

## SAFEST CHEMICAL CHART

COFRA boasts one of the most advanced laboratories in the safety world. Within its walls, continuous quality checks on materials are conducted and tests on all components are carried out, with particular attention to their features in terms of mechanics, hydrolysis and resistance to aggressive agents. The SAFEST compound is the result of an in-depth research and a specialized know-how and is able to satisfy any demand of work environments.

HYDROCARBONS (oils and solvents)	POLYURETHANE
Turpentine	1
ASTM 1 OIL	3
ASTM 2 OIL	1
ASTM 3 OIL	3
Benzene	X
Butane	2
Kerosene (domestic)	2
Cyclohexane	3
Chloroform	X
Benzyl Chloride	X
Methylene Chloride	X
Hexane	2
Diesel oil (cracking)	2
Diesel oil (SR)	3
Grease (all kinds)	3
Isoctane	2
Methyl Chloride	X
Oil mixture	3
Nitrobenzene	X
Animal oil	3
Coconut oil	2
Cod-liver oil	3
Linseed oil	2
Corn oil	3
Olive oil	2
Pine oil	2
Castor oil	2
Cottonseed oil	3
Silicone oil	3
Lard oil (158 °F)	2
Hydraulic oil	3
Mineral oil	2
Vegetable oil	2
Perchlorethylene	X
Propane	2
Beef tallow (158 °F)	3
Carbon tetrachloride	1
Toluene	X
Trichlorethylene	X
Xilene	X

INORGANIC ACIDS	POLYURETHANE
Acetic acid	1
Boric acid	2
Citric acid	1
Carbolic acid	1
Formic acid	2
Malic acid	1
Tartaric acid	X
Oleic acid	X
Palmitic acid	1
Stearic acid (158 °F)	1
Tannic acid	X
Chlorine water	1

MIXTURES	POLYURETHANE
Sea water	3
Acrylonitrile	1
Starch	3
Aniline	X
Butter (158 °F)	2
Milk butter	3
Chlorobenzene	X
Chlorophenol	1
Cresol	X
Dibenzylether	1
Dichlorobenzene	X
Ethylether	2
Sodium hypochlorite	1
Milk	1
Monoethanolamine	1
Morpholine	X
Hydrogen peroxide	2
Soap	3
Paint remover	X

ALCOHOLS	POLYURETHANE
Amyl alcohol	1
Benzyl alcohol	1
Butyl alcohol	1
Ethyl alcohol	1
Methyl alcohol	1
Octyl alcohol	1
Propyl alcohol	1
Diacetone alcohol	1
Glycerine	3
Diethanolamine	2

ORGANIC ACIDS	POLYURETHANE
Acetic acid	1
Boric acid	2
Citric acid	3
Carbolic acid	1
Formic acid	1
Malic acid	2
Tartaric acid	2
Oleic acid	1
Palmitic acid	2
Stearic acid (158°F)	2
Tannic acid	3

SALTS AND ALKALIES	POLYURETHANE
Potassium dichromate	2
Ammonium chloride	2
Calcium chloride	3
Potassium chloride	3
Sodium chloride	3
Ferric chlorid	2
Copper chloride	2
Ammonium hydroxide	1
Calcium hydroxide	2
Potassium hydroxide	1
Sodium hydroxide	2
Sodium hypochlorite 20%	X
Calcium nitrate	3
Potassium nitrate	2
Ferric nitrate	3
Ammonium sulphate	3
Potassium sulphate	2
Copper sulphate	2
Ferric sulphate	3
Calcium sulphate	2
Calcium sulphide	2

ALDEHYDES AND KETONES	POLYURETHANE
Acetaldehyde	X
Acetone	X
Benzaldehyde	X
Butyraldehydee	X
Chloracetone	X
Formaldehyde	1
Methyl ethyl Ketone	X

ORGANIC ESTERS	POLYURETHANE
Amyl acetate	X
Butyl acetate	X
Ethyl acetate	X
Dibutyl phtalate	1
Ethyl formate	1
Methyl acetate	X
Propyl acetate	X

### LEGEND

EXCELLENT	3
GOOD	2
FAIR	1
NOT RECOMMENDED	X

**COLD  
PROTECTION**



Footwear specifically designed and produced to ensure perfect thermal comfort, even for users working in low temperature environments.

**100%  
METAL  
FREE**

Footwear entirely made of metal free components and or components which do not set off security alarms.

**SLIP  
RESISTANT  
SOLE**

Footwear endowed with a sole, which thanks to a special compound and to the pattern of the outsole, has great anti-slip resistance; especially suitable for use on slippery surfaces or for activities on grounds demanding very good adherence.

**PERFUMED  
SOLE**

Sole compound enriched with a pleasant essence, which provides a nice scent.

**COLD  
defender PU**



COLD DEFENDER PU is a special polyurethane compound which guarantees higher performances than the ordinary polyurethane for:

- MECHANICAL RESISTANCE TO LOW

TEMPERATURES: particularly sturdy in dynamic

conditions and under strong mechanical strains, typical of different work activities, under extreme temperatures up to -25 °C;

- THERMAL INSULATION: together with the footwear construction, it guarantees successful tests for Cold Insulation with better results than the -17 °C required by the standard EN ISO 20345:2011.

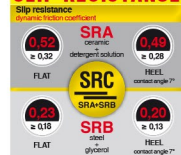
**SAFEST**

**DUAL DENSITY POLYURETHANE SOLE**  
COLD DEFENDER PU resistant to -25 °C

The design of cleats guarantee great grip.



**SLIP RESISTANCE**



**APT  
PLATE**

Anti Perforation Textile  
**ZERO PERFORATION**

- FLEXIBLE
- LIGHTER and more comfortable than the traditional steel plate
- HIGHER THERMAL INSULATION compared to steel
- 100% Surface protected by the puncture resistant plate used as an insole.

EN 12568:2010



**100%  
SURFACE  
PROTECTED**

**HIGH  
ELECTRICAL  
RESISTANCE**

**100%  
METAL  
FREE**



Certified in compliance with the new EN12568:2010 standard, no perforation at a force of 1.100 N.

**TOPreturn**

COMPOSITE TOE CAP RESISTANT TO 200 J



**ELASTIC EFFECT**

EN 12568:2010



**100%  
METAL  
FREE**

- NON MAGNETIC
- REDUCED THICKNESS
- THERMAL INSULATING
- LIGHTER, only 50 g compared to 90 g of a steel toe cap
- ELASTIC EFFECT In case of crushing, the toe cap will recover its original shape making it easier to remove the foot