

TECHNICAL DATA SHEET

PRO GRP – HARDENER

Issue 1 – December 2011

Description:

Cromar PRO GRP Hardener is a Methyl Ethyl Ketone peroxide in phlegmatizer for the curing of unsaturated polyester resins at ambient temperature in combination with cobalt accelerators.

Application:

Cromar PRO GRP Hardener is a general purpose MEKP and gives consistent room temperature curing of unsaturated polyester resins and gelcoat/topcoats.
 A reliable product of remarkable purity, Cromar PRO GRP Hardener assures quality in almost every system. Suitable applications are hand lay-up, spray-up, RTM, continuous laminating, centrifugal casting, filament winding, polymer concrete and vacuum infusion.

Using a standard type of pre-accelerated PolyLite Polyester resin 1-4% Cromar PRO GRP Hardener is normally added and for Cromar PRO GRP Gelcoat/Topcoat 1-4%(Subject to temperature)

Gel time and rate of curing are specified in the technical data sheet for the relevant PolyLite Polyester resin and Cromar PRO GRP Gelcoats/topcoats.

Product Data:

Active oxygen	:	9.1 ± 0.1 %
Free hydrogen peroxide	:	1.7 ± 0.1 %
Flash point (seta flash)	:	> 80°C
Water content	:	1.5%
Supplied as	:	Liquid
Colour	:	Clear, colourless
Specific weight at 23°C	:	1.10 – 1.13
Colour:	:	Water-white
Viscosity at 23°C	:	19 – 22 mPa s (cP)
Ph	:	4 – 7
SADT	:	65°C
Solubility	:	Insoluble in water. Soluble in oxygenated organic solvents.
Storage stability	:	12 months

Packaging:

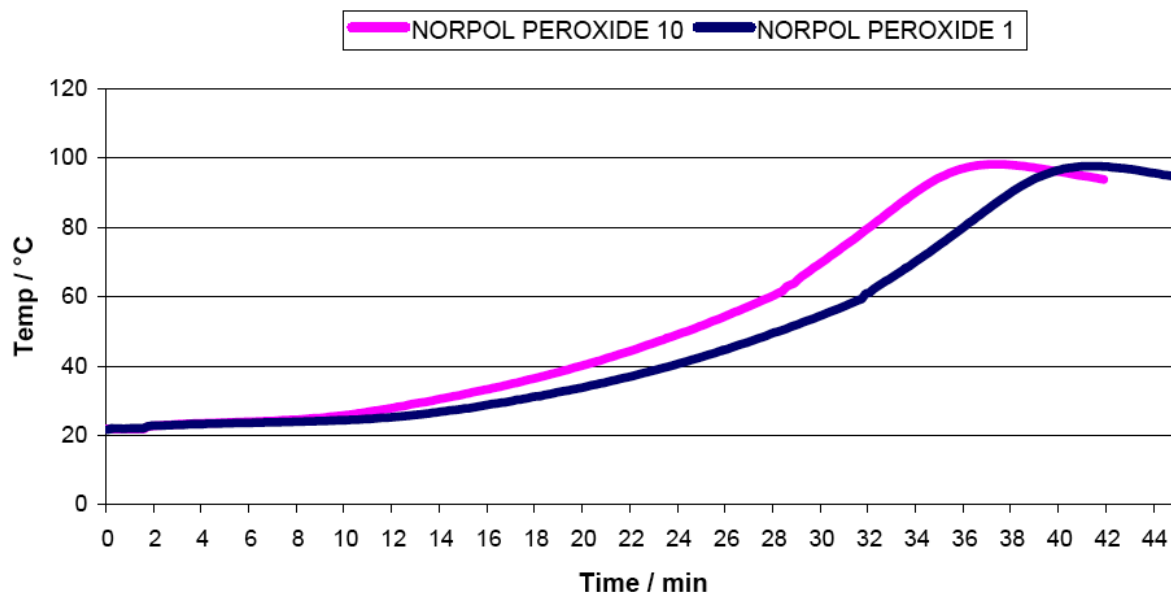
Standard packing sizes are 5 kg and 25 kg net weight.

Cure Characteristics:

Resin:	PolyLite 440-000	Resin Temp:	23°C
Acc.conmc.:	1% Accelerator 9802P		
Per.1:	1%		

Initiator	Gel Time Min	Gel to Peak Min	Peak Exotherm
Cromar PRO GRP Hardener	13,8	27,7	98

Peak exotherm curves of NORPOL PEROXIDE MEKPs.



Storage:

- Storage at 25°C or below is recommended. Storage below 20°C is recommended for maximum shelf life.
- Store in original containers away from flammables and all sources of heat, sparks or flames; out of direct sunlight and away from promoters, accelerators, reducing agents and strong acids or bases.
- Leaking containers – Remove and isolate in safe area. Re-package or dispose (see later section) immediately.
- Never store in refrigerators containing food and/or beverages.

Handling:

- Inform all personnel of procedures for safe handling and review SDS with them.
- Remove from storage area only the amount needed for one shift.
- Wear safety glasses or goggles and chemical resistant gloves.
- Keep away from heat, flames and sparks.
- Avoid breathing vapours.
- Never add peroxides directly to promoters or vice-versa, violent decomposition can occur.
- Prevent contamination such as contact with dust, over-spray, wood and combustible material.
- Never allow contact with metal of any type except 304 or 316 stainless steel or equivalent.

First Aid:

- EYES – Flush immediately with large amounts of fresh water and continue washing for at least 15 minutes- Medical attention is needed.
- SKIN – Wash with soap and water.
- INGESTION – Administer large amounts of milk or water and call a doctor immediately for lavage. Do not induce vomiting.

Spills:

- Clean up immediately by absorbing with inert material – vermiculite, perlite or sand.
- After absorbing, moderately wet immediately with water and place in a clean plastic bag lined, plastic pail.
- Dispose of immediately in accordance with local regulations. NOTE: Spilled peroxides, if not immediately cleaned up, can become contaminated and ignite or decompose in a vigorous manner.

Fire:

- This peroxide is hard to ignite, but burns vigorously with acceleration.
- Use water from a safe distance – preferably with a water-fog nozzle.
- For very small fires, an extinguisher with carbon dioxide, foam, or dry chemicals may be effective.
- In case of a fire in or near a storage area, cool stored containers with water spray.

Health & Safety:

Please refer to health & safety data sheet on Cromar PRO GRP –Hardener.

Always read and understand the Material Safety Data Sheet before working with this product.

Further Information:

In the event of further queries or problems concerning the use of this product, please contact the address below, e-mail info@cromar.uk.com or telephone our Technical Line on 0844 8588186:

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