

RIMLINE[®] SK 97014 Polyol

RTM Polyol Blend

CHEMICAL TYPE

Formulated Polyol Blend

APPLICATIONS

Composites – RTM Processing

DESCRIPTION

RIMLINE[®] SK 97014 is a fully formulated polyol blend intended for use in resin transfer molding processes. Designed as part of a two-component system in conjunction with SUPRASEC[®] 9701 MDI-based isocyanate, the resin offers good wetting characteristics and no VOC emissions. The complete polyol/isocyanate resin system is ideally suited for structural components in demanding applications where superior strength and durability are required.

TYPICAL PROPERTIES OF NEAT RESIN: RIMLINE SK 97014

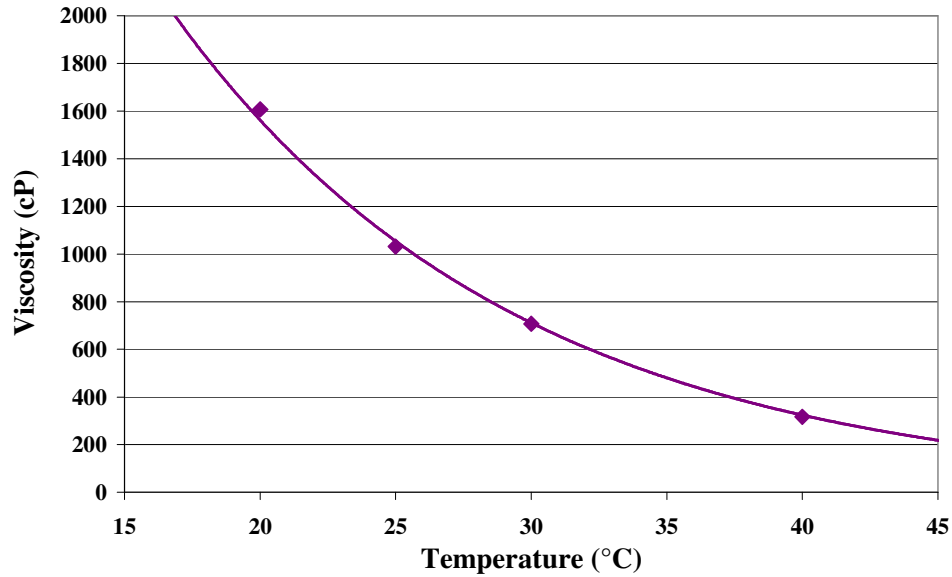
Appearance	Slightly opaque liquid
Specific Gravity (25 °C)	1.09
Polyol Viscosity (25 °C, cP)	950 – 1050
Mix Ratio <i>Isocyanate : Polyol</i>	1.5 : 1 (by wt) 1.29 : 1 (by vol)
Initial Mixed Viscosity with SUPRASEC 9701 (25 °C, cP)	400-450

Molded End Use Applications

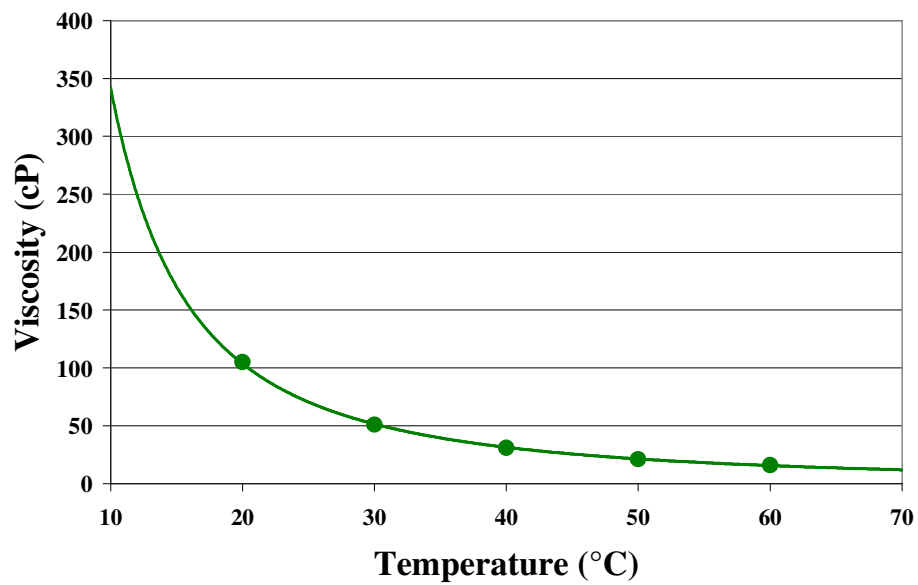
- Structural components
- Sporting goods

RESIN COMPONENT VISCOSITY CURVES

RIMLine® SK 97014 Viscosity vs. Temperature

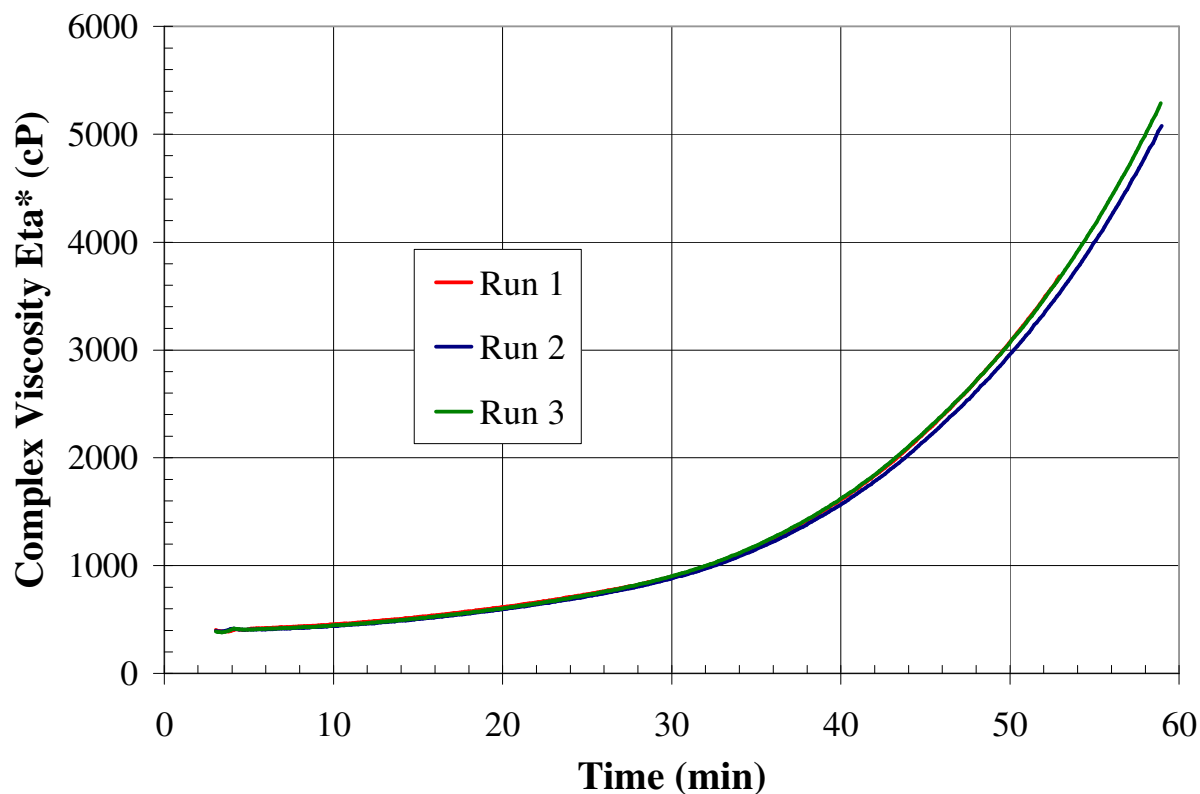


SUPRASEC® 9701 Viscosity vs. Temperature



MIXED SYSTEM VISCOSITY: RIMLINE SK 97014 / SUPRASEC 9701

Mixed Resin System Viscosity (25 °C)



PROCESS INSTRUCTIONS

- Two-component metering pump and static mixer assembly.
- Heated tools for optimum cure of the resin system.
- RIMLINE SK 97014 polyol blend must be thoroughly mixed before and during use.

Properties of Cured Neat RIMLINE SK97014/SUPRASEC 9701 Resin

Property	Units	ASTM Test Method	Value
Flexural Modulus	GPa	D-790	2.75
Flexural Yield Strength	MPa		105
Flexural Break Strength	MPa		No Break
Strain at Yield	%		7.1
Strain at Failure	%		No Break
Tensile Modulus	GPa	D-638	2.92
Tensile Yield Strength	MPa		76
Tensile Break Strength	MPa		72
Strain at Yield	%		6.7
Strain at Failure	%		11.3
Hardness	Shore D	D-2240	82
Notched Izod	N/m	D-256	210
Specific Gravity		D-792	1.23
Tg by DMA E' Onset	°C	D-7028	125
Tg by DMA <i>tan δ</i> Peak			141
Heat Deflection Temperature	°C	D-648	109

HANDLING AND STORAGE

RIMLINE SK 97014 polyol is supplied in 200 liter (55 gal.) open top drums or 1000 liter (250 gal.) IBCs. Systems are designed to offer very good storage stability but this is dependent on conditions, particularly temperature.

Due to the hygroscopic nature of the product, containers should be kept tightly sealed and away from direct sunlight. Under these conditions, the shelf life will be 6 months at 25°C (77 °F).

ADDITIONAL INFORMATION

Before selecting this product, it is necessary that the user ensures its performance will meet all operational and end use requirements. Having satisfied these requirements, should changes be contemplated in method of application, materials, service conditions or any other change that could affect the ultimate performance of the end product, then further tests and trials should be carried out.

For assistance with particular problems and applications, please contact the Huntsman Technical Service Department. Inquiries should be addressed to the nearest Huntsman Sales Office or to:

North America

Huntsman Polyurethanes
2190 Executive Hills Boulevard
Auburn Hills, MI 48326
USA
Phone: +1-248-322-7300
FAX: +1-248-322-7303

Europe, Middle East & Africa

Huntsman Polyurethanes
Everslaan 45
3078 Everberg
BELGIUM
Phone: +32-2-758-9211
FAX: +32-2-758-9946

HEALTH AND SAFETY

*The Safety and Health information in this data sheet does not contain sufficient detail for safe handling in all cases. For detailed safety and health information refer to the **Safety Data Sheet** for this product.*

EMERGENCY CALLS:

CHEMTREC - Spills, Leak, Fire 1-800-424-9300 (USA/Canada), 1-703-527-3887 (International)

IMPORTANT LEGAL NOTICE:

Sales of the products described herein ("Product") are subject to the general terms and conditions of sale of Huntsman Corporation and its affiliates and subsidiaries (collectively, "Huntsman").

To the knowledge, information and belief of Huntsman, all the information and recommendations in this publication are accurate as of the date of publication.

WARRANTY:

Huntsman warrants that at the time and place of delivery all Products sold to a buyer of such Products shall conform to the specifications provided by Huntsman to such buyer of such Products.

DISCLAIMER AND LIMITATION OF LIABILITY:

EXCEPT AS SET FORTH ABOVE, HUNTSMAN MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT OF ANY THIRD PARTY, OR WARRANTIES AS TO QUALITY OR CORRESPONDENCE WITH PRIOR DESCRIPTION OR SAMPLE, AND ANY BUYER OF PRODUCTS DESCRIBED HEREIN ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH PRODUCT, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES. Chemical or other properties purported to be typical of such Products, where stated herein, should be considered as representative of current production and should not be construed to be specifications of any such Products. In all cases, it is the sole responsibility of a buyer to determine the applicability of the information and recommendations contained in this publication and the suitability of any Product for its own particular purpose, and no statements or recommendations made herein are to be construed as a suggestion, recommendation, or authorization to take any action that would infringe any patent or other intellectual property right. A buyer or user of a Product is solely responsible for ensuring that its intended use of such Product does not infringe any third party's intellectual property rights. Huntsman's maximum liability for any claim related to the Products described herein or breach of an agreement associated therewith shall be limited to the purchase price of the Products or portion thereof to which such claim pertains. IN NO EVENT SHALL HUNTSMAN BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES, INCLUDING BUT NOT LIMITED TO ANY DAMAGES FOR LOST PROFITS OR BUSINESS OPPORTUNITIES OR DAMAGE TO REPUTATION.

WARNING:

The behaviour, hazardousness and/or toxicity of the Products referred to in this publication in manufacturing processes and their suitability in any given end-use environment are dependent upon various conditions such as chemical compatibility, temperature, and other variables, which may not be known to Huntsman. It is the sole responsibility of the buyer or user of such Products to evaluate the manufacturing circumstances and the final Product(s) under actual end-use requirements and to adequately advise and warn future purchasers and users thereof.

Products referred to in this publication may be hazardous and/or toxic and require special precautions in handling. A buyer should obtain Safety Data Sheets from Huntsman containing detailed information on hazardousness and/or toxicity of the products contained herein, together with proper shipping, handling and storage procedures, and should comply with all applicable safety and environmental standards. The Product(s) described herein have not been tested for, and is therefore not recommended or suitable for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended or likely, or for uses for which implantation within the human body is intended, and Huntsman assumes no liability for such uses.

Unless otherwise specified, Huntsman shall not be liable for or otherwise have any obligation to a buyer of any Products contained in this publication for any technical or other information or advice furnished by Huntsman in this publication.

RIMLINE® and SUPRASEC® are a registered trademarks of Huntsman Corporation or an affiliate thereof in one or more, but not all countries.

Copyright © 2015Huntsman Corporation. All rights reserved.

For further information, please visit our website at: www.huntsman.com/pu