

HA Cut catalyst for Fast or Extra Fast reaction times.



- **field of application**
 - HA Cut 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 catalyst for use in cold to very cold temperatures.
- **advantages**
 - 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 15V expansion (HA Cut Cat XF).
- **description**

HA Cut Cat F/XF are pink non-flammable liquids. HA Cut Cat F/XF are catalysts for HA Cut 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 is used in 5-10% mixing ratio. HA Cut Cat XF is 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 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 Technical Data Sheet for further information.

3. Reaction Time.

Reactivity	HA Cut CatF/XF	Reaction Start		Polymerisation		Expansion	
		F	XF	F	XF	F	XF
At -3°C	10%	24"	18"	1'35"	51"	± 20x	15x
	5%	35"	-	2'40"	-	± 20x	-
At 5°C	10%	20"	16"	1'26"	44"	15-20x	20x
	5%	30"	-	2'12"	-	15-20x	-
At 20°C	10%	16"	13"	1'08"	35"	20-25x	20x
	5%	25"	-	1'56"	-	20-25x	-

• technical data/properties

Property	Value		Norm
Uncured HA Cut Cat	F	XF	
Viscosity (at 25°C°)	Approx. 33 mPas	Approx. 40 mPas	ASTM D-1638
Density	1,035 kg/dm ³	1,040 kg/dm ³	
Flash Point		C.O.C. 160°C	
Cured HA Cut with HA Cut Cat F/XF			
Density	Approx. 1,05 – 1,10 kg/dm ³		ASTM D-3574
Tensile Strength	Approx. 31 kg/cm ²		ASTM C-190-1963
Compressive Strength	Approx. 63 kg/cm ²		
Bending Strength	Approx. 15 kg/cm ²		
Bonding Strength to mortar joints			
• Bending bonding strength	Approx. 7 kg/cm ²		
• Shearing bonding strength	Approx. 18 kg/cm ²		

• appearance

HA Cut Cat F/XF are pink transparent liquids.

• consumption

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

The consumption is 5-10% of the HA Cut volume for HA Cut Cat F.

The consumption is always 10 % of the Ha Cut volume for HA Cut Cat XF.

• packaging

HA Cut Cat F/XF : 2,5 l plastic jerry can.

: 20 kg metal drum.

• storage

HA Cut Cat F/XF 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 a pail has been opened, the useful life of the material is greatly reduced and should be used as quickly as possible.

Shelf life: 2 years.

• health & safety

HA Cut Cat F/XF are classified as irritating.

Always wear protective clothing and gloves.

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