SAFETY DATA SHEET



1. Identification

Covestro LLC 1 Covestro Circle Pittsburgh, PA 15205 USA TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300 INTERNATIONAL: (703) 527-3887

NON-TRANSPORTATION

Emergency Phone: Call Chemtrec Information Phone: (844) 646-0545

Product Name: MULTRANOL 8114

Material Number: 05212502 Chemical Family: Polyether Polyol

Use: Polyol components for the production of polyurethanes

2. Hazards Identification

GHS Classification

Acute toxicity (Oral): Category 4
Eye irritation: Category 2B

GHS Label Elements

Hazard pictograms:

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Signal word: Warning

Hazard statements: Harmful if swallowed. Causes eye irritation.

Precautionary statements: **Prevention:**

Wash skin and face thoroughly after handling. Do not eat, drink or smoke when using this product.

Response:

IF SWALLOWED: Call a POISON CENTER or doctor/physician if

you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Rinse mouth.

If eye irritation persists: Get medical attention.

Disposal:

Dispose of contents and container in accordance with existing federal,

state, and local environmental control laws.

3. Composition/Information on Ingredients

Hazardous Components

Concentration	Components	CAS-No.
95 - 100%	Polyether Polyol	67800-94-6

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

4. First Aid Measures

Most Important Symptom(s)/Effect(s)

Acute: Causes eye irritation with symptoms of reddening, tearing, stinging, and swelling.

Eye Contact

In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

Skin Contact

In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention if irritation develops.

Inhalation

If inhaled, remove to fresh air. Get medical attention if irritation develops.

Ingestion

If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

5. Firefighting Measures

Suitable Extinguishing Media: Carbon dioxide (CO2), Dry chemical, Foam, water spray for large

fires.

Unsuitable Extinguishing Media No Data Available

Fire Fighting Procedure

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

Hazardous Decomposition Products

By Fire: Carbon DioxideCarbon Monoxide other aliphatic fragments which have not been determined

6. Accidental Release Measures

Spill and Leak Procedures

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Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Use appropriate personal protective equipment during clean up. Evacuate and keep unnecessary people out of spill area.

7. Handling and Storage

Handling/Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Keep container closed when not in use. Material is hygroscopic and may absorb small amounts of atmospheric moisture. If contamination with isocyanates is suspected, do not reseal containers. Avoid breathing dust, vapor, or mist. Avoid contact with eyes. Avoid contact with skin or clothing.

Storage Temperature

Minimum: 10 °C (50 °F) **Maximum:** 43 °C (109.4 °F)

Storage Conditions

Store separate from food products.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Substances to Avoid

Oxidizing agents, Isocyanates

8. Exposure Controls/Personal Protection

The recommendations in this section should not be a substitute for a personal protective equipment (PPE) assessment performed by the employer as required by 29 CFR 1910 Subpart I.

Exposure Limits

Country specific exposure limits have not been established or are not applicable

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

Industrial Hygiene/Ventilation Measures

Use local and general exhaust ventilation to control levels of exposure.

Respiratory Protection

Respiratory protection is recommended in insufficiently ventilated working areas and during heating or spraying. For components with occupational exposure limits, when workers are facing concentrations above those limits, they must use appropriate certified respirators.

Hand Protection

Ensure gloves remain in good condition during use and replace if any deterioration is observed.

Permeation resistant gloves.

Eye Protection

Chemical safety goggles or safety glasses with side-shields.

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Skin Protection

Wear as appropriate:, Impervious protective clothing.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product.

9. Physical and Chemical Properties

State of Matter: liquid **Appearance:** viscous

Color: Amber, Yellow

Odor: slight

Odor Threshold:

PH:

No Data Available

Flash Point: > 93 °C (199.4 °F) (ASTM D 93)

Evaporation Rate:

Lower explosion limit:

Upper Explosion Limit:

Vapor Pressure:

Vapor Density:

No Data Available
No Data Available
No Data Available
No Data Available
1 g/cm³ @ 20 °C (68 °F)

Relative Vapor Density:No Data AvailableSpecific Gravity:1 @ 25 °C (77 °F)Solubility in Water:completely solublePartition Coefficient: n-No Data Available

octanol/water:

Auto-ignition Temperature: No Data Available **Decomposition Temperature:** Not established

Dynamic Viscosity: 5,300 - 12,300 mPa.s @ 25 °C (77 °F)

Kinematic Viscosity: No Data Available
Bulk Density: 1,000 kg/m3
Hygroscopicity: hygroscopic

10. Stability and Reactivity

Hazardous Reactions

Hazardous polymerisation does not occur.

Stability

Stable

Materials to Avoid

Oxidizing agents, Isocyanates

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition.

Hazardous Decomposition Products

By Fire: Carbon Dioxide; Carbon Monoxide; other aliphatic fragments which have not been determined

11. Toxicological Information

Likely Routes of Exposure: Skin Contact Eye Contact

Health Effects and Symptoms

Acute: Causes eye irritation with symptoms of reddening, tearing, stinging, and swelling.

Toxicity Data for: MULTRANOL 8114

Acute Oral Toxicity

Acute toxicity estimate: 1,414 mg/kg (Calculation method)

Toxicity Data for: Polyether Polyol

Acute Oral Toxicity

LD50: 1,400 mg/kg (rat, male/female) (Directive 84/449/EEC, B.1)

Acute Dermal Toxicity

LD50: > 2,000 mg/kg (rat, male/female) (OECD Test Guideline 402)

Skin Irritation

rabbit, OECD Test Guideline 404, non-irritant

Eye Irritation

rabbit, OECD Test Guideline 405, Slightly irritating

Sensitization

Skin sensitisation according to Magnusson/Kligmann (maximizing test):: negative (Guinea pig, OECD Test Guideline 406)

Repeated Dose Toxicity

4 w, Oral: NOAEL: 40 mg/kg, (rat, male/female, daily)

Studies of a comparable product.

Mutagenicity

Genetic Toxicity in Vitro:

Salmonella/microsome test (Ames test): No indication of mutagenic effects. (Metabolic Activation: with/without)

In vitro mammalian cell gene mutation test: negative (Chinese hamster V79 cell line, Metabolic Activation: with/without)

Chromosome aberration test in vitro: negative (Chinese hamster V79 cell line, Metabolic Activation: with/without)

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Carcinogenicity

No data available.

Toxicity to Reproduction/Fertility

Oral, daily, (rat, male/female) Fertility and developmental toxicity tests did not reveal any effect on reproduction.

Studies of a comparable product. Fertility Screening, Oral, daily, (rat, male/female) Fertility and developmental toxicity tests did not reveal any effect on reproduction.

Studies of a comparable product.

Developmental Toxicity/Teratogenicity

rat, female, Oral, 58 d, NOAEL (maternal): 10 mg/kg, Fertility and developmental toxicity tests did not reveal any effect on development.

Studies of a comparable product.

Carcinogenicity:

No carcinogenic substances as defined by IARC, NTP and/or OSHA

12. Ecological Information

Ecological Data for: MULTRANOL 8114

No data available for this product.

Ecological Data for Polyether Polyol

Biodegradation

aerobic, 27 %, Exposure time: 28 d, i.e. not readily degradable

Zahn-Wellens Test, 42 %, Exposure time: 27 d, i.e. not inherently degradable

Bioaccumulation

Due to the low n-octanol-water partition coefficient, an accumulation in organisms is not to be expected.

Acute and Prolonged Toxicity to Fish

LC50: > 100 mg/l (Danio rerio (zebra fish), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: > 100 mg/l (Daphnia magna (Water flea), 48 h)

Toxicity to Aquatic Plants

ErC50: 208.9 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)

Toxicity to Microorganisms

EC10: ca. 1,800 mg/l, (activated sludge, 3 h)

Studies of a comparable product.

13. Disposal Considerations

Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions

Recondition or dispose of empty container in accordance with governmental regulations.

14. Transportation Information

Land transport (DOT)

Non-Regulated

Sea transport (IMDG)

Non-Regulated

Air transport (ICAO/IATA)

Non-Regulated

15. Regulatory Information

United States Federal Regulations

US. Toxic Substances Control Act: Listed on the Active Portion of the TSCA Inventory.

No substances are subject to TSCA 12(b) export notification requirements.

US. EPA CERCLA Hazardous Substances (40 CFR 302) Components:

None

SARA Section 311/312 Hazard Categories:

Refer to hazard classification information in Section 2.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components:

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components: None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

Concentration	<u>Components</u>	CAS-No.
>=95%	Polyether Polyol	67800-94-6

California Proposition 65 List:

None.

CFATS (Chemical Facility Anti-Terrorism Standards) Chemicals

To the best of our knowledge, this product does not contain Appendix A Chemicals of Interest (COI), at or above the Screening Threshold Quantity (STQ), as defined by the Department of Homeland Security Chemical Facility Anti-terrorism Standard (CFATS, 6 CFR Part 27).

Based on information provided by our suppliers, this product is considered "DRC Conflict Free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 2012-08-22).

16. Other Information

The method of hazard communication for Covestro LLC is comprised of product labels and safety data sheets. Safety data sheets for all of our products and general product declarations are available for download at www.productsafetyfirst.covestro.com.

Contact: Product Safety Department

Telephone: (412) 413-2835 Version Date: 03/06/2020

SDS Version: 2.6

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.