

TECHNICAL DATA SHEET

General Information

Denamer 1220 is an aliphatic alternative to BisPhenol A Epoxy DiAcrylate.

Chemical Name	2-Propenoic acid, polymer with 2-(chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[cyclohexanol]
CAS No.	144952-38-5
Formula	C ₂₇ H ₄₄ O ₈
Formula Weight	496.19
Chemical Structure	<p>The chemical structure shows a central bisphenol A backbone consisting of two cyclohexane rings connected at their 1-positions by a central carbon atom bonded to two methyl groups. Each cyclohexane ring has a hydroxyl group (-OH) at the 4-position and an ether linkage (-O-) at the 2-position. The ether linkages connect to two propenoic acid side chains, each consisting of a propyl chain with a hydroxyl group at the 2-position and an acrylate group (-O-C(=O)-CH=CH₂) at the 3-position.</p>
Appearance	Pale Yellow Liquid
Purity	≥99%
Water Content	≤0.5%
Acid Content	<0.1%
T_g (by DMA)	92.5° C
Viscosity (at 60 C°)	2,850 cP

Use

Denamer 1220's unique combination of its hydrogenated bisphenol A backbone and hydroxy groups gives strong physical properties with good weatherability, adhesion, and the ability to react into hybrid radical/cationic-UV curable formulations where high green strength is critical. The OH-groups also serve as potential functional sites for reactions with isocyanates, for example, to produce acrylate-functional resins. Denamer 1220 shows promising use in photopolymer 3D printing and additive manufacturing, inks, exterior durable hard coatings, photoresists, and adhesives.

Storage and Handling

Material should be stored in a cool, dry environment under normal conditions. Avoid exposure to visible light and direct sunlight. Material should be stored in a closed, opaque container before and after use. Shelf life for this product is 1 year under proper storage and handling conditions.

Regulatory

All regulatory information can be found in the Denamer 1220 Material Safety Data Sheet.

Packaging

Denamer 1220 is available in 20-kg pails and 180-kg drums.

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