

OC™ - 234 HV

Gelcoat Resin



PRODUCT DATA SHEET

Date of Revision : November 2023

VERSION : 03

CHEMICAL/PHYSICAL NATURE:

OC™ - 234 HV is a high viscosity, medium reactive, non pre accelerated, non-thixotropic unsaturated polyester resin based on Phthalic acid and standard glycols react with each other and then dissolved in styrene.

MAJOR APPLICATIONS:

OC™-234 HV is a quick curing unsaturated polyester resin suitable for hand layup. The resin offers good impact resistance and glass fiber laminate made with the resin exhibits excellent strength, rigidity and durability.

OC™-234 HV is designed to have homogenous consistency fast wet out of reinforcement, rapid cure and excellent surface finish. It is used in defense, automotive, building and construction applications etc. It is also used in the manufacturing of gelcoats.

PRODUCT SPECIFICATIONS UPON DELIVERY:

Property	Range	Unit	TM
Appearance	Clear	-	WI-QC-01
Acid value	< 30	mgKOH/g	WI-QC-14
Viscosity @ 25°C	900 - 1600	cps	WI-QC-15
Non Volatile content	68 - 72	%	WI-QC-03
*Gel time at 25°C	5 - 8	Min	WI-QC-03-B
Gel to Peak temp	12 - 16		
Peak temperature	150 - 185	°C	WI-QC-04-B

REMARKS:

Viscosity measurement: B/F HDT @ 25°C # 03/60.

*Reactivity determined with: 2.00 g MEKP and 0.2 g accelerator cobalt (12%) added to 100 g resin.

PROPERTIES OF THE LIQUID RESIN

(Typical values):

Property	Range	Unit
Density @ 25°C	1120 ± 10	Kg/m ³
Flash point	Appr. 33.0	°C
Shelf life @ 25°C	06	Months

TYPICAL VALUES OF CAST UNFILLED RESIN:

Property	Range	Unit	TM
Tensile Strength	55	Mpa	ISO 527
Tensile Modulus	3500 ± 250	Mpa	ISO 527
Elongation at Break	2.5 - 4.5	%	ISO 527
Flexural Strength	95 ± 5	Mpa	ISO 178
Flexural Modulus	3750 ± 250	Mpa	ISO 178
HDT	65 ± 5	°C	ISO 75

CURING CONDITIONS:

Resin casting prepared with addition of accelerator and hardener. Casting allowed to cure 24 hours at room temperature and then oven post cured. The cured resin is post cured properly before testing the mechanical properties.

PROCESSING:

Post-curing at elevated temperatures (e.g. 80 °C) for several hours may optimize the final state of cure.

STORAGE GUIDELINES:

The resin should be stored indoors in the original, un-opened and undamaged packaging in a dry place at temperatures between 5°C and 25°C. Shelf life is reduced at higher temperatures and the properties of the resin might change during storage. The shelf life of styrene containing unsaturated polyesters will be significantly reduced when exposed to light. Store in dark and in 100% light tight containers only.

GUIDELINES BEFORE USE:

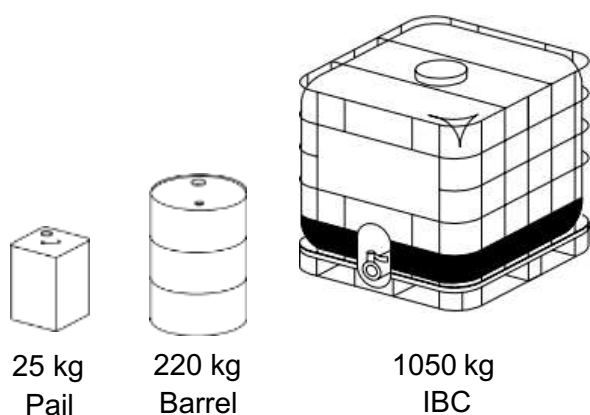
The resin should be conditioned at a well defined Application dependent temperature (usually 15 °C Minimum for a MEKP/Co cure).

MATERIAL SAFETY:

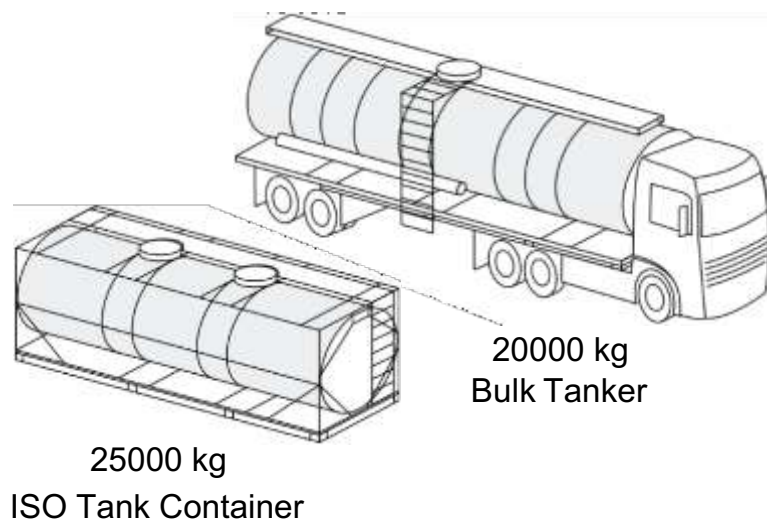
A Material Safety Data Sheet of this product is available on request.

PACKAGING

Standard Packaging



Bulk Packaging



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