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: ARCOL® POLYOL LHT-112
Material Number: 05494184
Chemical Family: Polyether Polyol
Use: Polyol components for the production of polyurethanes

2. Hazards Identification

GHS Classification
Acute toxicity (Oral): Category 4

GHS Label Elements
Hazard pictograms:

Signal word: Warning

Hazard statements: Harmful if swallowed.

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.
Rinse mouth.
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	25791-96-2

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: Harmful if swallowed.

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: High volume water jet

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
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
Maximum: 70 °C (158 °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

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., Nitrile rubber, Neoprene gloves, butyl-rubber

Eye Protection
Chemical safety goggles or safety glasses with side-shields.

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:	Clear
Odor:	Mild
Odor Threshold:	No Data Available
pH:	Approximately 5 - 7
Freezing Point:	No Data Available
Boiling Point:	> 199 °C (> 390.2 °F)
Flash Point:	198 °C (388.4 °F)
Evaporation Rate:	No Data Available
Lower explosion limit:	No Data Available
Upper Explosion Limit:	No Data Available
Vapor Pressure:	< 0.001 mmHg @ 20 °C (68 °F)
Vapor Density:	No Data Available
Density:	No Data Available
Relative Vapor Density:	No Data Available
Specific Gravity:	1.01 @ 20 °C (68 °F)
Solubility in Water:	Slightly Soluble
Partition Coefficient: n-octanol/water:	No Data Available
Auto-ignition Temperature:	No Data Available
Decomposition Temperature:	Not established
Dynamic Viscosity:	280 cps @ 25 °C (77 °F)
Kinematic Viscosity:	No Data Available
Bulk Density:	1,013 kg/m3
Molecular Weight:	1,500
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: Harmful if swallowed.

Chronic: Not expected to cause adverse chronic health effects.

Toxicity Data for: ARCOL® POLYOL LHT-112

Acute Oral Toxicity
Acute toxicity estimate: 500 mg/kg (Calculation method)

Acute Dermal Toxicity
Acute toxicity estimate: > 5,000 mg/kg (Calculation method)

Toxicity Data for: Polyether Polyol

Acute Oral Toxicity
Acute toxicity estimate: 500 mg/kg

Acute Dermal Toxicity
LD50: > 2,000 mg/kg (rabbit, male/female) (OECD Test Guideline 402)

Skin Irritation
rabbit, OECD Test Guideline 404, slight irritant
Toxicological studies of a comparable product.

Eye Irritation
rabbit, OECD Test Guideline 405, slight irritant
Toxicological studies of a comparable product.

Sensitization
Skin sensitisation according to Buehler (epicutaneous test):: negative (Guinea pig, OECD Test Guideline 406)
Studies of a comparable product.

Repeated Dose Toxicity
4 w, Oral: NOAEL: >= 1,000 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)
Studies of a comparable product.

Toxicity to Reproduction/Fertility
Oral, daily, (rat, male/female) No toxicity to reproduction
Studies of a comparable product.

Developmental Toxicity/Teratogenicity
rat, female, Oral, 58 d, NOAEL (maternal): 1,000 mg/kg, Studies of a comparable product.

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

12. Ecological Information

Ecological Data for Polyether Polyol
Biodegradation
aerobic, 40 %, Exposure time: 28 d, i.e. not readily degradable
Studies of a comparable product.

Acute and Prolonged Toxicity to Fish
LC50: > 1,000 mg/l (Leuciscus idus (Golden orfe), 96 h)
Studies of a comparable product.

Acute Toxicity to Aquatic Invertebrates
EC50: > 100 mg/l (Daphnia magna (Water flea), 48 h)
Studies of a comparable product.

Toxicity to Aquatic Plants
ErC50: > 100 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)
Studies of a comparable product.

Toxicity to Microorganisms
EC10: > 10,000 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	Components	CAS-No.
95 - 100%	Polyether Polyol	25791-96-2

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:	3.8

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