U.S.SAFETY Cartridge & Filter Selection Guide

Product & Part Numbers		Approvals & Typical Applications
Particulate Filter Pads	 Filter Cover - P/N 159-T-61, Pkg. of 6 N95 Filter Pad* - P/N 158-D-N5, Box of 16 N99 Filter Pad* - P/N 158-D-N9, Box of 16 Filter Holder - P/N 14880, Pkg. of 6	**N95** - Approved for minimum 95% efficient protection against non-oil particulates. **N99** - Approved for minimum 99% efficient protection against non-oil particulates. **Typical applications:** For welding on steel or aluminum, use an N95 pad and a Half-Mask respirator. If concentrations are higher, use an N99 pad and a Full Face respirator with welding adapter. Also used for woodworking or general dust environments, protection against sodium salts, aluminum oxides & silicates, carbon black, paper dusts, cotton dusts, fiberglass, gypsum, graphite and mineral or rock dusts. CDC recommended for protection against Tuberculosis.
Gas/Vapor Cartridges	 Organic Vapor - P/N 158-T-20, Box of 6 Acid Gas - P/N 158-T-21, Box of 6 Ammonia & Methyl Amine - P/N 158-T-22, Box of 6 Acid Gas & Organic Vapor - P/N 158-T-26, Box of 6 Formaldehyde - P/N 158-T-29, Box of 6	**For protection against organic vapors. Typical applications include protection against lacquer thinners, petroleum distillates, naptha, acetone, isopropyl alcohol, toluene & stoddard solvent.** **For protection against chlorine, hydrogen chloride, sulfur dioxide and chlorine dioxide. Typical applications include cleaning or etching (e.g. metal or concrete) with the acids listed. Also used for protection against muratic acid.** **For protection against ammonia or methyl amine.** **For protection against organic vapors, chlorine, hydrogen chloride, sulfur dioxide and chlorine dioxide. Typical applications include anywhere there is a combination of acid gases and organic vapors. Some cleaning compounds contain both.** **For protection against formaldehyde. Eye protection is required (goggles or full face respirator).**
Gas/Vapor/Filter Combination	 Optional Cover- P/N 159-T-61, Pkg. of 6 Retainer - P/N 14881, Pkg. of 6 N95 Filter Pad* - P/N 158-D-N5, Box of 16 N99 Filter Pad* - P/N 158-D-N9, Box of 16 Gas/Vapor Cartridge (see above)	Select a filter pad, then select either the retainer or the optional cover to easily add particulate protection to any gas/vapor cartridge. In general, select an N95 pad for lower concentrations where a Half-Mask respirator will be used and select an N99 pad for higher concentrations where a Full Face respirator will be used. The retainer is an open top design to be used in heavy dust/mist applications; the optional cover is for general use. **Typical applications:** Protecting against misting or splashing of the liquid of the gas/vapor contaminants listed above. Also used where there is a combination of any of the particulate hazards listed in the first row and also any of the gas/vapors listed above.
Organic Vapor/N95	 Retainer N95 Filter Pad* Organic Vapor Cartridge } 158-T-20DN5, Box of 2	Approved for organic vapors and minimum 95% efficient protection against non-oil particulates. This combination is best suited for lacquer & enamel paints (including applying oil-based paints) and also most commercially available pesticides. Also used for some concrete and floor sealers. **Advantages:** Unique filter design has low breathing resistance and resists clogging so you don't need a special pre-filter. **Note**: Not for use against paints containing isocyanates. If the pesticide contains oil, use the Diskit-R95 shown below.
Diskit™ Particulate Filter	 N99*- P/N DiskitN99, Box of 12 pair N100*- P/N DiskitN100, Box of 12 pair R95**- P/N DiskitR95, Box of 12 pair R100**- P/N DiskitR100, Box of 12 pair P100- P/N DiskitP100, Box of 12 pair	**N99**-Approved for minimum 99% efficient protection against non-oil particulates. **Typical applications:** welding, woodworking & dusts, fumes or mists. Also used for protection against Tuberculosis, and, if **combined with an organic vapor cartridge**, paint spray & pesticides. **N100**-Approved for minimum 99.97% efficient protection against non-oil particulates. **Typical applications:** battery plants, nuclear power facilities, asbestos abatement (specific limitations apply see OSHA 1910.1001) and remediation, lead, cadmium, silver, cobalt fume & dust, radionuclides and radon daughters. Also used for dusts, fumes, & mists with a PEL less than 0.5mg per cubic meter. **R95**-Approved for minimum 95% efficient protection against oil & non-oil particulates. **Typical applications:** metal working with oil mists, such as grinding or machining with oil lubricants. Also used for protection against glycerin mists, welding, woodworking, and, **if combined with an organic vapor cartridge**, paint spray & pesticides. **R100**-Approved for minimum 99.97% efficient protection against oil & non-oil particulates. **Typical applications:** lead, welding, metal working with oil mists, such as grinding or machining with oil lubricants, and radionuclides and radon daughters. **P100**-Passes NIOSH's most rigorous testing criteria and is approved for minimum 99.97% efficient protection against oil & non-oil particulates. **Typical applications:** battery plants, nuclear power facilities, asbestos abatement (specific limitations apply see OSHA 1910.1001) and remediation, lead, cadmium, silver, cobalt fume & dust, radionuclides and radon daughters. Also used for dusts, fumes, & mists with a PEL less than 0.5mg per cubic meter.
Gas/Vapor/Diskit Combination	 Diskit, (see above for P/N) Adapter- P/N 14890, Box of 10 pair Gas/Vapor Cartridge (see above for P/N)	Select the appropriate gas/vapor cartridge for your application and then select the Diskit filter that meets your particulate protection needs. The durable, reusable adapter allows you to easily replace the cartridge or filter when they expire. **Typical applications:** An R95/Organic Vapor can be used around plastics processing where there are vapors & glycerin mists. It can also be used for pesticides containing oil & for paint spray operations. An N99/Organic Vapor is suitable for lacquer and enamel paints & non-oil pesticides. An R100/Organic Vapor/Acid Gas can be used where there is repair welding on machinery coated with oil, dirt, and grime.
Low Profile P100 Filter	 Retainer for Pre-Filter- P/N 14879, Pkg. of 6 Optional Pre-Filter for P100- P/N 14494, Box of 24 Low Profile P100 Filter- P/N 158-T-LP0, Box of 6	P-100 - Approved for minimum 99.97% efficient protection against oil & non-oil particulates. This low-profile filter passes NIOSH's most rigorous particulate test criteria. It is packaged in a sturdy molded housing, so there is no chance of filter damage. The low-profile P100 has been engineered to provide low breathing resistance & long life, at an economical price. The optional pre-filter is best used in heavy dust applications. It will extend the life of the P100 filter because it prevents larger particles from rapidly clogging the high efficiency media. **Typical applications:** Any application which required a 30CFR11 HEPA filter such as lead, cadmium, asbestos (specific limitations apply, see OSHA 1910.1001), radionuclides and radon daughters.
Gas/Vapor/P100 Combination	 Retainer for Pre-Filter- P/N 14879, Pkg. of 6 Optional Pre-Filter for P100- P/N 14494, Box of 24 Organic Vapor/P100- P/N 158-T-20LP0, Box of 4 Acid Gas/P100- P/N 158-T-21LP0, Box of 4 Ammonia/Methyl Amine/P100- P/N 158-T-22LP0, Box of 4 Acid Gas/Organic Vapor/P100- P/N 158-T-26LP0, Box of 4 Formaldehyde/P100- P/N 158-T-29LP0, Box of 4	The sturdy, low profile P100 shown above is available permanently sealed to any U.S. Safety cartridge. This provides the ultimate protection & durability at a very affordable price. The optional pre-filter is best used in heavy dust applications. It will extend the life of the P100 filter because it prevents larger particles from rapidly clogging the high efficiency media. **Typical applications:** The Acid Gas/Organic Vapor/P100 is commonly used in metal smelting or forging, such as steel mills or mining and post mining operations. These filters are also used anywhere there is a combination of particulate & gas/vapor contaminants where the particulate hazard requires a P100 filter.

* DO NOT use N Series products for protection against oil aerosols, such as grinding with oil-based lubricants or processes with glycerin mists. ** When R Series products are exposed to oil, a one shift (8 hour) time use limit applies.

WARNINGS:

1. Selection & typical applications shown are a guideline only. Prior to selecting a respirator, the workplace hazards must be evaluated by a qualified Industrial Hygienist, who will determine the appropriate cartridge, filter, and facepiece as well as use limitations.
2. Respirators must be selected, fitted, used and maintained in accordance with MSHA, OSHA and other applicable regulations as well as ANSI Z88.2.
3. Do not exceed maximum use concentrations as established by regulatory guidelines.
4. Never use a half-mask respirator where contaminant concentrations exceed 10 times the PEL or TLV.
5. Never use a full facepiece respirator where contaminant concentrations exceed 50 times the PEL or TLV.
6. Before using any respirator, READ and UNDERSTAND the instructions provided with the respirator facepiece assembly as well as the Cautions and Limitations listed on the enclosed NIOSH approval matrix.
7. Although this respirator reduces exposure to certain contaminants, it DOES NOT completely eliminate your exposure or risk. Misuse of this product or failure to follow the warnings may result in sickness or even death. For proper use, consult a qualified safety professional or call U.S. Safety at 1-800-821-5218.

U.S.SAFETY
8101 Lenexa Drive P.O. Box 15965
Lenexa, Kansas 66285-5965
(800)821-5218 or (913)599-5555 Fax: (800)252-5002
e-mail: info@ussafety.com

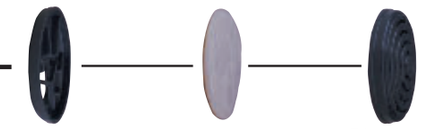
U.S.SAFETY's
Air Purifying Respirators
featuring the Diskit™ FILTER SYSTEM

Series 100 - Silicone
Series 300 - Thermoplastic
Series 400 - Limited Use

Series 120 - Silicone
Series 520 - Neoprene

Optional Spacer
P/N 14895

Particulate Protection



Filter Holder
P/N 14880

N95 Filter - P/N 158-D-N5
N99 Filter - P/N 158-D-N9

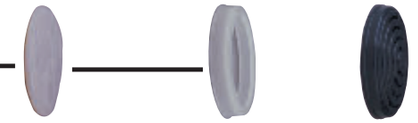
Filter Cover
P/N 159-T-61

Filter Holder & Cover Assembly
P/N 158-T-50

Gas/Vapor Protection

Organic Vapor ..... P/N 158-T-20
Acid Gas ..... P/N 158-T-21
Ammonia & Methyl Amine ..... P/N 158-T-22
Acid Gas & Organic Vapor .... P/N 158-T-26
Formaldehyde ..... P/N 158-T-29

Particulate Pre-Filter For Gas/Vapor

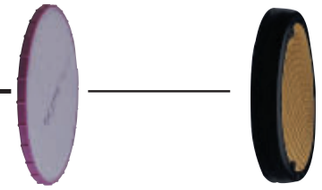


N95 Filter - P/N 158-D-N5
N99 Filter - P/N 158-D-N9

Retainer (paint)
P/N 14881

Optional Retainer
P/N 159-T-61

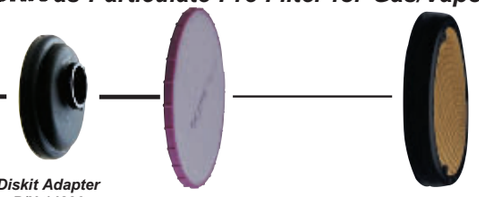
Diskit™ as Particulate Filter



N99 Filter ..... P/N DiskitN99
N100 Filter ..... P/N DiskitN100
R95 Filter ..... P/N DiskitR95
R100 Filter ..... P/N DiskitR100
P100 Filter..... P/N DiskitP100

Optional Sparkshield
P/N 14885

Diskit™ as Particulate Pre-Filter for Gas/Vapor



Diskit Adapter
P/N 14890

N99 Filter ..... P/N DiskitN99
N100 Filter ..... P/N DiskitN100
R95 Filter ..... P/N DiskitR95
R100 Filter ..... P/N DiskitR100
P100 Filter..... P/N DiskitP100

Optional Sparkshield
P/N 14885

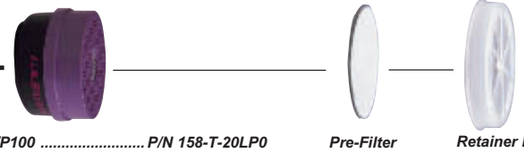
Low Profile P100 Particulate Filter

P/N 158-T-LP0

Pre-Filter
P/N 14494

Retainer For
Pre-Filter
P/N 14879

Low Profile Gas/Vapor & P100 Particulate Filter Combination



Organic Vapor/P100 ..... P/N 158-T-20LP0
Acid Gas/P100 ..... P/N 158-T-21LP0
Ammonia & Methyl Amine/P100 ..... P/N 158-T-22LP0
Acid Gas & Organic Vapor/P100 ..... P/N 158-T-26LP0
Formaldehyde/P100 ..... P/N 158-T-29LP0

Pre-Filter
P/N 14494

Retainer For
Pre-Filter
P/N 14879

Affordable Quality Respirators From U.S.SAFETY

8101 Lenexa Drive P.O. Box 15965
Lenexa, Kansas 66285-5965
(800)821-5218 or (913)599-5555 Fax: (800)252-5002
e-mail: info@ussafety.com