

TREATMENT OF INJURIES DUE TO CONTACT WITH HYDROFLUORIC ACID (HF)

Hydrofluoric acid is used in (chemical) cleaning agents and processes because of its corrosive (pickling) action. As a result of this corrosive action of hydrofluoric acid, it is mainly used for pickling processes and surface treatments of stainless steel, aluminium and C-steel.

However, the corrosive action of hydrofluoric acid is also harmful and toxic for human beings. Both the vapours (gaseous) and the liquid can cause chemical burns. Because it has become apparent that not all physicians know exactly how to treat a hydrofluoric acid contamination, the Stichting Industriële Reiniging [Industrial Cleaning Foundation] (SIR), in consultation with international experts in the area of the treatment of HF injuries, have drafted a First Aid chart.

In this way, it will be realised that the HF injury is always treated in the right manner and that the chance of (permanent) injuries is decreased.

One of the most important parts of the right treatment is the use of neutralising calcium gluconate. The HF burn ointment contains a calcium compound, because of the fact that the hydrofluoric acid reacts very strongly with calcium (in, for instance, the blood or serum and bones). This calcium compound reacts with the hydrofluoric acid. It is absolutely essential that this ointment is applied as quickly as possible after the contamination. When working with products containing hydrofluoric acid, it is recommended to have the HF burn ointment and the First Aid chart near at hand. In the case of contamination, it is important to have this treated immediately or as soon as possible by a specialist physician and to have the victim take the SIR First Aid chart with him.

Despite the fact that the product safety sheets usually contain enough information about the possible hazards and the treatment of contaminations with the product, it has been shown that extra information about the treatment of the HF injury is very useful.

More information about hydrofluoric acid injuries can be obtained from the Stichting Industriële Reiniging [Industrial Cleaning Foundation]: www.sir-safe.nl



Front and backside of the First Aid chart

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Table: Vecom products containing hydrofluoric acid

Product name	% HF	Application
Vecosan TTC101	4-7%	Powerful rim cleaner
Vecosan Brightner GTM	2-6%	Aluminium pickling agent
Vecosan Super	2-6%	Cement veil remover
Vecinox Pickling Spray	3-5%	SS pickling gel
Vecinox Pickling Liquid	3-5%	SS pickling agent (bath pickling)
Vecinox Pickling Paste	3-5%	SS pickling paste
Vecosan Activator H	35-44%	HF concentrate