



# DATASHEET

## CARADOL SP30-47

### URETHANE CHEMICALS FOR SLABSTOCK APPLICATIONS

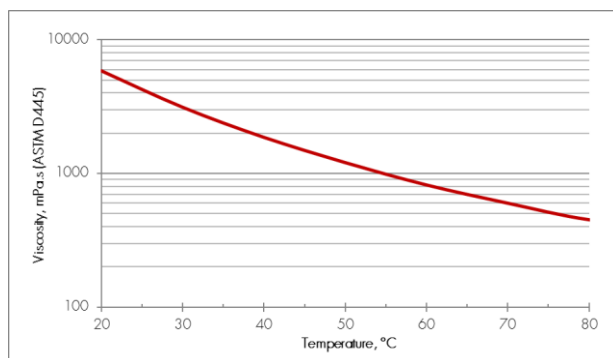
**U318N**  
May 2018

CARADOL SP30-47 is a propylene oxide/ethylene oxide based polyether polyol grafted with a styrene-acrylonitrile co-polymer. It is specifically intended to produce conventional and high resilience (HR) polyurethane slabstock foams exhibiting increased load bearing characteristics. CARADOL SP30-47 is based on a new SAN polymerization technology, that couples a higher solid content with a lower viscosity. The enhanced stabilizing properties allows a significant reduction in foam hardness variations across the slabstock block. When used in formulations normally based on conventional polyols, an increase in hardness of more than 80% can be expected. Changes to catalyst and surfactant levels may be necessary to obtain equivalent processing performance. CARADOL SP30-47 is BHT free, the overall molecular weight is higher than 6000 Daltons.

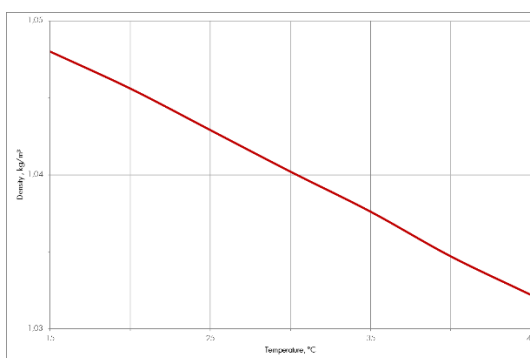
#### TYPICAL PROPERTIES

PROPERTY	TEST METHOD	UNIT	VALUE
Appearance			White opaque liquid
Hydroxyl value	ASTM D4274D	mg KOH/g	30
Density at 20°C	ASTM D4052	kg/m <sup>3</sup>	1.046
Water content	ASTM D4672	% m/m	0.05
Viscosity at 25°C	SMS 2849	mPa.s	4230
Flash point	ASTM D93	°C	> 140

#### VISCOSITY/TEMPERATURE CHARACTERISTICS



#### DENSITY/TEMPERATURE CHARACTERISTICS



The above typical physical properties are published here as a guide to potential users of the product. A sales specification is published separately.

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### TEST METHODS

ASTM standards are published by the American Society for Testing and Materials at [www.astm.org](http://www.astm.org). SMS methods (Shell Methods Series) can be obtained through the local Shell company.

### STORAGE AND HANDLING

CARADOL SP30-47 is slightly hygroscopic and must be stored under conditions so that contamination with water and absorption of moisture are prevented. Contact with copper, copper alloys or zinc must be avoided.

The storage temperature of CARADOL SP30-47 is not critical, in that there will be no hazardous conditions created by the storage of the product at any ambient temperature likely to be encountered. It should be noted however that a normal storage temperature, ensuring optimum processing conditions when using the product, is between 20°C and 25°C and that storage at low temperatures may result in the product viscosity being too high for transfer from the storage container with the pumps available.

CARADOL SP30-47 is a stable product and its processing performance is not expected to deteriorate significantly with time providing it is stored as below. As good industrial practice however it is recommended that it is not stored for periods longer than 2 years.

### Bulk

**Tanks** should be of stainless steel or of mild steel, free of mill-scale or rust and maintained in a rust-free condition. When desired, the latter can be lined with an epoxide resin paint or zinc silicate paint approved for this service. Small tanks must be fitted with silica gel breathers, inspected and regenerated at regular intervals; large tanks (of volumes greater than 1000 m<sup>3</sup>) should be fitted for blanketing with dry nitrogen. Heating facilities may be necessary and where this is the case, care should be taken to ensure that heating coil skin temperatures do not exceed 100°C.

**Lines** should be of stainless steel or mild steel maintained in a rust-free condition. Trace heating may be necessary in cold climates. Hoses should be of polypropylene, stainless steel or wire bound canvas.

### Drums

CARADOL SP30-47 should be stored in dry conditions away from direct sources of heat, preferably in the unopened original containers. Opened drums must be reclosed tightly immediately after drawing-off material.

### HAZARD IDENTIFICATION

Low order of acute toxicity by the oral or percutaneous routes, neither irritating nor sensitising to the skin. Slightly irritating to the eyes.

This product is not in the 'flammable' range, but will burn.

Before handling the product refer to the Safety Data Sheet.

### PRODUCT CODE

U318N

### DISCLAIMER

CARADOL is a Shell trade mark.

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Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

For further information please contact your local sales representative or visit

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