

HA Cut Cat F/XF/SXF AF

Next generation, phthalate free Fast, eXtra-Fast and Super eXtra-Fast catalysts for use with HA Cut AF and HA Cut CFL AF closed cell 1-component polyurethane injection resins.



REPLACES HA CUT CAT F/XF/SXF AND C-852 F/XF/SXF

• field of application

- HA Cut AF / HA Cut CFL AF catalyst for cutting off gushing leaks with a high to very high flow rate and/or high to very high pressure, where use of the standard catalyst does not result in a fast enough reaction.
- HA Cut AF / HA Cut CFL AF catalyst for use in cold to very cold temperatures where fast reaction times are needed.

• advantages

- ADR free transport.
- Next generation phthalate free catalysts, REACH compliant.
- Improved performance at temperatures below 5°C, no crystallisation of HA Cut Cat F/XF/SXF AF.
- Non-flammable, solvent free.
- Final foam is resistant to most organic solvents, mild acids, alkaloids and microorganisms.
- Very fast reaction: as fast as less than 60" in salt water at -3°C, still giving 20V expansion (HA Cut Cat SXF AF).

• description

HA Cut Cat F/XF/SXF AF are red non-flammable, phthalate free liquids. HA Cut Cat F/XF/SXF AF are catalysts for HA Cut AF and HA Cut CFL AF water-cutting resin for applications in cold temperatures or when use of the standard catalyst does not give a fast enough reaction. HA Cut Cat F/XF/SXF AF are used in 10% mixing ratio.

• application

Before commencing the injection, consult the Technical Data Sheets and MSDS in order to be familiar with the materials at hand. Always shake the catalyst well before use.

1. Resin and equipment preparation

- Prepare the resin with the predetermined amount of catalyst. Shake HA Cut Cat F/XF/SXF AF well before use. No reaction with the resin will occur until the resin comes into contact with water.
- Keep the resin protected from water, since this will trigger a reaction in the container used and might cause the resin to harden or foam prematurely within the injection equipment.
- It is highly recommended to use separate pumps for the water and the resin injection to prevent cross contamination and blockages.

2. Injection

Please refer to the HA Cut AF / HA Cut CFL AF Technical Data Sheet for further information.

3. Reactivity

Reactivity for HA Cut AF

	10% HA Cut Cat F AF			10% HA Cut Cat XF AF			10% HA Cut Cat SXF AF		
	Start reaction	End reaction	Expansion	Start reaction	End reaction	Expansion	Start reaction	End reaction	Expansion
-3°C	Approx. 30"	Approx. 1'40"	Approx. 20V	Approx. 25"	Approx. 1'15"	Approx. 24V	Approx. 22"	Approx. 1'05"	Approx. 30V
5°C	Approx. 28"	Approx. 1'25"	Approx. 26V	Approx. 23"	Approx. 1'10"	Approx. 28V	Approx. 20"	Approx. 1'00"	Approx. 30V
10°C	Approx. 26"	Approx. 1'23"	Approx. 26V	Approx. 23"	Approx. 1'10"	Approx. 28V	Approx. 20"	Approx. 1'00"	Approx. 30V
15°C	Approx. 23"	Approx. 1'20"	Approx. 28V	Approx. 23"	Approx. 1'05"	Approx. 30V	Approx. 20"	Approx. 55"	Approx. 32V
20°C	Approx. 23"	Approx. 1'20"	Approx. 30V	Approx. 20"	Approx. 1'05"	Approx. 30V	Approx. 20"	Approx. 50"	Approx. 32V
25°C	Approx. 20"	Approx. 1'20"	Approx. 32V	Approx. 18"	Approx. 1'05"	Approx. 32V	Approx. 15"	Approx. 45"	Approx. 35V

Reactivity for HA Cut CFL AF

	10% HA Cut Cat F AF			10% HA Cut Cat XF AF			10% HA Cut Cat SXF AF		
	Start reaction	End reaction	Expansion	Start reaction	End reaction	Expansion	Start reaction	End reaction	Expansion
-3°C	Approx. 28"	Approx. 2'00"	Approx. 24V	Approx. 25"	Approx. 1'30"	Approx. 24V	Approx. 20"	Approx. 1'00"	Approx. 28V
5°C	Approx. 25"	Approx. 1'40"	Approx. 26V	Approx. 20"	Approx. 1'10"	Approx. 26V	Approx. 18"	Approx. 55"	Approx. 30V
10°C	Approx. 25"	Approx. 1'35"	Approx. 26V	Approx. 20"	Approx. 1'10"	Approx. 26V	Approx. 18"	Approx. 55"	Approx. 30V
15°C	Approx. 25"	Approx. 1'30"	Approx. 28V	Approx. 20"	Approx. 1'05"	Approx. 28V	Approx. 17"	Approx. 55"	Approx. 30V
20°C	Approx. 25"	Approx. 1'20"	Approx. 28V	Approx. 20"	Approx. 1'00"	Approx. 30V	Approx. 15"	Approx. 45"	Approx. 30V
25°C	Approx. 20"	Approx. 1'15"	Approx. 30V	Approx. 15"	Approx. 1'00"	Approx. 30V	Approx. 10"	Approx. 40"	Approx. 30V

• technical data/properties

Property	Value			Norm
	HA Cut Cat F AF	HA Cut Cat XF AF	HA Cut Cat SXF AF	
Uncured				
Viscosity at 25°C (mPas)	Approx. 20	Approx. 20	Approx. 25	EN ISO 3251
Density (kg/dm ³)	Approx. 0,973	Approx. 1,000	Approx. 1,044	EN ISO 2811
Flash point (°C)	125	125	125	EN ISO 2719
Cured with HA Cut AF				
Density (kg/dm ³)	Approx. 1,000	Approx. 1,000	Approx. 1,000	EN ISO 1183
Compressive strength (MPa)	Approx. 30			EN 12190
Flexural strength (MPa)	Approx. 16			EN 12190
Cured with HA Cut CFL AF				
Density (kg/dm ³)	Approx. 1,000	Approx. 1,000	Approx. 1,000	EN ISO 1183
Compressive strength (MPa)	Approx. 9,5			EN 12190
Flexural strength (MPa)	Approx. 9			EN 12190

• appearance

HA Cut Cat F/XF/SXF AF: Red liquids.

• consumption

HA Cut Cat F/XF/SXF AF are developed solely for cutting of high flow gushing leaks where very fast reaction times are needed.

The consumption is always 10% of the Ha Cut AF / HA Cut CFL AF volume for HA Cut Cat F/XF/SXF AF.

• packaging

HA Cut Cat F/XF/SXF AF

0,5 or 2,5 l plastic bottle or 20 kg metal drum.

1 box = 8 x 0,5 l

1 box = 5 x 2,5 l

1 Pallet

84 boxes with 0,5 l bottles.

40 boxes with 2,5 l bottles.

24 x 20 kg metal drums.

• storage

HA Cut Cat F/XF/SXF AF are sensitive to moisture and should be stored in original containers in a dry area. Storage temperature must be between 5°C and 30°C. Once the packaging has been opened, the useful life of the material is greatly reduced and should be used as soon as possible.

Shelf life: 2 years.

• **health & safety**

HA Cut AF is classified as harmful.

HA Cut CFL AF is classified as harmful.

HA Cut Cat F/XF/SXF AF is classified as irritant.

In case of spills and accidents, refer to the Material Safety Data Sheet of the products or when in doubt contact the De Neef responsible for your territory. Always wear protective clothing, gloves and protective goggles when handling chemical products.

For full information, consult the relevant Material Health and Safety Data Sheet.

^(*) For chemical resistances please contact your De Neef representative.

*All data mentioned on this technical data sheet are product descriptions. They are the result of general experience and experiments and don't take any specific application into account. No further demands may be derived from these data. The manufacturer has the privilege to implement technical changes, which result from new research concerning the material composition and form. To verify that you are holding the latest version of this technical Data Sheet, please visit www.deneef.com.
De Neef Conchem • 29-07-2010-01.*