



Clothing

Clothing

Introduction

North Safety Products Europe has manufactured chemical protective clothing for a wide variety of applications. The North range of Chemical Protective Clothing is the result of over 50 years in the industry with extensive research, development and expertise gained since the range was formed. North offers a full line of garments and suits of diverse materials for industrial, fire fighting and emergency situations. All clothing is designed and manufactured in compliance with EN standards.

Applications

- Oil Refineries
- Chemical handling
- Petrochemical industry
- Handling of hazardous materials
- Transport of hazardous materials
- Cleaning industry
- Waste cleanup
- Utilities
- Fire brigades



Sizes

For the sizes of the protective clothing North uses the following size table:

Size	Clothing size	Body length	Chest size	Waist size
M	50 - 52	176 - 182	100 - 104	88 - 92
L	54 - 56	182 - 188	108 - 112	96 - 100
XL	58 - 60	188 - 194	116 - 120	104 - 108
XXL	62 - 64	194 - 200	124 - 128	112 - 116

Level of protection

For each level of protection North offers a different type of seam closure. Depending on the particular fabric and application, users have a choice of either spray, liquid or even gas tight connections of the seams. North uses high quality techniques and methods to assure the best possible construction of the seams. Seams can be welded, taped or glued for different kind of protection.

Class 1

Gas-tight chemical protective clothing

1^a Gas-tight chemical protective clothing with the SCBA on the inside of the suit.

1^b Gas-tight chemical protective clothing with the SCBA on the outside of the suit.

1^c Gas-tight chemical protective clothing with external air supply.

Seam construction gas tight stitched, taped and glued on the outside.

Class 2

Non gas-tight chemical protective clothing

with external air supply by which a positive pressure will arise.

Class 3

Liquid tight chemical protective clothing

protection of the entire body with liquid-tight seams between the different parts (a.o. boots and gloves)

Seam construction liquid tight stitched and welded on the outside or taped on the inside

Class 4

Spray-tight chemical protective clothing

protection of the entire body with spray tight connections between the different parts (a.o. also boots and gloves) Seam construction spray tight stitched and welded on the outside or taped on the inside

Class 5

Chemical protective clothing against particles

Class 6

Limited spray-tight chemical protective clothing

Overview coated fabric properties

Properties	Standard	Ferranyl	Neoprene	Butyl	Viton
Outside colour		Red/grey	Yellow/grey	Green	Yellow
Total weight		360 g/m ²	370 g/m ²	720 g/m ²	600 g/m ²
Temperature range		-30°C / +70°C	-30°C / +70°C	-30°C / +70°C	-30°C / +70°C
Abrasion resistance	EN 530-2	6	6	6	6
Stability to heat	EN 25978	2	2	Pass	Pass
Bending resistance	ISO 7854-B	5	5	5	5
Puncture resistance	EN 863	2	2	2	2
Tear resistance	ISO 4674-A	5	3	5	5
Seam strenght	ISO 5082	4	5	4	4

Rinba chemical protective clothing

Useful terms and technical explanations

Chemical Penetration

The movement of a chemical and/or micro organism through porous material, seams, pinholes or other imperfections in a chemical protective material.

Chemical permeation

A process by which a chemical passes through a polymer by means of molecular diffusion. This occurs without there being any physical holes in the fabric. It is divided into three parts:

absorption = the process of being soaked on the outer coating

diffusion = spreading through this coating and

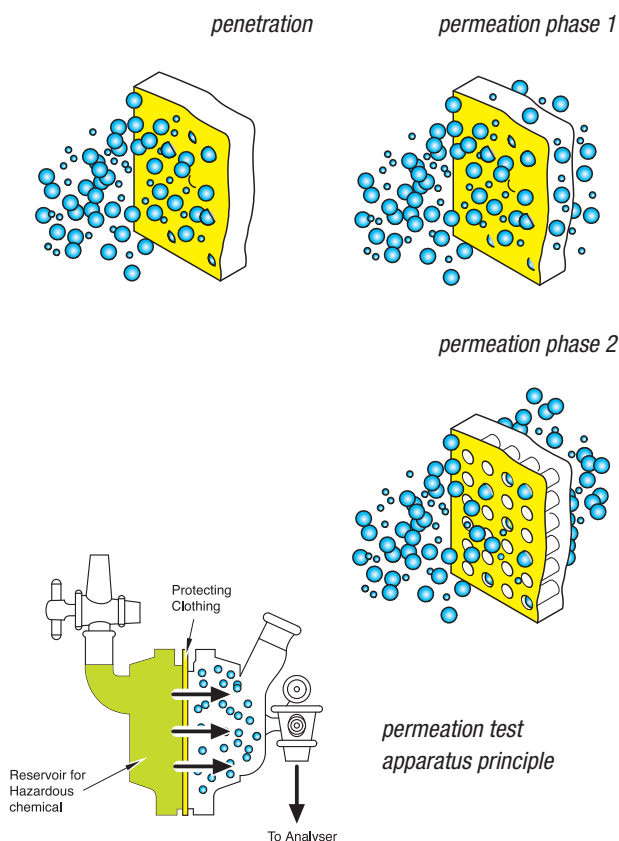
desorption = releasing on the inner coating.

Degradation

is a deleterious change in one or more mechanical properties of a chemical protective material due to contact with a chemical.

Breakthrough or Permeation time

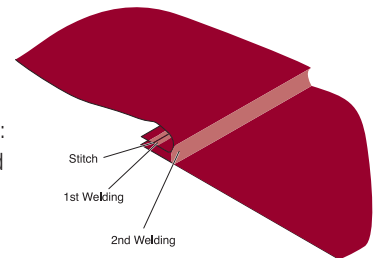
The breakthrough time is the elapsed time between first exposure of the fabric to chemical and the rate of permeation reaching a target value. The target permeation rate for tests according to EN 374-3 is one microgram of chemical passing through each square centimetre of fabric every minute. When measured according to the standard method, the breakthrough time is a value by which the performance of different fabrics can be compared.



Materials

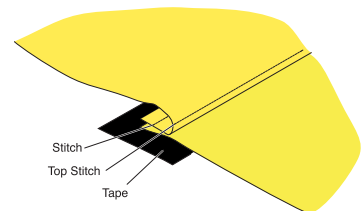
Ferranyl

Polyamide fabric coated on both sides with Poly-Vinyl-Chloride (PVC) coating. Colour: red & grey. Good abrasion and resistance against acids and bases. Limited resistance against oils, fats and benzene. Relatively cheap and used as an all-round material because of low allergy risks.



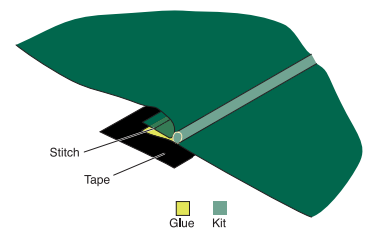
Neoprene

Polyamide fabric coated on both sides with Chloroprene (CR) coating. Colour: yellow & grey. Mechanically better than natural rubber. Good flexibility and resistant against acids, bases, oils, fats and several other aggressive chemicals. Not resistant against benzene.



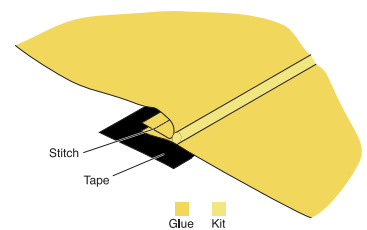
Butyl

Polyamide fabric coated on both sides with Butyl rubber (IIR) coating. Colour: green. High chemical resistance, especially against ketons and esters. High protection against gases. Long shelf life. Not resistant against oil or oil based products.



Viton*

Polyamide fabric coated with Neoprene on the inside, Butyl in the middle and Viton on the outside. High protection against gas. Very good chemical resistance against solvents (Tri-chlorethylen, Xylene, Toluol).



* Viton is a brand name from Dupont.

Splash suits

Rinba Splash



Heavy duty overall specially developed for work in sewers and liquid tanks. The overall is made from thick, elastic PVC and is liquid proof up to chest level. Complete with boots, gloves and hood for extra safety. An attached hood from the same material protects neck and head. The front of the overall is fitted with a wedge shaped closing with double covered zipper and velcro closing.

Product features and benefits

- heavy duty stretch PVC
- unique easy exchangeable, liquid tight glove adaptors
- elastic hood for safe and proper sealing of wearer's face and neck.
- easy to put on/take off because of wedge-shaped closing with zipper and cover with Velcro closing

Technical description

Material	PVC
Seams	liquid tight class 3
Standard	EN343
Colour	dark green
Visor	full face mask
Closure	wedge shaped with zipper and cover with Velcro closing
Gloves	PVC exchangeable (EN374)
Boots	sealed nitrile rubber with steel sole and toecap (EN345)
Breathing apparatus	possible outside suit (not supplied)
Weight	2500gr.

Art. nr.	Description	size
A164380	Splash	M (43), L (943), XL (46), XXL (46)

Northylon



Boiler suit

PVC coated suit all seams are sewn and welded. With chemical tight plastic zipper and metal press studs for perfect protection against (chemical) liquids.

Technical description

Material	PVC coated nylon 295gr/m ²
Seams	liquid tight class 3
Standard	EN343
Colour	green
Closure	plastic zipper

Art. nr.	Description	size
N71200***	Boiler suit with collar	S, M, L, XL, XXL
N71250***	Boiler suit with hood	S, M, L, XL, XXL
N71254***	Boiler suit with hood, elasticated wrist & ankles	S, M, L, XL, XXL

Northylon Garments

PVC coated garments with welded seams for (chemical) liquids splash protection to specific body parts.

Art. nr.	Description	size
N70451935	Apron 40x36inch heavy weight	-
N70453935	Apron 48x36inch heavy weight	-
N70461910	Apron 40x36inch lightweight	-
N70463910	Apron 48x36inch lightweight	-
N71081***	Jacket with collar	S, M, L, XL
N71300***	Trousers	S, M, L, XL
N71501910	Sleeves 15inch	-

FSN Hood

Fully enclosed hood for chemical liquid protection to head, neck and shoulders. With elasticated headband and anti mist visor with yoke vent an apron front to help circulate and minimize lens fogging.

Art. nr.	Description
N72750002	Hood with visor and apron front
N72750003	Hood with visor and neck cover
N72750005	Hood with ventilated visor and apron front

Disposable Coveralls

North GEN 'Air'



The North Gen Air Coverall is constructed from a new generation of laminated Micro-porous fabric that complies with CE Type 5 & 6 protection standards giving it resistance to noxious dust and splash. It combines excellent chemical properties as well as offering high comfort levels due to its light weight and breathable panels in the hood, under the arm and the gusset made of SMMMS (spun bound and melt blown polypropylene) material.

Art. nr.	Description	size
85596/.	North GEN 'Air'	M, L, XL, XXL

North GEN 'FR Plus'



The North Gen "FR Plus" coverall is constructed from a revolutionary new white and blue fabric using SMMMS technology and is specially treated in order to be flame retardant as per EN533, index 1, for first layer flame protection (should be used with an index 2/3 garment below). It also offers protection against oil and solvents, so this product is unique in its class. High breathability properties ensure an increased level of comfort. This product can be worn for long periods of time and is low linting.

Art. nr.	Description	size
25599/.	North GEN 'FR Plus'	M, L, XL, XXL

North GEN 'Pro'



The North Gen "Pro" coverall is constructed from a revolutionary new blue fabric using SMMMS technology. It combines excellent chemical and particulate protection, high breathability properties and increased comfort levels. This product can be worn comfortably for long periods of time and is low linting.

Art. nr.	Description	size
35596/.	North GEN 'Pro'	M, L, XL, XXL

Product features and benefits of North GEN Coveralls

- CE type 5 & 6 (certified as per BS EN ISO 13982-1:2004 and BS EN ISO 13034:2005)
- 2-way zip enclosed by re-sealable storm flap
- Adhesive tabs for fastening
- Knitted cuffs
- Elasticated waist and ankles
- 3 piece hood construction and enclosed neck to increase protection from contamination
- Silicon free
- Soft fabric for greater comfort levels
- Individually vacuum packed for reduced storage space and risk of contamination
- High quality at very competitive prices!



Spray tight suits

Rinba Ferranyl



A broad range of chemical resistant garments from double coated Ferranyl with high frequency welded seams. The range contains Rinba sleeves, aprons, jackets, trousers and coveralls made for a wide variety of applications. Ferranyl is characterised for its good chemical resistance and permeation in a wide variety of chemical applications.

Product features and benefits

- Excellent fit due to weight and flexible material
- High frequency sealed seams for best possible protection against sprays
- excellent resistance to a wide variety of chemicals or application

Options

- Easy to replace liquid proof glove adaptors
- Hoods for extra protection to head and neck
- Mask hood easy to combine with all types of full-face masks

	Garments	Coveralls
Material	Double coated PVC on nylon	Double coated PVC on nylon
Seams	Spray tight class 4	Spray tight class 4 liquid tight class 3
Standard	EN14605	EN14605
Colour	Red/grey	Red/grey

Art. nr.	Description	size
A164856	Apron 70x120cm	-
A164141	Sleeve 70x120cm	-
A163332	Trouser	M, L, XL, XXL
A163731	Jacket	M, L, XL, XXL

Spray tight suits Ferranyl

Rinba Trooper



The Rinba Trooper coveralls have been specially developed for situations where wearers are exposed to high concentrations of chemicals. The Rinba Trooper is made from Ferranyl.

Product features and benefits

- Excellent fit
- Excellent resistance to a wide variety of chemicals
- High frequently sealed spray and liquid tight seams
- Wedge-shaped closure with 8mm zipper and Velcro

Options

- Easy to replace liquid proof glove adaptors
- Hood gives extra protection to head and neck
- Mask hood is easy to combine with all types of full face masks

Technical description

Material	Double coated Ferranyl on nylon
Seams	spray tight class 4
Standard	EN14605
Colour	Red/grey

Art. nr.	Description	specifications	size
A164242	Trooper Ferranyl	without hood	M, L, XL, XXL
A163431	Ferranyl hood	With adjustable shock cord	-
A163432	Ferranyl hood	For mask	-

Spray and liquid tight suits

Guardian



Specially developed for situations where wearers are exposed to high concentrations of chemicals. Made from a soft and pliable Neoprene: nylon with a double coated Chloroprene and known for its comfortable wear in both cold and extremely hot conditions!

Product features and benefits

- Excellent fit
- Excellent resistance to a wide variety of chemicals
- High frequently sealed spray and liquid tight seams
- Wedge-shaped closure with 8mm zipper and Velcro

Optional:

- Easy-to-replace liquid proof glove adaptors
- Hoods give extra protection to head and neck
- Mask hood is easy to combine with all types of full-face masks
- To fit with safety boots
- Protective knee or elbow pads

Technical description

Material	Double coated chloroprene on nylon
Seams	Spray tight class 4 liquid tight class 3
Standard	EN14605
Colour	Yellow/grey

Art. nr.	Description	specifications	size
A164221	Guardian basic	without hood	M, L, XL, XXL
A164222	Guardian Luxury	without hood, inner sleeves & plastic ends	M, L, XL, XXL
A164223	Guardian Plus	with hood, closing at leg ends, neoprene gloves	M, L, XL, XXL
A163241	Neoprene hood	with adjustable shockcord	-
A163422	Neoprene hood	for mask	-

Liquid tight suits

Rinba Scout



Chemical protective rescue suit that can be used very quickly in the event of calamities in which chemical contamination can occur. If the situation requires a quick response there is generally no time for the procedure of putting on a complete chemical and gas-tight proof suit the Scout is a perfect solution. Made of flexible, comfortable Neoprene, which is known for its excellent chemical resistance and the mechanical strength of the material. Designed with unique glove adaptors which make a liquid proof connection between arm and hand.

Product features and benefits

- quick and simple procedure
- fits over all existing fire-fighting clothing and breathing apparatus
- durable though lightweight and flexible Neoprene
- Two types: one-piece overall (Scout I) and two-piece jacket and trousers (Scout II)
- large, acetate visor for clear field of vision
- Easy-to-change gloves without the suit having to be removed

Technical description

Material	Double coated neoprene
Seams	liquid tight class 3
Standard	EN14605
Colour	yellow
Visor	2mm acetate anti fog
Closure	180cm zipper with Velcro closing
Gloves	Nitrile exchangeable (EN374)
Boots	seals nitrile rubber with steel sole and toecap (EN345)
Breathing apparatus	inside suit (not included)
Option	reflecting characteristics
Weight	2500gr.

Art. nr.	Description	specifications	size
A164505	Scout I	rescue suit	L, (43) XL (46)
A164504	Scout II	rescue jacket & trousers	L, (43) XL (46)

Over pressure suits

Rinba PionAir



Non- gas tight overpressure suits with external air supply. A one-piece suit in Ferranyl or Butyl with an external air supply and a step-in possibility on the back with a large high chemical and solvents resistant visor.

Can be connected to the AFU compressed air filter line by means of a breathing air hose (EN139). The air is inserted into the suit via a feed-through where it is distributed inside the suit towards the arms and legs by means of a hose system. The ventilation system produces a slight overpressure in the suit, thus keeping the suit at a small distance from the body. This significantly increases the wearing comfort and the degree of protection. The air leaves the suit via overpressure valves attached to the back.

For technical details of the AFU filter unit see page 53 chapter Respiratory.

Product features and benefits

- Complete liquid proof and chemical-resistant air suit
- The air suit also serves as a cooling system
- Excellent view through large chemical resistant visor
- Unique easy to replace liquid proof glove adaptors
- Attached safety boots with steel sole and toecap
- Easy to put on and off due to access possibility on the back

Technical description	PionAir Ferranyl	PionAir Butyl
Material	Double coated PVC	Butyl
Seams	Liquid tight class 3	Gas tight class 1
Standard	DIN58648-2:1997	DIN58648-2:1997
Colour	Red/grey	Green
Hood	AG airhood	
Visor	Cellulose acetate	
Closure	Backentry step in closing	
Gloves	Nitrile exchangeable (EN374)	
Boots	Seales nitrile rubber with steel sole and toecap (EN345)	
Breathing apparatus	Through AFU and airline (not supplied)	
Weight	2500gr.	

Art. nr.	Description	size
A137030	Pionair ferranyl	L, (43) XL (46)
A137130	Pionair butyl	L, (43) XL (46)
A161253	Compressed air hose 10m	-
A161254	Compressed air hose 20m	-
A161255	Compressed air hose 40m	-
A160050-23	AFU airline filter unit	-

Gas tight suits

Rinba Patrol



A neoprene chemical protective gas-tight suit with elastic gas proof face seal for full-face mask. The face seal is made of elastic foam rubber that feels comfortable to the skin and absorbs perspiration.

Neoprene provides high resistance to a wide variety of chemicals and is known for its pleasant and supple wearing properties at high temperature differences. This makes the suit highly suitable for doing heavy work in both very cold and hot conditions.

The gas-tight proof zipper of the Patrol is 110cm long and runs from the wearer's right shoulder to his left knee. This makes it possible to put on the suit without the help of others. The zipper has the teething on the inside, thus preventing any dirt collecting there and making it easy to clean the suit.

Product features and benefits

- Suit and mask can be decontaminated separately
- The suit does not have to be replaced when the mask is replaced and vice versa
- Seams are stitched, taped and sealed
- 110 cm gas tight proof zipper for easy putting on
- Unique easy-to-replace gas proof glove adaptors ensure extra safety

Technical description

Material	Double coated neoprene
Seams	Gas tight class 1
Standard	EN943-1b-ET
Colour	Yellow
Visor	Full face mask
Closure	110cm gas tight teething inside
Gloves	Nitrile exchangeable (EN374)
Boots	Seals nitrile rubber with steel sole and toecap (EN345)
Breathing apparatus	Outside suit (not included)
Weight	4500gr.

Art. nr.	Description	size
A140340	Patrol	L, (43) XL (46)

Gas tight suits

Rinba Defender



A chemical-resistant gas tight suit with a large panoramic, polycarbonate visor. The 2mm thick coated visor offers the user both chemical and mechanical protection. Made of Viton provides protection against hazardous chemicals in liquid, gaseous vapour and/or solid form.

The gas and liquid proof zipper is 180cm long and runs from the wearer's head to his left knee.

This makes it very easy to step into the suit when wearing compressed air breathing apparatus. The zipper has the teething on the inside, thus preventing any dirt from collecting there and making the suit easy to clean and decontaminate.

Product features and benefits

- Total protection for wearer and SCBA
- Soft flexible and durable Viton for high resistance against hazardous chemicals
- Easy to wear over working clothes and SCBA
- Seams are stitched, taped and sealed
- Easy to clean and decontaminate
- Large visor ensures excellent view
- Unique glove adaptors with easy-to-change gloves

Optional

- External air supply and cooling
- Knee and elbow pads available



Technical description

Material	Viton outside/ Butyl inside
Seams	Gas tight class 1 A
Standard	EN943-1a-ET
Colour	Yellow
Visor	2mm coated Polycarbonate
Closure	180cm gastight teething outside with cover
Gloves	Nitrile exchangeable (EN374)
Boots	Sealed nitrile rubber with steel sole and toecap (EN345)
Breathing apparatus	Inside suit (not supplied)
Weight	6500gr.

Art. nr.	Description	size
A145110	Defender	L, (43) XL (46)

Specials & Accessories

Leather coverall



Coverall for shot blasting or welding with leather front and cotton back. The overall has been specially developed for situations where wearers in heavy conditions are exposed to welding sparks or shot blasting grit. The Leather material is characterised by its excellent mechanical resistance against sparks and grit. The back of the coverall is made from lightweight cotton for cooling effect.

Features and benefits

- fully leather arms with elastic cotton cuffs
- leather protects against sparks and rebounding blast grit
- cotton back for cooling effect
- equipped with double turn-up with jeans buttons

Art. nr.	size
A164451	M, L, XL, XXL

Glove adapters



The unique glove adapters. The glove adapters provide a liquid proof sealing between the user's sleeve and glove. This design is also used standard in the Rinba gas suits to ensure that the connection between glove and sleeve is liquid and gas proof.

Art.-Nr.	Description
A163525	Adapter

Gas tight suit test & repair kit



A suit that has been damaged should be taken to the manufacturer or to a manufacturer appointed service centre so that it can be tested and maintained. Repairs, changes, supplements can only be carried out by the manufacturer or a by the manufacturer appointed authority.

After each cleaning the suit must be checked on functionality. All parts must be checked especially with regards to breaks, holes or damages on the coating. In case of small damages the user is able to repair and test the suit with the help of the test and repair kit.

The test kit consists of a plate for seal with couplings, pressure gauge, hoses with nipples for pressure gauge, plugs and key for exhalation valves, repair patches, solution for repair patches, grease sticks for zipper and a brush.

Art.-Nr.	Description
?????	

Chemical resistant selection guide

Chemical	Ferranyl	Neoprene	Butyl	Viton
A				
Acetaldehyde	C	C	A	C
Acetylene	C	B	A	C
Acetic acid, glacial	C	B	B	C
Acetic acid 100%	C	B	B	C
Acetic acid 30%	B	A	A	B
Acetic acid 85%	C	B	B	C
Acetic acid anhydride	C	B	A	C
Acetone	C	C	A	C
Acetonitrile		C	A	C
Acrolein			A	C
Acrylonitrile	C	B	B	C
Alcoholic beverages	B	A	A	A
Allyl alcohol	C	C	A	
Aluminium chloride	A	A	A	A
Aluminiumsulphate	A	A	A	A
n-Amminoethylpiperazine			A	
Ammonia	B	A		
Ammonia > 30%	B	A		B
Ammonia, gaseous	B	A	B	C
Ammonium chloride	A	A	A	A
Ammonium chloride	A	A	A	A
Ammonium sulphate	A	A	A	A
Ammoniumhydroxide	A	A	A	A
normal Amyl acetat	C	C	A	C
normal Amyl alcohol	A	A	B	B
Aniline	C	C	A	A
Asphalt for roads	A	B	C	A
B				
Barium hydroxide	A	A	A	A
Battery accid	A	A	A	A
Benzaldehyde	C	C	A	C
Benzene	C	C	A	C
Benzene	C	C	C	A
Benzonitrile			A	C
Benzotrichloride	C	C	B	
Benzotrifluoride	C	C	C	
Benzoyl chloride	C	C	B	B
Benzyl				
Benzyl alcohol	C	B	A	A
Benzyl chloride	B	C	B	
Bleach liquor	A	B	B	B
Borax	A	A	A	A
Boric acid	A	A	A	A
Bromoacetone nitrile			A	A
1-Bromo-2-Propanol			A	A
3-Bromo-1-propanol		A	A	A
1,3-Butadienes	A	B	B	B
Butyraldehyde	B	C	A	C
n-Butane	C	A	C	A
Butyric anhydride	C	B		
n-Butanols	B	A	A	A
para-t-Butyl toluene		C	C	A
2-Butanone	C	C	A	C
Butyl acetate	C	C	B	C
Butyl ether	C	B	B	

Chemical	Ferranyl	Neoprene	Butyl	Viton
C				
Calcium sulphate	A	A	A	A
Calcium bisulfide	A	A	B	A
Calcium chloride	A	A	A	A
Calcium hydroxide	A	A	A	B
Calcium hypochlorite	A	C	A	A
Carbolic acid	C	A	A	A
Carbolic acid / Phenol	C	A	A	A
Carbon dioxide	A	A	A	A
Carbon disulphide	C	C	C	A
Carbon monoxide	A	A	A	A
Caustic soda	B	A	A	B
Chlorine	B	A	C	B
Chlorine bleach water	A	A	B	A
Chlorine decolourising agent	A	B	B	A
Chlorine, liquid	B	C	C	A
Chloroacetonnitril			A	A
Chloroform	C	C	C	A
1-Chloronaphtalene	C	C	C	
2-Chloroprene	C	C		
1-Chloro-2-Propanol	C		A	A
3-Chloro-1-Propanol	C		A	A
Chlorosulphonic acid	C	C	C	C
Chlorosulphonic acid	C	C	C	C
Chlorothene	C	C	C	A
Chromic acid	A	C	C	A
Citric acid	A	A	A	A
Copper-ii-Sulfate	A	A	B	A
Creosote oil	B	A	A	
ortho-Cresols	C	B		
Crotonaldehyde		C	A	C
Crude oil, petroleum		C	B	A
Cyclohexanol	B	B		A
Cyclohexane	C	C	C	A
Cyclohexanone	C	C	B	C
D				
Diacetone alcohol		A	A	A
Dibutylphthalate	A	A	A	B
1,4-Dichloro-2-Butene	C	C	A	A
Dichlorodifluoromethane	C	C	A	B
Dichlorodifluoromethane Freon 11	C	B	B	B
Dichlorodifluoromethane Freon 12	C	A	A	B
Dichlorodifluoromethane Freon 113TF	C	B	C	B
Dichlorodifluoromethane Freon 114	C	A	A	A
Diesel fuel C	A	C	A	
Diethyl glycol C	A	C	A	
1,1-Difluoroethelene		A		A
n,n Dimethyl acetamide	C	C	A	C
Diisobutyl ketone	C	C	B	C
1,2-Dichloroethane	C	C	C	A
Dioctylphthalate	C	C	A	C
Dioxane	C	C	A	C
1,4-Divinylbenzene	C	C	A	C
E				
Epichlorohydrin	C	C	A	C
Ethanol	B	A	A	A

Chemical	Ferranyl	Neoprene	Butyl	Viton
Ethanolamine		B	A	
Ether	C	C	C	C
Ethyl acetate	C	C	A	C
Ethyl bromide	C	C	B	A
Ethyl chloride	C	B	C	A
Ethyl glycol	C	B	B	B
Ethyl methyl ketone	C	C	A	C
Ethylamine	C	C	A	C
Ethylene dibromide	C	C	C	A
Ethylene glycol	A	A	B	A
Ethylene Glycol Mono Butyl Ether	A	B	A	A
Ethylene Oxide	C	C	B	C
2-Ethyl hexane acid	A	A		
F				
Formaldehyde	B	A	A	A
Formalin	B	A	A	A
Formic acid	A	A	A	B
Fuel	B	B	C	A
Fural	A	B	A	C
Furfurale	A	B	A	C
Freon TMC	C	C		
G				
Gas / Petrol	C	B	C	A
Gas, Petrol	C		C	A
Gasoil	C	A	C	A
Gasoline / Motor spirit	C	B	C	A
Glucose	A	A	A	A
Glycerin	B	A	A	A
Glycerol	B	A	A	A
Glycol	A	A	B	A
H				
Heating oil	B	B	C	A
Heptane	C	A	C	A
Hexamethyl phosphoramide			B	
normal-Hexane	C	A	C	A
Hydraulic oil		A	C	A
Hydrazine 100%	C	C	A	C
Hydrazine 30-70%	A	A	A	
Hydrochloric acid 36%	A	A	A	B
Hydrochloric acid 15%	A	A	A	B
Hydrochloric acid 36%	A	A	A	B
Hydrogen		A	A	A
Hydrogen chloride 15%	A	A	A	B
Hydrogen chloride 36%	A	A	A	B
Hydrogen cyanide	A	B	A	A
Hydrogen cyanide	B	B		B
Hydrogen Fluoride 30-80%	C	B	B	B
Hydrogen Fluoride, gaseous	A	B	C	B
Hydrogen peroxide 50%	A	B	A	A
Hydrogen sulphide		B	A	B
Hydroquinone	A	A		
I				
beta-Ions			A	A
Isoamyl acetate	C	C		
Isoamyl nitril	C		C	
Isobutyl alcohol	C	A		A

Chemical resistant selection guide

Chemical	Ferranyl	Neoprene	Butyl	Viton
Isooctane	C	C	B	A
Isoprene		C		A
Isopropyl acetate	C	C	A	C
Isopropyl alcohol	C	C		C
K				
Kerosene	C	B	C	A
L				
Id-Lactid acid	A	A	A	B
lubricant oil		B	C	A
M				
Magnesium chloride	A	A	A	A
Magnesium hydroxide	A	A	A	A
Maleic acid	A	A	B	A
MCPP	A			
MEK	C	C	A	C
Mercuric chloride	A	A	A	A
Mercury	A	A	A	A
meta-Xylene	C	C	C	A
Methane sulfonic acid		A		
Methanol	C	B	B	B
Methanol	C	B	B	B
4-Methoxy-4-methyl-2-Pentanon		C	A	C
Methyl acetate	C	C	B	C
Methyl alcohol	C	B	B	B
Methyl amine	A	A	B	
Methyl chloride	C	C	B	B
2-Methyl-4-Chlorofenoxyaceticacid	A			
Methyl chloroform	C	C	C	A
Methyl glycol			A	
Methyl iodide	C	C		
Methyl isobutylketone	C	C	B	
Methyl methacrylate	C	C	B	
Methylene chloride	C	C	C	B
Mineral oil	A	A	C	A
Monobromobenzene			C	A
Monochlorobenzene	C	C	C	A
Morpholine	C	C	A	C
N				
Naftalene	B	C	C	A
Naphta <3% arom. 150-200°C	C	B	C	
Naphta <3% arom. 180-260°C		B		
Naphta 10-15% arom. 120-140°C	C	B		
Naphta 15-20% arom. 150-200°C	C	B		
Naphta 15-20% arom. 180-260°C	A	A		
Sodium chloride	A	A	A	A
Nitric acid 10%	A	A	B	A
Nitric acid 30%	A	A	B	A
Nitric acid 60%	B	B	C	A
Nitrobenzene	C	C	B	A
Nitrohydrochloric acid	B	B		
Nitromethane / Nitrocarbøl	C	C		
1-Nitropropane	C	C	A	C
2-Nitropropane			B	
Nonyl phenol	A			
O				
Octane	C			

Chemical	Ferranyl	Neoprene	Butyl	Viton
Oleic acid	B	B		B
Oleum 20% SO ₃	C	C	C	A
Oleum 65% SO ₃	C	C	C	A
Oxalic acid	A	A		
P				
Paint- solvents	C	C	C	A
Palmitic acid	B	A	B	A
PCB	C	A	A	A
Pentachlorophenol	B	C		A
normal-Pentane	C	C		A
Perchloric acid 50-72%	A	A		
Perchloric ethylene	C	C	C	A
Petrol		C		
Petroleum	C	B	C	B
Phenol	C	A	A	A
0-p-Phenolsulphonic Acid		A		
Phosphoric acid 100%	A	A		
Phosphoric Acid 25-85%	A	A	A	A
Phosphorus Oxychloride	C	C		C
Picric acid	C	B	B	A
Polychlorinated biphenyls	C	A	A	A
Potassium bromide	A	A	A	A
Potassium cyanide	A	A	A	A
Potassium cyanide	A	A	A	A
Potassium dichromate	A	B	A	A
Potassium hydroxide	A	A	A	A
Potassium hydroxide	A	A	A	A
Potassium nitrate	A	A	A	A
Potassium nitrate	A	A	A	A
Potassium sulphate	A	A	A	C
n-Propanol	B	A	A	A
b-Propiolacton				
Propionaldehyde		C	A	C
Propionitrile	C		C	
Propyl acetate	C	C	B	C
Propylene oxide	A	A	A	
Pyridine	C	C	B	C
S				
Soap solutions	A	A	A	A
Sodium acetate	C	A	A	A
Sodium carbonate 70%	A	B	B	B
Sodium chloride	A	A	A	A
Sodium dichromate		B	A	A
Sodium fluoride	A	A	A	A
Sodium hydroxide	B	A	A	B
Sodium nitrate	A	B	A	
Sodium peroxide		B	A	A
Sodium sulphate	A	A	A	A
Soybeanoil	A	A	A	A
Special boiling point spirit	C	B	C	
Stearic acid	A	B	B	A
Styrene	C	C	C	A
Sulphur	C	C	C	A
Sulphur dioxide acid	C	C	B	A
Sulphur dioxide, gaseous	A	B		A
Sulphur trioxide	C	B		A

Chemical	Ferranyl	Neoprene	Butyl	Viton
Sulphuric acid 25%	A	A	A	A
Sulphuric acid 50%	A	B	A	A
Sulphuric acid apr. 98%	B	C	C	B
Sulphuric acid fuming 20%	C	C	C	A
Sulphuric acid, fuming 65%	C	C	C	A
Sulphurous acid	C	C	B	A
T				
Tannic acid	A	A		A
Tars		A	C	A
Tetra	C	C	C	A
1,1,2,2-Tetrachloroethane	C	C		
Tetrachloromethane	C	C	C	A
Tetrafluoroethylene		A	A	A
Tetrahydrofuran	C	C	C	C
Toluene	C	C	C	A
2,4-Tolunene diisocyanate	C	C	A	A
para-Toluenesulphonic acid	A	A		
Tribromoethane			A	A
Tributyl phosphate		C	B	C
1,1,2-Trichloroethane		C	C	A
Trichloro acetonnitrile		C	C	C
Trichloro ethylene	C	C	C	A
Trichloro ethylene	C	C	C	A
1,2,3-Trichloropropane			A	A
Trichloromonofluoromethane	C	B	B	B
Trichloromethane	C	C	C	A
Tricresyl phosphate	A	C	A	A
Triethanolamine	A	A	B	C
Trifluoric ethanol	C	B		
Turpentine	C	C	C	B
Turpentine / White spirit	C	B	C	
V				
Vinyl chloride				A
W				
Water	A	A	A	A
White spirit	C	B	C	
X				
Xylene	C	C	C	A
Z				
Zinc chloride	A	A	A	A

Icons used

General



Material



Weight



Customizable



3A coating



4A coating



4A+ coating

Eye protection



Lollypop packaging



RX Insert



Replaceable lens



Pantoscopic angling

Hearing protection



SNR Value

Respiratory protection



Adjustable fit



Dust filter



Gas filter

Hand protection



EN 388



EN374.2003



EN374.2003



EN374.2003



EN407



EN511



EN421



EN421



Coating



Packaging



EN420 - Consult the instructions for use

Fall protection



Servicable



Positioning



Ladder climbing



Rescue



Descent



Fall arrest



Confined spaces



Construction working



Extended D-ring



Work restraint



Scaffolding work