

KRM 8296

Technical Data Sheet

Urethane acrylate oligomer

INTRODUCTION

KRM 8296 is an undiluted aliphatic urethane triacrylate oligomer developed for energy curable systems. KRM 8296 can contribute to unique performance in formulations for haptic coatings (soft touch).

PERFORMANCE HIGHLIGHTS

KRM 8296 is characterized by :

- Light colour
- Solid at room temperature

UV/EB cured products based on KRM 8296 are characterized by the following performance properties:

- High flexibility
- High compatibility with various polyurethane and acrylic beads additives and fillers

The actual haptic properties of UV/EB cured formulations containing KRM 8296 depend on the selection of the other formulation components, such as co-resins, suitable additives, reactive diluents and photoinitiators.

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing KRM 8296 can be diluted with solvent (eg. Ethylacetate, Butylacetate, Methyl ethyl ketone, Ethyl cellosolve, etc) and applied by spray coating, screen, roller and curtain coating methods.

KRM 8296 is recommended for use in:

- Flexible coatings
- Haptic coating (soft touch) on plastics and films

TYPICAL VALUES

Appearance white, solid product
Höppler viscosity at 60°C, mPa.s 2400
Colour, Gardner 50 (APHA)

PHYSICAL PROPERTIES

Melting point, °C 53
Density, g/cm³ n.a.
Molecular weight, theoretical 2400
Functionality, theoretical 3
Polymer solids, % by weight 100

VISCOSITY REDUCTION

KRM 8296 can be formulated with reactive monomers such as 1,6 hexanediol diacrylate (HDDA)⁽¹⁾, tripropyleneglycol diacrylate (TPGDA)⁽¹⁾, trimethylolpropane triacrylate (TMPTA)⁽¹⁾, oligotriacrylate (OTA 480)⁽¹⁾ and octyl/decyl acrylate (ODA)⁽¹⁾. The specific reactive diluent(s) used will influence performance properties such as hardness and flexibility.

STORAGE AND HANDLING

Care should be taken not to expose radiation curable products to temperatures exceeding 40°C for prolonged periods or to direct sunlight. This might cause uncontrollable polymerization of the product with generation of heat.

Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Do not store this material under an oxygen free atmosphere. Use dry air to displace material removed from the container. This material should not be stored for more than 1 year.

⁽¹⁾ HDDA, TPGDA, TMPTA, OTA 480 and ODA are produced by Cytec Surface Specialties.

Cytec Surface Specialties S.A./N.V. Anderlechtstraat 33, B-1620, Drogenbos, Belgium

Telephone: ++32 (0)2 334 51 11

E-mail: tsd.radcure@cytec.com

Web Site: www.surfacespecialties.com

KRM 8296

Technical Data Sheet

Urethane acrylate oligomer

PRECAUTIONS

The following is a summary of the precautions to be taken when handling this product. Please refer to the Safety Data Sheet for further details.

The toxicological properties of this material have not been fully determined. Products of this type can be expected to be eye and skin irritant and have the potential to cause sensitization or other allergic responses. Appropriate precautions should be taken to avoid eye and skin contact and to avoid inhalation of the aerosols or vapours. Consult the relevant Safety Data Sheet for appropriate handling procedures and protective equipment prior to using this or any other material referred to in this bulletin.

See Safety Data Sheet for emergency and first aid procedures.

STATUTORY LABELLING

Please refer to Safety Data Sheet.

October 2007 - Supersedes previous versions

Cytec Surface Specialties S.A./N.V. Anderlechtstraat 33, B-1620, Drogenbos, Belgium		
Telephone: ++32 (0)2 334 51 11	E-mail: tsd.radcure@cytec.com	Web Site: www.surfacespecialties.com

Disclaimer: Cytec Surface Specialties S.A./N.V. or any of its affiliated companies (hereinafter "Cytec Surface Specialties") decline any liability with respect to the use made by any third party of the information contained herein. The information contained herein represents Cytec Surface Specialties' best knowledge thereon without constituting any express or implied guarantee or warranty of any kind (including, but not limited to, regarding the accuracy, the completeness or relevance of the data set out herein). Cytec Surface Specialties is the sole owner or authorized user of the intellectual property rights relating to the information communicated. The information relating to the use of the products is given for information purposes only. No guarantee or warranty is provided that the product is adapted to the client's specific use. The client should perform its own tests to determine the suitability for a particular purpose. The final choice of use of a product remains the sole responsibility of the client. TM trademark of Cytec Surface Specialties Group.