators.

Supplied air
waist flow control devices



Powered air purifying respirator



Protection film for
CA2 Hood (optional)



Item # 13059

PVC Breathing Hose
with
Connector
(Hood-Valve)



CA40F & CA40M

Breathing Tube

This tube delivers air to the face piece. Careful selection of material of breathing tube would be important since it could be more vulnerable to the surrounding atmospheric contaminants.

Universal Hood CA2- Painting
Construction of material-
Tyvek
Connector CA40F

Item # 13178



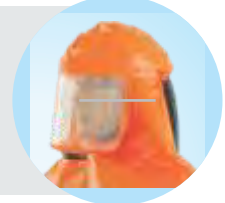
Universal Hood CA 2
Construction of material-
Tyvek
Connector CA40F

Item # 13069



Universal Hood CA2
EN 12941:1998
EN 14594:2005
Connector CA40F

Item # 13019



Grinding Visor CA3
Connector CA40F

Item # 13057



Safety Helmet CA4
for Indl-Engg.

Item # 13040



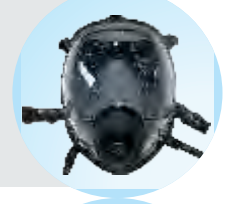
Welding Hood CA27

Item # 13182



Full Face Mask
V-777

Item # 13151



Full Face Mask
V-668+SF

Item # 15013



Self Contained Breathing Apparatus

Emergency rescue / respond device

IS 10245 (Part 2)



CM/L-0002809666

ISI Approved

Demand valve

Turns the air into a suitable pressure level for human body
Prevents fogging on the visor

Reflective flame retardant harness

For high visibility
Withstands high temperatures

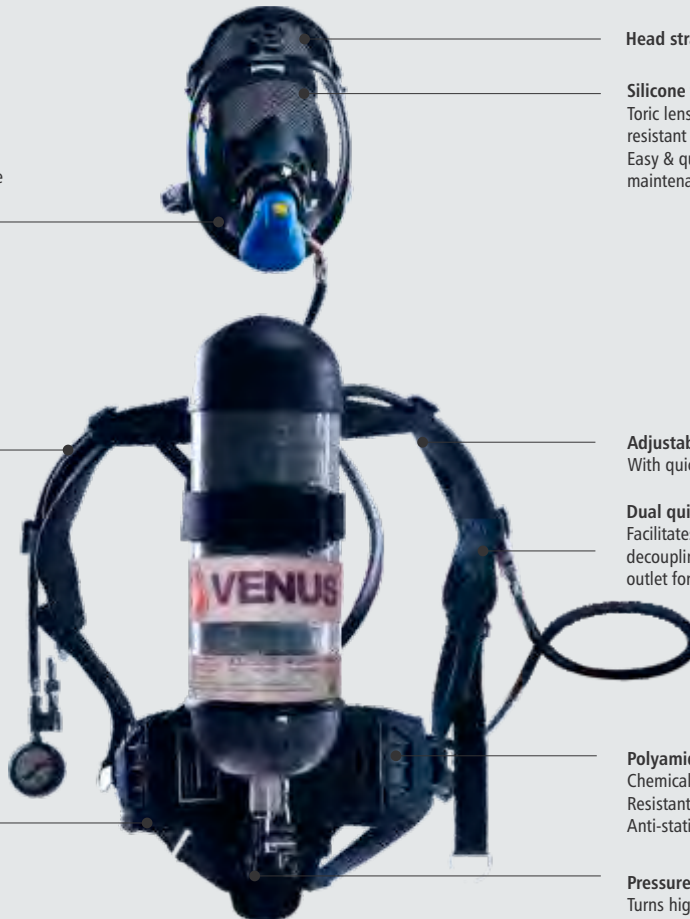
Water proof remote pressure gauge with alarm

Denotes air flow pressure from cylinder
Handy when cylinder is back-mounted

Pressure gauge on cylinder

Denotes cylinder pressure at standby mode

User instructions and training CD



Head strap in flame retardant material

Silicone full face mask

Toric lens for wide vision Shock resistant & scratch resistant
Easy & quick to use & low maintenance

Adjustable waistband

With quick release buckles

Dual quick release coupling

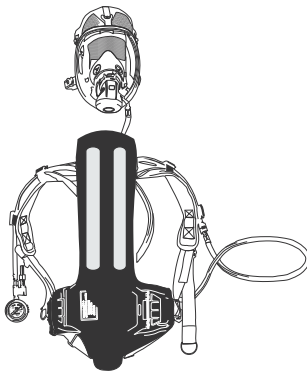
Facilitates instant coupling & decoupling with auxiliary outlet for emergency rescue

Polyamide back plate

Chemical resistant head
Resistant light weight & flexible
Anti-static

Pressure reducing valve

Turns high air pressure into medium



Self Contained Breathing Apparatus Backplate

With Full Face mask Silicone V-777 Positive pressure type(PP)

Item # 13199

With Full Face mask NP V-666+ Positive pressure type(PP)

Item # 13203



Carbon composite cylinder

Cylinder Pressure: 6.8 Ltr, 300 bar
Work life: 45 minutes

Item #

13196 With Cylinder gauge
13208 W/o. Cylinder gauge

Cylinder Pressure: 9 Ltr, 300 bar
Work life: 60 minutes

Item # 13149



ABS Carrying case

Item # 13187

Wooden case

Item # 13198

Steel cylinder

Cylinder Pressure: 6.2 Ltr, 300 bar
Work life: 45 minutes

Item # 13197

Application examples

Fire Services
Respondent / Rescue / Escape
Highly hazardous industry

Hearing Protection

Hearing Protection Need:

Noise risk assessment is usually a requirement at industrial workplaces / factories. At a workplace, if two people at two meter distance from each other have to raise their voices to be heard, it indicates the need for noise risk assessment. The purpose of a workplace noise risk assessment is to identify persons who may be exposed to higher levels of noise and / or for longer exposure period.

Hearing Hazard and their Effects

The effects of noise induced hearing loss are

- Psychological- Can cause stress / interferes with communication & concentration
- Interference with job performance and safety
- Physiological- aural pain, or even nausea

Rating Terms

Each rating number is based upon different test standards, test frequencies and calculation methods, and any given hearing protector generates different numbers depending on the rating method used. For example, single-use earplug displays the following ratings:

NRR 32

SNR 35 (H=34, M=32, L=31)

SLC₈₀ 25.0 (Class 4)

Noise Reduction Rating (NRR):

It is specified in USA by 40 CFR (Code of Federal Regulations) Part 211, Product Noise Labeling (ANSI S12.6-1997). The current range of NRR available extends from 0 to 33 decibels. The NRR is derived from an involved calculation that begins with attenuation test results from at least ten laboratory subjects across a range of frequencies. The NRR estimates the amount of protection

achievable by 98% of users in a laboratory setting when hearing protectors are properly fitted. The higher the NRR, the greater reduction in noise level.

Single Number Rating (SNR):

It is calculated in accordance with ISO 4869-2(1994).

Independent laboratories test earplugs to determine their SNR value which can be used to compare the level of noise attenuation offered by different hearing protectors. To determine acoustic pressure on your ears, SNR value needs to be subtracted from the average noise level measured.

For example:

- The machine noise in a plant measures an average of 99dB.
- You are wearing the Ear Plug with a SNR of 19.
- Thus, the acoustic pressure on your ears is on average 80 dB (99 – 19 = 80 dB).

SOUND LEVEL CONVERSION (SLC80) rating as applied to hearing protection devices (HPD) is a simple number and class rating derived from a test procedure outlined in the Australian / New Zealand Standard, AS/NZS 1270: 2002. It provides a simple number guide to the level of noise attenuation (reduction) that can be expected from a particular HPD. Because humans are different, the level of protection achieved for each person could also be different and so a scientific formula is used to allow for differences. The SLC value includes a correction to ensure that the stated degree of noise reduction is obtained on 80% of occasions, hence the SLC80 rating. The SLC80 rating is the difference between the sound level of the environment in which the HPD is worn and the sound level reaching the wearer's ears. The testing procedure can be separated into two different areas: Mechanical Testing & Audiometric Testing.



Hearing Protection

Single use (Disposable) Earplugs

This is the most common type of protection. Such earplugs are usually made of a PU (polyurethane) foam. They are compressed or rolled-down prior to insertion following which they slowly re-expand to fill the ear canal. They come with or without a pre-attached cord and are usually one-size-fit-all.

(Earplugs of different sizes are also available.)

Reusable Earplugs

Multiple-use ear plugs are typically moulded with a semi-rigid stem and pliable flanges, so they don't require rolling prior to insertion. They insert easily and can be quite comfortable for extended periods.

How to Choose Ear Protection Equipment

- Identify the level and type of noise
- Identify the environment
- Choose equipment that fits well

Identify the level and type of noise

Permissible noise exposure scale

85 dB	8 hours
88 dB	4 hours
91 dB	2 hours
94 dB	1 hour
97 dB	30 minutes
100 dB	15 minutes
103 dB	7.5 minutes
106 dB	3.75 minutes (< 4 min)
109 dB	1.875 minutes (< 2 min)
112 dB	.9375 min (~ 1 min)
115 dB	.46875 min (~ 30 Sec)

Choose equipment that fits well

Ear muffs

To be used when the noise exposure is intermittent

- Are easier to fit
- Are generally more durable than plugs
- Have replaceable parts

Ear Plugs

- To be used when the noise is continuous
- Are simple to use
- Are less expensive than muffs for short term work
- Are more comfortable in hot or damp work areas

FAQ

Q: How can I tell if a noise situation is too loud?

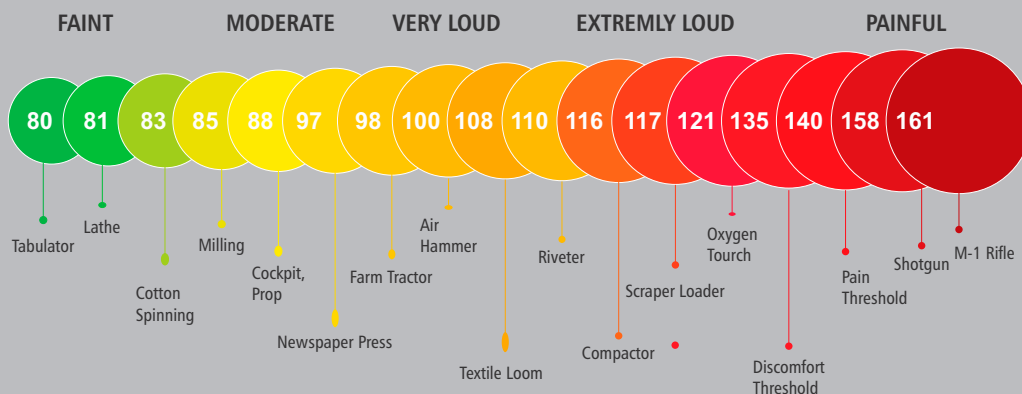
A: There are two rules: First, if you have to raise your voice to talk to someone who is an arm's length away, then the noise is likely to be hazardous. Second, if your ears are ringing or sounds seem dull or flat after leaving a noisy place, then you probably were exposed to hazardous noise.

Q: How often should your hearing be tested?

A: Anyone regularly exposed to hazardous noise should have an annual hearing test. Also, anyone who notices a change in his /her hearing (ringing or buzzing in the ears) should have his or her ears checked. People who have healthy ears and who are not exposed to hazardous noise should get a hearing test every three years.

Identify the environment

Standard Decibel Levels



Q: What is the difference between Disposable and Reusable earplugs?

A: Disposable earplugs and reusable ones are not very different in the level of hearing protection. The major difference, however, is in how they stand up to wear and tear. A disposable (single use) PU earplug will degrade after first use. PU is not environmental friendly and end up in landfill. Unlike disposables, most reusable ear plugs are made of TPE material. It's environment friendly product. Other apparent benefits of using a reusable earplug are stated below. It does not require rolling for insertion, so it is a good pick incase of soiled hands. Moreover, it doesn't require the user to wait to let foam recover unlike a disposable one. Plus, the user will be able to easily get multiple wears out of it since reusable earplugs are designed with added durability in mind. They degrade slower than disposable earplugs since they're typically made with a more resilient design and material to suit washing and hygienic repeat wears.

Q: What is the difference between earplugs and earmuffs?

A: Earplugs are simple to use, less expensive than muffs, and more comfortable in hot or damp work areas. Ear muffs are easier to fit, generally more durable than plugs, and have replaceable parts. In areas where noise levels are very high, muffs and plugs can be worn together to give better protection.

Q: Will the eardrums be poked out with earplugs?

A: That is unlikely for two reasons. First, the average ear canal is about 1 inch long. The typical ear plug is between 1/2 to 3/4 of an inch long. So even if you insert the entire earplug, it would still not touch the eardrum. Secondly, the path from the opening of the ear canal to the eardrum is not straight. In fact, it is quite irregular. This prevents you from poking objects into the eardrum.

Q: If earplug and earmuff are used together, will the NRR be total of both the equipments?

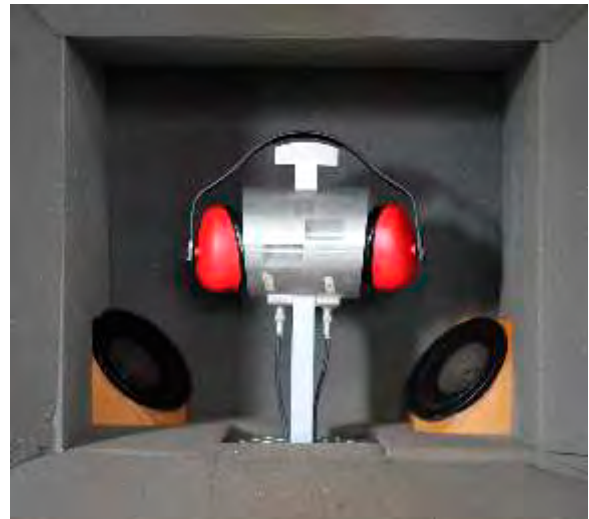
A: Earplugs worn in combination with earmuffs, helmets, or communications headsets, typically provide greater protection than either device alone. However, the attenuation of the combination is not equal to the sum of the individual attenuation values.

For example, at 1000 Hz the combination of a 19-dB plug and a 21-dB muff does not yield 40-dB overall, but rather about 31dB. The simplified solution would be to add 10 dB over the highest device viz 21dB+ 10 dB=31dB.

Q: What is the unit measurement of noise?

A: It is calculated in Decibel (dB). For every 5 dB increase, the noise is louder by double.

Acoustic Measuring System



EARMUFFS



EARPLUGS



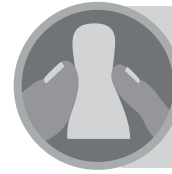
Foam PU



TPE / Silicone

Reference Standard : IS : 9167-1979

DISPOSABLE EARPLUGS



Soft Polyurethane foam
 ■ Single use, hygienic

IS 9167



CM/L-0007892102

ISI Approved

Identifiable colour

Distinct bright orange colour makes monitoring easy for supervisors

High Attenuation

- Slow expansion to perfectly fit the ear canal size & form
- Minimizes noise disturbance immediately

Instructions on each pack

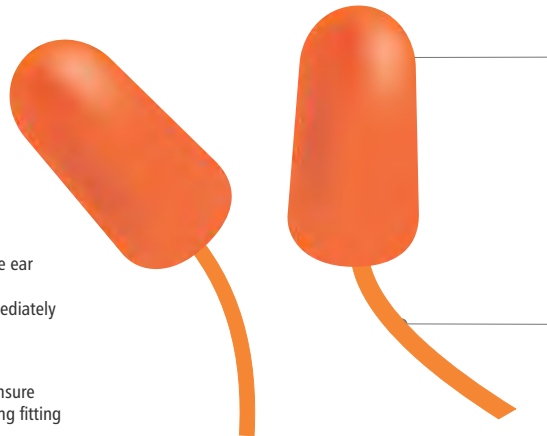
Wearer instructions on each pack ensure correct ways of use thereby providing fitting and protection

Tapered / Bell Shape

- Suitable for long time duration use
- Provides superior fit

Pharma variant

Easily detectable with metal detector



Soft Polyurethane foam

Ultimate comfort fit allows easy use for long duration without discomfort

One size fits all

- No need to stock different sizes
- Lowers inventory

Adequate sound protection

With NRR 32, user is well-protected from noisy environments

Textile cord

- Reduces transmission of sound
- Skin friendly

Easy Accessibility

Earplugs can be dispensed directly from the packing



VENUS H-101 Earplug



NRR 32 dB

Item #	Colour	Cord
16011	ORANGE	CORDED
16017	ORANGE	UNCORDED
16039	ORANGE	METAL DETECTABLE for PHARMA / FOOD



VENUS Earplug Dispenser

Item # 16066



VENUS H-103 Earplug



NRR 32 dB

Item #	Colour	Cord
16013	ORANGE	CORDED
16018	ORANGE	UNCORDED

Pharma-Food Variant



Suggested Applications

Airport
 Cement
 Ceramics
 Construction

Aircraft marshaling
 Crushing, Bagging
 Material mixing
 Sanding, Drilling, Cutting

Engineering
 Mining
 Pharmaceuticals
 Textiles

Sand Blasting, Buffing, Cutting
 Drilling, Material handling
 Material handling
 Spinning, Weaving



REUSABLE EARPLUGS



Washable
 ■ Easy to wash and re-use without compromising on hygiene

IS 9167



CM/L-0007892102

ISI Approved

Multi flange design

- Enhanced protection against hazardous noise, water and other particles
- Repeat wear, value addition

Quick to use

- Quick insert
- No rolling and waiting for correct fit

Even and moderate attenuation

Blocks hazardous noise yet allows warning signals and voices

Smart packaging

Convenient containers available



TPE material

- Low bacteria growth
- Easily washable
- Environment friendly

Hygienic

- Soiling due to rolling eliminated
- No change in performance after washing

Adequate protection

Max NRR 27 dB

Removable textile cord

Cord can be detached and reattached as per requirement



VENUS H-301
Earplug



NRR 27 dB

Item #	Colour	Packing
16019	BLUE	With Pouch



VENUS H-303
Earplug



NRR 27 dB

Item #	Colour	Packing
16035	ORANGE	With Pouch
16036	ORANGE	With Container



VENUS H-401
Earband (For Rifle Shooting)



NRR 27 dB

Item #	Colour	Packing
16046	RED	With Band



VENUS H-307 / V-Shant
Earplug



NRR 27 dB

Item #	Colour	Packing
16044	YELLOW- BLUE	With Pouch
16038	YELLOW- BLUE	With Container
16042	YELLOW- BLUE	With Blister

Suggested Applications

Airport
Cement
Ceramics
Construction

Aircraft marshaling
 Crushing, Bagging
 Material mixing
 Sanding, Drilling, Cutting

Engineering
Mining
Pharmaceuticals
Textiles

Sand Blasting, Buffing, Cutting
 Drilling, Material handling
 Material handling
 Spinning, Weaving

Quick Donning

Washable



EAR MUFFS



- Foam filled cushion**
- Comfortable fit
 - Can be used for long duration without discomposure

IS 9167



CM/L-0007892102

ISI Approved

One size fits all
No need to stock different sizes
Lowers inventory

Better attenuation level
Provides adequate protection
from noisy environments

Height adjustment
To achieve proper fit

Compatibility
Can be used with ear plug with
minimum hindrance in working



Cushioned Headband
Comfort during long working hours


Compactable (Only H-555)
Can be easily compacted when not in use
and store in small space

Light weight

Wide Ear cushions with height adjustments
To achieve superior fit




VENUS H-556

Earmuff 
For Helmet
NRR 23 dB
SNR 26 dB

Item # Colour
16068 **BLACK**




VENUS H-555

Earmuff 
NRR 23 dB
SNR 26 dB

Item # Colour
16058 **BLACK**




VENUS H-530

Earmuff 
NRR 23 dB
SNR 26 dB

Item # Colour
16034 **FLUORESCENT GREEN**




VENUS H-510

Earmuff 
NRR 23 dB
SNR 26 dB

Item # Colour
16014 **RED**



VENUS H-550

Earmuff 
NRR 23 dB
SNR 26 dB

Item # COLOUR
16015 **BLACK**

Suggested Applications

Airport	Aircraft marshaling
Cement	Crushing, Bagging
Ceramics	Material mixing
Construction	Sanding, Drilling, Cutting
Engineering	Sand Blasting, Buffing, Cutting
Mining	Drilling, Material handling
Pharmaceuticals	Material handling
Textiles	Spinning, Weaving

One size fits all



Light weight



Height adjustment



Eye Safety at Work

Need:

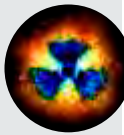
The risk of workplace eye injuries is reduced if proper prevention measures are followed.

To improve eye safety at work, you must first identify the hazards.

Hazards and their Effects:

Potential eye hazards against which protection is needed in the workplace are:

- **Projectiles** (dust, concrete, metal, wood and other particles)
- **Chemicals** (splashes and fumes)
- **Radiation** (especially visible light, ultraviolet radiation, heat or infrared radiation, and lasers)
- **Blood borne pathogens** (hepatitis or HIV) from blood and body fluids



Types of eye injuries include

- Scratch or cut
- Puncture
- Embedded object
- Chemical burn
- Welding flash (vision loss caused by bright light)

Sources of optical radiation

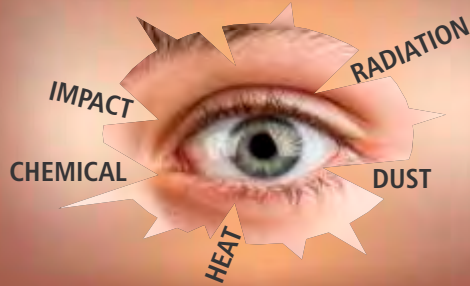
- Sunlight
- Radiation from heat
- Infrared rays
- Reflected light
- Ultraviolet rays

Types of materials

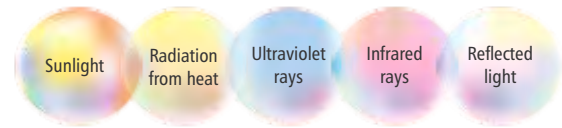
Glass | Plastic | Polycarbonate



Common Eye hazards?



Optical radiation – Sources



Terms

Hard Coating for preventing scratches

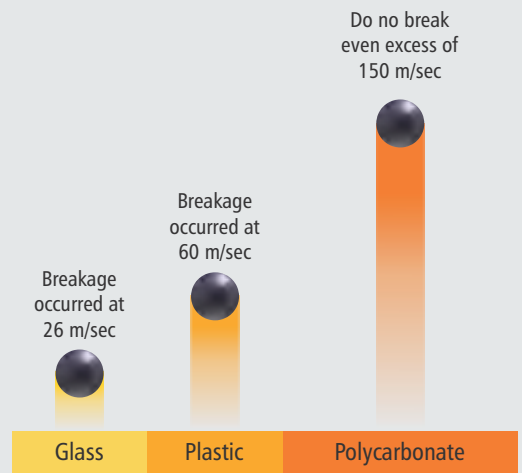
It is applied to the exterior of the lens to minimize the likelihood of accidental scratching. This does not make the lens scratch proof, but helps in tremendously reducing fine hair line scratches.

Bridge

It is the part of a frame that connects the two lenses and goes over the nose. The bridge can be either decorative or simple.

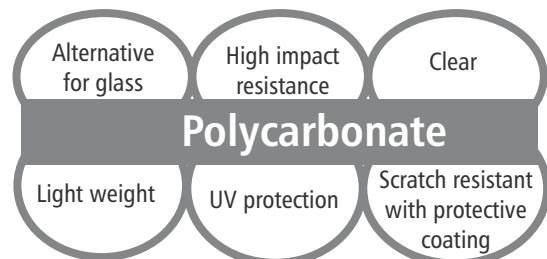
Frame

It is the part that holds the lens. Frame can be made of plastic or memory retention nylon.



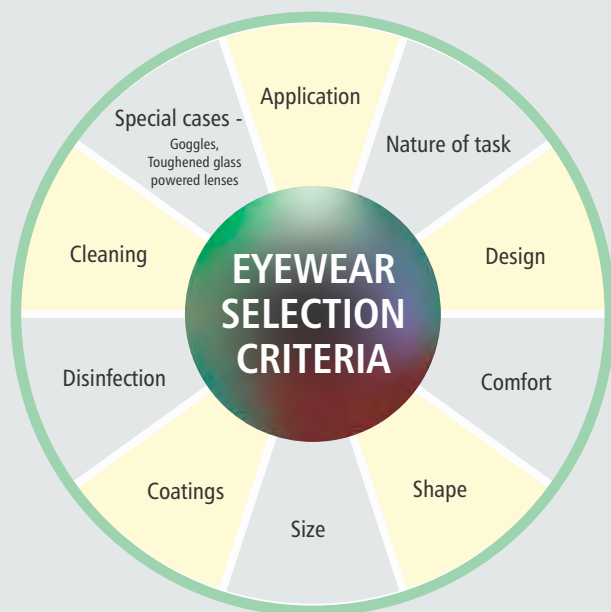
Types of materials & Breakage test

Polycarbonate Advantage





Eye Safety at Work



User Selection Guide

Appropriate wearing of eye protection relevant for the task can significantly reduce the risk of injury. Always buy eye protection that complies with the applicable National and International Standards.

Safety eyewear includes:



Risk or Use	Safety Spectacles	Safety goggles	Safety Face shield
Gas Welding	*	*	*
Electric welding			*
Ultraviolet radiation	*	*	*
Laser radiation	*	*	*
Solar radiation For industrial use	*	*	*

General recommendations include:

Low impact: For tasks including chipping, riveting, and hammering. Recommended protection includes safety spectacles with/without side shields, eye cup goggles, wide vision goggles, eye shields and face shields. Choose items marked with manufacturer ID and Standards mark.

Medium impact: For tasks including scaling, grinding and machining metals, some woodworking tasks, stone dressing, wire handling and brick cutting. Recommended protection includes goggles, wide vision goggles, eye shields and face shields.

High impact: For tasks including explosive power tools and nail guns. Recommended protection includes face shields.

Welding: Recommended protection includes filters and shields.

Chemical handling: Recommended protection includes wide vision goggles, eye shields or face shields.

Hazardous radiation: For tasks like welding, lasers, or fiber optics. Recommended protection includes safety glasses, goggles, face shields, or helmets designed for that task.

Dust: Recommended protection includes goggles.

DESIGNATION OF FILTERS	LIGHT TRANSMISSION VALUE(LTV)	LENS SHADE	UV PROTECTION	FUNCTIONS AND SUITABLE USES
2-1.2 2C-1.2	74.4%-100% 74.4%-100%	Clear	✓	Suitable for use in good visibility conditions.
5-1.4 5-1.7	58.1%-74.4% 43.2%-58.1%	Indoor / Outdoor	✓	Reduces dazzling and the harmful effects of blue light. Ideal moving between light and dark areas.
5-3	8.5%-17.8%	Smoke	✓	For direct sunlight and bright glare conditions.
5-2.5	17.8%-29.1%	Blue Mirror	✓	Ideal protection against sun glare as it reflects solar rays before filtering UV.
2-1.2	74.4%-100%	Yellow	✓	Offers sharpness, acuity and contrast. Primary uncton is to block blue light.

Eye Safety at Work

FA.Q.'s on Eye Protection

Q: Why should safety eyewear protect against UV and IR rays?

A: Various industrial processes emit IR rays i.e. over luminous transmittance. Also there is very strong UV rays spectrum below luminous transmittance in tropical countries like India. These radiations can cause cataract, retinal burn, painful eye condition, skin cancer around the eyelids etc. The lens of safety spectacles are made up of polycarbonate material which block the entry of UVs radiation into the eyes. Shaded PC lens protect against IR rays.

Q: How to select correct welding filters?

A: Selection and use of welding filters are described in IS: 5983-1980.

Q: What are markings on an approved eye protector?

A: Manufacturer's name or trademark and national standard need to be mentioned on temple. Alphabets are used to indicate speciality. For e.g. Ocular "C" for chemically toughened, "V" for High velocity and "M" for molten metals and hot solids.

Q: What type of safety eye protection should I wear?

A: The type of safety eye protection you should wear depends on the hazards in your workplace. If you are working in an area that has particles, flying objects, or dust, you must at

least wear safety glasses with side protection (side shields). If you are working with chemicals, you should wear goggles. If you are working near hazardous radiation (welding, lasers, or fiber optics) you must use special-purpose safety glasses, goggles, face shields or helmets designed for that task.

Q: What is the difference between glass and polycarbonate safety lenses?

A: Both types of safety lenses meet or exceed the requirements for protecting your eyes.

Glass lenses

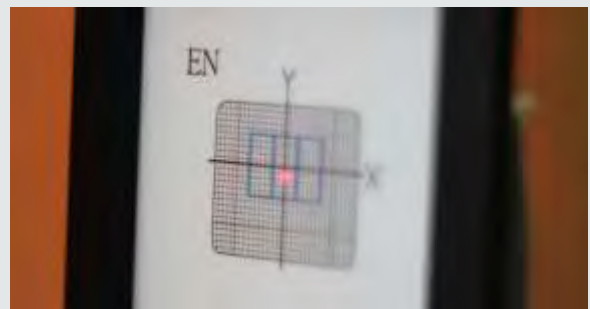
- Can not be easily scratched
- Can be used around harsh chemicals
- Can be made in your corrective prescription
- Are sometimes heavy and uncomfortable
- Are likely to fog

Polycarbonate lenses

- Are lightweight
- Protects against welding splatter
- Are not likely to fog if coated with AF coating
- Are stronger than glass
- Are more impact resistant than glass
- Are not as scratch resistant as glass
- Are also available as Bifocal or corrective lens



Eye-wear Tests



- Hot Oven Tester
- Lens Transmission Tester
- Anti-Ultraviolet & Radiation tester
- Cooling Oven Impact Tester
- Flame Resistance Tester
- Refractive Power Bench

PROTECTIVE SPECTACLES

VENUS G-101

- Clear hard coated lens**
- Polycarbonate material
 - 99.9% UV protection



Adjustable side arms
Temple length can be altered

Side shield
For enhanced protection

IS 5983
CM/L 0002915463

VENUS G-101

Nylon flexible support side arms

Item #	Colour	Type
13108	CLEAR	CHC

VENUS G-102

Style
New framless design
Light weight provides comfort



Temples
Polycarbonate temples with side shield

Frameless Design

Nose bridge
Clear inbuilt nose bridge gives comfortable nose fit

IS 5983
CM/L 0002915463

- Lens**
- Polycarbonate material
 - 99.9% UV protection
 - Single lens made from clear hard coated polycarbonate material for scratch & high impact resistance wrap around design
 - Provide wide coverage
 - Flexible body, one size fits all

VENUS G-102

Item #	Colour	Type
13107	CLEAR	CHC
13125	AMBER	AHC
13126	GREY	GHC
13128	CLEAR	CUC
13159	CLEAR	ANTI-FOG CAF
13200	CLEAR	2.0 BI-FOCAL
13201	CLEAR	2.5 BI-FOCAL

Application examples

Agriculture	Pesticides, Insecticides, Grain dust
Battery	Lead handling
Cement	Crushing, Bagging, Cement handling
Ceramics	Material mixing
Chemical	Material handling
Construction	Sanding, Drilling, Cutting
Engineering	Sand blasting, Powder coating, Buffing, Cutting
Mining	Drilling, Material handling
Pharmaceuticals	Bulk drugs, Material handling
Textiles	Spinning, Weaving
Tyre	Carbon black

OVER SPECS & WELDING SPECTACLES

VENUS G-103 Overspec

Temples

Polycarbonate flexible temples with side shield & vent

Lens

Polycarbonate material 99.9% UV protection Single lens made from clear hard coated polycarbonate material for scratch & high impact resistance



Style

- Frameless fit over spectacles
- Can be worn over with other spectacles

Nose bridge

Clear inbuilt nose bridge gives comfortable nose fit



CML 0002915463

VENUS G-103

Item #	Colour	Type
13106	CLEAR	CHC
13140	CLEAR	ANTI-FOG AF

Welding Spectacles

VENUS G-717-HC



Nylon flexible support side arms

ANSI Z87.1

Shade **1.3 IR**

Item #	Colour	Type
13132	LIGHT GREEN	HC

VENUS G-730-HC



Adjustable temples with soft tips

ANSI Z87.1

Shade **3.0 IR**

Item #	Colour	Type
13133	DARK GREEN	HC

Application examples

Agriculture
Battery
Cement
Ceramics
Chemical
Construction

Pesticides, Insecticides, Grain dust
 Lead handling
 Crushing, Bagging, Cement handling
 Material mixing
 Bulk drugs
 Sanding, Drilling, Cutting

Engineering
Mining
Pharmaceuticals
Textiles
Tyre

Sand blasting, Powder coating,
 Buffing, Cutting
 Drilling, Material handling
 Bulk drugs, Material handling
 Spinning, Weaving
 Carbon black

PROTECTIVE SPECTACLES

New! 2016

VENUS G-204

Light weight and comfortable
Streamline and modern style

Standard compliant
Complies with all standards

Quick release for lens interchange
4-step angle adjustment

Maintains shape
PC arms flexibility without shape distortion (unlike nylon arms)



ANSI Z87.1

IS 5983



CM/L 0002915463

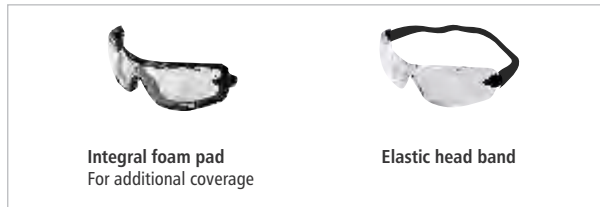
Dielectric safety glasses
Metal-free hinges

Integral brow guard
For additional coverage

Ventilated temples
Provides exceptional ventilation

PC single molded lens
For firmer built

Larger fitting size
To suit most users



Integral foam pad
For additional coverage

Elastic head band

VENUS G-204

Item #	Colour	Type
13312	CLEAR	CHC
Item #	Accessories (Optional)	
13117	FOAM PAD	
13204	ELASTIC HEAD BAND	

New! 2016

VENUS G-304

Light weight and comfortable
Streamlined and modern style

Standard compliant
Complies with all standards

Ventilated temples
Provides exceptional ventilation

Larger fitting size
To suit most possible users



ANSI Z87.1

IS 5983



CM/L 0002915463

PC single molded lens
For firmer built

Dielectric safety glasses
Metal-free hinges

Maintains shape
Flexible yet shape does not get distorted

VENUS G-304

Item #	Lens		Temple Colour
	Colour	Type	
13113	Clear	CHC	RED
13118	Clear	CHC	YELLOW
13120	Clear	CHC	GREEN
13121	Clear	CHC	BLACK
13123	Clear	CHC	BLUE
13207	Clear	CHC	VIOLET-BLUE

New! 2016

VENUS G-404 R

None-slip grip TPR tips

Pivoting temples
For fitting adjustment

Universal fitting
One size fits all

Streamlined design

Complies with all kinds of safety standards
Safe to use



ANSI Z87.1

IS 5983



CM/L 0002915463

Ventilated temples
Provides exceptional ventilation

Nose bridge
Adjustable non-slip soft bridge PVC

VENUS G-404 R

Item #	Colour	Type
13115	CLEAR	CHC

SAFETY GOGGLES

Style

- Wrapped PVC Frame with four side ventilation
- Can be worn over with other spectacles

Lens

- Polycarbonate material 99.9% UV protection
- Single lens made from clear hard coated polycarbonate material for scratch & high impact resistance
- Protect against liquid, dust & molten metals



Ventilation

- Direct ventilation provides cool flow of air
- Reduces fogging

Temples

Adjustable side strap shields with vents

Nose bridge

Clear inbuilt nose bridge gives comfort



VENUS G-503-CHC

Side shields with vent valve (indirect vent) allow free movement of air, prevent direct passage of liquid splash

ANSI Z87.1 : 2003

Item #	Colour	Type
13100	CLEAR	CHC



VENUS G-501-CHC

With side ventilation (direct vent) to allow cool air flow and help prevent fogging

ANSI Z87.1 : 2003

Item #	Colour	Type
13101	CLEAR	CHC

VENUS G-505 with shield

Quick and easy to use

Take off and assembly within 3 seconds each

Anti-fog spherical lens

For clear vision

Over the glass version

For better protection

Compatibility

Compatible with respiratory mask

Superior protection to lower face

Protects lower face from chemical splash



Compact low profile design

180 panoramic view

Perfect and comfortable fitting

Meets all safety goggle standards

High Impact Resistance

Handles blows well

Strong and durable

UV 380 rated polycarbonate



VENUS G-505 SHIELD

Item #	13206
--------	-------



VENUS G-505

ANSI Z87.1

Item #	Colour	Type
13205	CLEAR	CHC

Application examples

Agriculture
Battery
Ceramics
Chemical
Engineering

Pesticides, Insecticides
Lead handling
Material mixing
Mixing
Powder coating, Painting

Mining
Paints
Pharmaceuticals
Ships

Drilling, Material handling
Paint spray, Mixing
Bulk drugs, Material handling
Tank cleaning



Head Protection

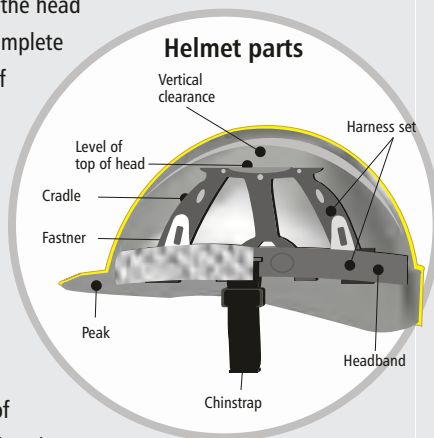
Head Protection Need:

Head protection device shall be worn in case of possibility of any of the following:

- Objects falling from above and striking on head;
- Heads bumping against fixed objects, such as exposed pipes or beams; or
- Accidental head contact with electrical hazards.

Definitions

- **Brim** - The rim surrounding the shell
- **Chinstrap** - An adjustable strap that fits under the chin to secure the helmet on the head
- **Harness set** - The complete assembly by means of which the helmet is maintained in position on the head, which includes headband, cradle etc.
- **Headband** - Part of harness surrounding the head. The plane of lower margin of headband shall correspond to reference line of the head form. The chinstrap may or may not be worn when nape strap is provided.
- **Cradle** - The fixed or adjustable assembly comprising of anti-conclusion tapes and if required, nape strap as well.
- **Nape strap** - An adjustable (with respect to the shell) strap that fits behind the head to secure the helmet and may be an integral part of the headband.
- **Peak** - The extension of the shell above the eyes.
- **Shell** - The smoothly finished material that provides the general outer form of the helmet.
- **Cap Style helmets** - Type of helmet characterized by a brim/peak in the front. Most helmets use this design. The design looks very similar to cap.
- **Full Brim helmets** - Type of helmet with a brim that wraps completely around the helmet. Helps to cover the neck and ears from the sun and other elements.
- **Marking**
Each helmet (shell and harness) will be legibly and indelibly marked with the following information:
 - a) Manufacturer's name or trade-mark and
 - b) Range / size of helmet
 - c) Month & year of manufacturing



• Certification

The helmets shall be marked with the relevant certification mark.

How to choose the appropriate HPD

- Identify head hazards
- Choose head protection accordingly
- Know the limitations of head protection
- Take the required care of the device

FAQ

What is the shelf life of Helmet?

Head protection products do not have an indefinite life. Helmets should be replaced periodically where user environments are known to include higher exposure to temperature extremes, sunlight or chemicals. If a helmet has been struck by a forcible blow of any magnitude, both the helmet shell and suspension should be replaced immediately even if no damage is visible.

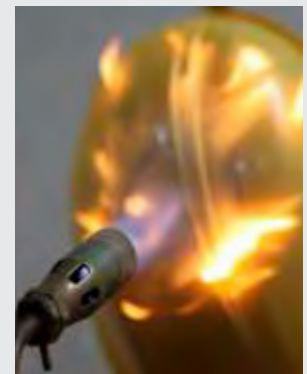
All safety helmets are marked with month and year of manufacturing. It is recommended that a helmet should not be in use after 5 years from the manufacturing date.

Standard Helmet Test Requirements

• Penetration Resistance



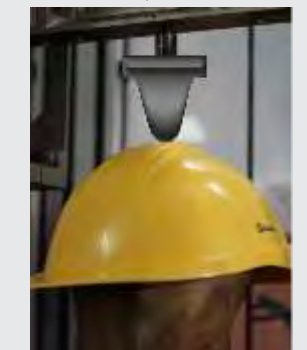
• Flammability Resistance



• Electrical Resistance



• Shock Absorption Resistance



HELMETS

IS 2925



CM/L-0003804156

ISI approved

HDPE shell material

Cost effective

ABS shell material

- Suits working -10° to 50°C
- Improved durability
- Better insulation to the wearer

Textile cradle option

For soft skin contacts

Branding panel

Customized 4 colour logo print

Optimum peak

Provides added protection against sun and rain yet allows unobstructed view

Comfortable sweatband

- Does not become soggy
- More comfort to the wearer
- Easy to replace - maintains comfort and hygiene



Inbuilt air vents option
Facilitates enhanced air flow and better comfort

Integral rain channel
Prevents falling of water on neck

Accessory slot
Standard accessory slot for ear muff, face shield etc.

Adjustable nape strap
Nape position can be adjusted to get the right fit and protection to the wearer

Adjustable chin strap
Provides snug fit

8 Point Cradle suspension

Step 1 - Select Shell

HDPE Shell (ITEM CODE)

VENUS C-110 18024 18026 18020 18017 18012 18014 Ventilated

VENUS C-210 18025 18028 18023 18104 18013 18016 Non-Ventilated

Red Orange Green Blue Yellow White

ABS Shell (ITEM CODE)

VENUS C-310 18099 18010 18097 18095 18092 18093 Ventilated

VENUS C-410 18009 18011 18098 18096 18091 18094 Non-Ventilated

Red Orange Green Blue Yellow White

Step 2 - Select Harness Set



18029

PLASTIC PIN LOCK



18019

PLASTIC RATCHET



18055

TEXTILE RATCHET

Step 3 - Select other accessories like Visor, Earmuff etc. (if available)

Optimum peak



Ventilation



Wear & Adjust



ABS shell



8 Point Cradle



GAS MONITORS



T40 single gas monitor CO, H₂S

- Low cost CO or H₂S monitoring
- Peak/hold feature
- 1500 hour run time on 1 AA alkaline battery
- Compact size and light weight
- Certifications : UL, ATEX, CSA

Item # 13310



Tango TX1 single gas monitor - CO, H₂S, NO₂, SO₂

- First-ever single gas monitor that uses two sensors to detect the same gas
- Certifications : ATEX, UL, IECEX, PESO

Item # 13309



Gas Badge Pro single gas monitor

CO, H₂S, SO₂, O₂, NO₂, NH₃, Cl₂,
CLO₂, PH₃, HCN, H₂

- Full-featured, single gas detector
- Interchangeable sensors
- iNet™ Ready and Docking Station™ compatible
- Certifications : UL, CSA, ATEX, Australia: Ex, IEC: Ex, Russia: GOST-R

Item # 13308



Mx4 Ventis multi-gas monitor CO, H₂S, O₂, SO₂, NO₂, LEL, CH₄, CO/H₂low

- Monitors 1-4 gases
- Configures with or without a pump
- Available with a black or safety orange overmold
- iNet™ Ready and DS2 compatible
- Certifications : UL, ATEX, CSA, MSHA, GOST, PESO, DGMS

Item # 13307



Mx6 multi-gas monitor with pump

LEL, CH₄, O₂, CO, H₂S, H₂, NO,
Cl₂, NO₂, SO₂, HCN, HCL, NH₃,
CLO₂, PH₃, CO₂, PID

- 1-6 Gas monitor
- Full color LCD display
- 24 Sensor options including PID & IR
- iNet™ Ready and Docking Station M compatible
- Certifications : UL, ATEX, CSA, MSHA, GOST

Item # 13306



Ventis Pro Series

O₂, LEL/CH₄, CO, H₂S, SO₂, NO₂,
CO-H₂ low, HCN, NH₃, COSH,
CO₂/HC-IR, CO₂/CH₄-IR

- Flexible Sensor configuration
- Alarm action messages
- iAssign Technology
- Dedicated PANIC BUTTON
- Man down alarm
- Certifications : ATEX / IECEX

Item # 13315

DOCKING STATION & GAS DETECTORS



The DSX Docking Station

INSTRUMENTS SUPPORTED

GasBadge Pro, MX6 iBrid, Tango TX1, Ventis MX4, Ventis LS

GAS INLETS

3-Port Version: One "fresh" air port, two calibration gas ports

6-Port Version: One "fresh" air port, five calibration gas ports

PUMP FLOW RATE

1.2 SCFH (550 mL / min)

COMMUNICATION

10 / 100 Ethernet support, RJ-45 Category 5 Connection

DISPLAY

128 x 64 Dot Matrix LCD

Item # 13312

WHAT'S YOUR MODE?

	STANALONE	CLOUD-CINNECTED	LOCAL SERVRR
Record Storage	USB	Cloud	PC, Server
Bump and Cal	✓	✓	✓
Print Certificates	✓	✓	✓
6-Ports (Optional)	✓	✓	✓
Reports		✓	✓
Fleet Management		✓	✓
Event Scheduling		✓	✓
Email Alerts		✓	
Auto Software Updates		✓	
Auto Cal Gas Replacement (Optional)		✓	
Price	\$	\$\$	\$\$\$
Software	Not Applicable	Included	Included



SharpEye Flame Detector

UV, UV-IR, IR3, IR4

- SIL2 capability(TOV)
- A range of industrial detectors UV/UV-IR/IR3/IR4
- Designed for all fires: hydrogen, hydrocarbons, metals etc.
- Industrial or commercial applications

Item # 13311



Open Path IR SAFETY series 700/900

- Hydrocarbons detection(C1 to C8)
- SIL2 capability (TOV)
- Heated optics
- 10-year warranty for xenon flash bulb
- Detection range: up to 140 M
- 4-20 mA and Modbus RTU outputs

Item # 13314



Detector Tube System

- Gastec Detector Tubes indicate concentrations directly by way of a calibrated scale printed on the tubes

Item # 13313

ABSORBENTS

Absorption capacity

- 10 times x its own body weight
- Large surface area

Stays afloat

- Does not sink after absorbing the spilt oil
- Can be removed easily

Large surface area

Attracts majority of the spilled oil to its surface
Absorbs large quantities of spilled fluids

Flexible

- Can be easily placed around a liquid spill to block it from spreading
- Absorbs leaks in tight places

Light weight

Can be transported / carried to the area of the spill with minimum effort

Multi-use

Can be used to clean areas with liquid spills, oils, coolants, cutting oils and solvents

Identifies oil and water separately

Floats in water, but absorbs oil



Booms - Mouldable as per need

Easily mouldable to required shapes
E.g. around machines, pipes and other areas

Pillow - Rough and tough

Stands rough handling

Pad - 2 in 1 design

Can be used as a pad or a wipe

Uses

Used for drip, leaks and repair jobs

Customizable to avoid waste

Continuous sock design allows customization of length and formation to provide full use of the absorbent



VENUS V-Sorb Pillows

Item #	Colour
18101	GREY



VENUS V-Sorb Booms

Item #	Colour
18103	GREY



VENUS V-Sorb Pads

Item #	Colour
18107	GREY



**VENUS V-SPILL KIT
75 Lts. (Capacity)**

Contents	Quantity
Pad	12Nos.
Boom	3Nos.
Pillows	2Nos.
V-8007800 ABEK1P3R	
Multipurpose Gas Mask	1Set
Splash Goggle	1No.
Nitrile Gloves	1Pair
Chemical Gum Boots	1Pair
Barricade Tape	1Roll
Disposable Bag	1No.

Item #	18100
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Suggested Applications

- Drains
- Oil drum storage
- Leaks and Drips
- Spill response
- Paint sludge
- Oil and grease spills
- Nuisance leaks

SERVICES



Walk-through Survey & PPE selection

- Contaminants in the hazardous area are analyzed and studied based on which suitable respirator is recommended as per the application.
- Aerosol monitor survey services available.
- Samples order supply, no MOQ.
- Product demonstrations are organized.



Awareness programs

- PPE awareness programs are conducted to create awareness among users about their health and safety.
- Safety awareness films produced by Venus are distributed for free.
- Safety posters are distributed to customers.
- On site safety PPE displays done for awareness and education.
- Safety Day campaigns & exhibitions.



Fit tests

- Fit tests are performed to check the fit of masks on different face sizes and contours as per guidelines mentioned in the standard.
- Quantitative fit testing program with Portacount, TSI USA.
- Quantitative fit testing program with pressure sensor equipment OHD, USA.



Training programs

- Educational presentations available on Neck up safety subject.
- On Site training is given with aid of safety films.
- Visits to PPE test facility at Venus, Navi Mumbai.
- PPE seminars are organized for end users.

LIST OF NATIONAL & INTERNATIONAL STANDARDS

Respiratory Protection

SN	Group	Indian Standard No	Description	European / American Standard	Description
1		IS 8347:2007	Respiratory Protective Devices- Definitions, classification and nomenclature of components	EN 134:1998	Respiratory Protective Devices- Nomenclature of components
2		IS 9623:2008	Selection, use and maintenance of respiratory protective devices	EN 529:2005	Respiratory Protective Devices- Recommendation for selection, use, care and maintenance
3	Particle Filters	IS 9473:2002	Respiratory Protective Devices- Filtering half mask to protect against particles	EN 149:2001 + A1:2009	Filtering Half mask to protects against Particles Requirement, Testing & Marking
		IS 15322:2003	Particulate Filters used in Respiratory Protective equipment	EN 143:2000	Particle Filters Requirements, Testing & Marking.
4	Gas Filters	IS 15323:2003	Gas filters and combined filters used in respiratory protective equipment's	EN 14387:2004 +A1:2008	Gas filter & combined filters
5	Face - piece	IS 14746:1999	Respiratory Protective Devices – Half Masks & quarter masks	EN 140:1998	Half mask & quarter masks requirements, testing & marking.
		IS 14166:1994	Respiratory Protective Devices - Full face Masks	EN 136:1998	Full-face Mask for special use requirements, testing & marking.
6	Air supplied Mask	IS 10245(Part 1):1996	Closed circuit breathing apparatus (compressed oxygen cylinder)	EN 145:1998	Self-contained open circuit compressed air breathing apparatus
		IS 10245(Part 2):1994	Open circuit breathing apparatus.	EN 147:2006	Respiratory Protective Devices- Self contained open circuit breathing apparatus with full face mask
		IS 10245(Part 3):1982	Fresh air hose and compressed air line breathing apparatus.	EN 14593-1 EN 14593-2 EN 14594	Compressed air line breathing apparatus with a full face mask, half mask or a mouthpiece.
		IS 10245(Part 4):1982	Escape breathing apparatus. (short duration self-contained type)		
7	RPD Threads	IS 14138:1994	Respiratory Protective Devices- Part 1 Standard thread connection.	EN 148 + 1999	Respiratory Protective Devices- Threads for face-pieces, standard thread connection.
8	RPD Threads	IS 14138:1994	Respiratory Protective Devices- Part 2 Threads for facepiece.	EN 148-2:1999	Respiratory Protective Devices- Threads for facepiece, Centre-thread connection.

Hearing Protection

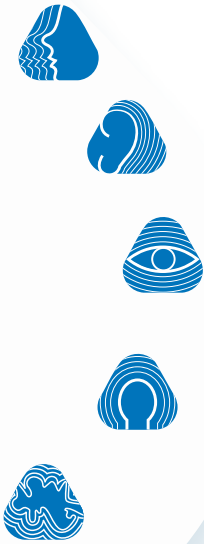
SN	Group	Indian Standard No	Description	European Standard	Description
1	Ear Protectors	IS 9167: 1979	Specification For Ear Protectors	EN 352-1:2002 EN 352-2:2002	Hearing protectors- Safety requirements and testing Earmuff Hearing protectors- Safety requirements and testing Earplug

Eye Protection

SN	Group	Indian Standard No	Description	European Standard	Description
1	Eye protectors	IS 5983:1980	Specification For Eye Protectors	EN 166	Personal Eye Protection specification

Head Protection

SN	Group	Indian Standard No	Description	European Standard	Description
1	Safety Helmet	IS 2925:1984	Specification for industrial safety helmets	EN 397 : 2012	Industrial safety helmets



VENUS[®]

High Protection | Good comfort | Great Value |

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