



DATASHEET

CARADOL SP44-10

URETHANE CHEMICALS FOR SLABSTOCK APPLICATIONS

U317H

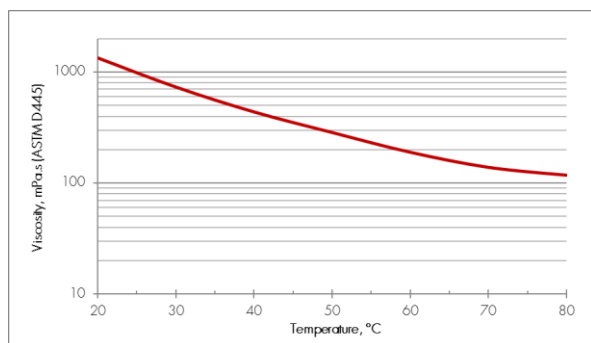
Revised July 2020

CARADOL SP44-10 is a suspension of styrene-acrylonitrile polymer particles in a propylene oxide/ethylene oxide based polyether polyol. It is specifically intended for the production of flexible polyurethane slabstock foams exhibiting increased load bearing characteristics. When used in formulations normally based on conventional polyols, a hardness increase of more than 20% can be expected. CARADOL SP44-10 exhibits an increased stability resulting in an improved distribution of the physical properties across the slabstock block. CARADOL SP44-10 is BHT free. Performance testing should be conducted before the product is used or brought into contact with HR systems.

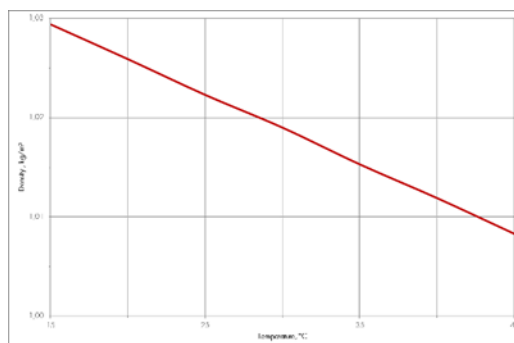
TYPICAL PROPERTIES

| PROPERTY | TEST METHOD | UNIT | VALUE |
|-------------------|-------------|-------------------|---------------------|
| Appearance | | | White opaque liquid |
| Hydroxyl value | ASTM D4274D | mg KOH/g | 44 |
| Density at 20°C | ASTM D4052 | kg/m ³ | 1.026 |
| Water content | ASTM D4672 | % m/m | 0.05 |
| Total acidity | ASTM D4662 | mg KOH/g | 0.03 |
| Viscosity at 25°C | SMS 2849 | mPa.s | 976 |
| 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. SMS methods (Shell Methods Series) can be obtained through the local Shell company.

STORAGE AND HANDLING

CARADOL SP44-10 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 SP44-10 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 SP44-10 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 m³) 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 SP44-10 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

U317H

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

www.shell.com/chemicals/customer

www.caradol.com

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