

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 7106
Material Number: 86071789
Chemical Family: Polyol System
Use: Polyol components for the production of polyurethanes

2. Hazards Identification

GHS Classification

Acute toxicity (Oral): Category 4
Eye irritation: Category 2A
Skin sensitisation: Category 1
Reproductive toxicity: Category 1B

GHS Label Elements

Hazard pictograms:



Signal word: Danger

Hazard statements: Harmful if swallowed.
May cause an allergic skin reaction.
Causes serious eye irritation.
May damage fertility or the unborn child.

Precautionary statements: **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust, mist, gas, vapors or spray.
Wash skin and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the

Material Name: MULTRANOL 7106

Material Number: 86071789

workplace.

Wear permeation resistant protective gloves and clothing. Wear eye and face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

IF exposed or concerned: Get medical attention.

If skin irritation or rash occurs: Get medical attention.

If eye irritation persists: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Rinse mouth.

Wash contaminated clothing before reuse.

Storage:

Store locked up.

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.
15 - 40%	Polyether Polyol	25791-96-2
7 - 13%	Hydroxylated Soy-based Polyol	693217-63-9
0.1 - 1%	Dibutyltin bis(2-ethylhexyl thioglycolate)	10584-98-2
0.1 - 1%	Calcium Oxide	1305-78-8

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 serious eye irritation with symptoms of reddening, tearing, swelling, and burning., May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

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. 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.

Material Name: MULTRANOL 7106

Material Number: 86071789

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 Dioxide Carbon Monoxide Tin oxide fumes., Other hazardous decomposition products may be formed.

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 Period:

12 Months

Storage Temperature

Minimum: 10 °C (50 °F)

Maximum: 32 °C (89.6 °F)

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

Dibutyltin bis(2-ethylhexyl thioglycolate) (10584-98-2)

US. ACGIH Threshold Limit Values, as amended

Time weighted average 0.1 mg/m³ as Sn

US. ACGIH Threshold Limit Values, as amended
Short term exposure limit 0.2 mg/m³ as Sn

US. ACGIH Threshold Limit Values, as amended
Skin as Sn Dermal absorption possible

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Permissible exposure limit 0.1 mg/m³ as Sn

US. ACGIH Threshold Limit Values, as amended
Hazard Designation: Group A4 Not classifiable as a human carcinogen.

Calcium Oxide (1305-78-8)

US. ACGIH Threshold Limit Values, as amended
Time weighted average 2 mg/m³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Permissible exposure limit 5 mg/m³

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.

Personal protective equipment

Avoid contact with skin, eyes and clothing.

Industrial Hygiene/Ventilation Measures

Use local and general exhaust ventilation to control levels of exposure. Thermal processing operations should be ventilated to control gases and fumes given off during processing.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators., NIOSH approved, air-purifying respirator with organic vapor cartridges and P-95 filters.

Hand Protection

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

Permeation resistant gloves., butyl-rubber, Nitrile rubber, Neoprene gloves

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
Color:	Amber
Odor:	amine-like
Odor Threshold:	No Data Available
pH:	No Data Available
Freezing Point:	No Data Available
Setting Point:	No Data Available
Melting Point:	No Data Available
Boiling Point:	No Data Available
Flash Point:	> 120 °C (> 248 °F)
Evaporation Rate:	No Data Available
Lower explosion limit:	No Data Available
Upper Explosion Limit:	No Data Available
Vapor Pressure:	No Data Available
Vapor Density:	No Data Available
Density:	No Data Available
Relative Vapor Density:	No Data Available
Specific Gravity:	1.05 @ 20 °C (68 °F)
Solubility in Water:	Partially soluble
Partition Coefficient: n-octanol/water:	No Data Available
Auto-ignition Temperature:	No Data Available
Decomposition Temperature:	Not established
Unblocking Temperature:	No Data Available
Softening point:	No Data Available
Dynamic Viscosity:	800 cps
Kinematic Viscosity:	No Data Available
Bulk Density:	No Data Available
Molecular Weight:	No Data Available
Pour point:	No Data Available

10. Stability and Reactivity

Hazardous Reactions

Hazardous polymerisation does not occur.

Stability

Stable

Materials to Avoid

Oxidizing agents, Isocyanates

Hazardous Decomposition Products

By Fire: Carbon Dioxide; Carbon Monoxide; Tin oxide fumes., Other hazardous decomposition products may be formed.

11. Toxicological Information

Likely Routes of Exposure: Skin Contact
Eye Contact

Health Effects and Symptoms

Acute: Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning., May

cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

Chronic: May damage fertility or the unborn child.

Toxicity Data for: MULTRANOL 7106

Acute Oral Toxicity

Acute toxicity estimate: 1,754 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 Inhalation Toxicity

, aerosol

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.

Toxicity Data for: Hydroxylated Soy-based Polyol

Acute Oral Toxicity

LD50: > 2,000 mg/kg (rat) (OECD Test Guideline 423)

Skin Irritation

No skin irritation

Eye Irritation

Irritation to eyes, reversing within 7 days

Toxicity Data for: Dibutyltin bis(2-ethylhexyl thioglycolate)**Acute Oral Toxicity**

LD50: 396 mg/kg (rat, male/female)

Acute Inhalation Toxicity

LC50: 0.941 mg/l, 4 h, aerosol (rat, male/female)

Acute Dermal Toxicity

LD50: 777 mg/kg (rat, male/female)

Eye Irritation

rabbit, irritating

Sensitization

Maximisation Test: positive (Guinea pig, OECD Test Guideline 406)

Repeated Dose Toxicity

(feeding study) oral: NOAEL: 0.3 - 0.4 mg/kg, (rat, female, daily)

Studies of a comparable product.

(feeding study) oral: NOAEL: 2 mg/kg, LOAEL: 4 mg/kg, (rat, male/female, daily)

Studies of a comparable product.

Mutagenicity

Genetic Toxicity in Vivo:

In vivo micronucleus test: positive (Mouse, male/female, Oral)

Studies of a comparable product.

positive

Carcinogenicity

Studies of a comparable product.

Toxicity to Reproduction/Fertility

(feeding study) oral, (rat, male) Studies of a comparable product.(feeding study) oral, (rat, female) Studies of a comparable product.

Developmental Toxicity/Teratogenicity

rat, female, Oral, Daily from day 6 to day 15 of the gestation, NOAEL (teratogenicity): 5 mg/kg, NOAEL (maternal): 1 mg/kg, Studies of a comparable product.

Did show teratogenic effects in animal experiments.

Toxicity Data for: Calcium Oxide**Acute Oral Toxicity**

LD50: > 2,000 mg/kg (rat, female) (OECD Test Guideline 425)

Acute Dermal Toxicity

LD50: > 2,500 mg/kg (rabbit, male/female) (OECD Test Guideline 402)

Skin Irritation

Human, Severely irritating

Eye Irritation

Severely irritating

Sensitization

dermal: non-sensitizer (Human)

Mutagenicity

Genetic Toxicity in Vitro:

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

Yeast - gene mutation assay: negative (Saccharomyces species, Metabolic Activation: with/without)

Toxicity to Reproduction/Fertility

One generation study, oral, (rat) NOAEL (parental): 680 mg/kg, No effects on Reproductive parameters observed at doses tested.

Developmental Toxicity/Teratogenicity

rat, oral, NOAEL (teratogenicity): 680 mg/kg, NOAEL (maternal): 680 mg/kg, No Teratogenic effects observed at doses tested.

No fetotoxicity observed at doses tested.

Other Relevant Toxicity Information

May cause irritation of respiratory tract.

Carcinogenicity:

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

12. Ecological Information**Ecological Data for: MULTRANOL 7106**

No data available for this product. Please find the data available for the components.

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, (Desmodemus subspicatus (Green algae), 72 h)

Studies of a comparable product.

Toxicity to Microorganisms

Material Name: MULTRANOL 7106

Material Number: 86071789

EC10: > 10,000 mg/l, (activated sludge, 3 h)
Studies of a comparable product.

Ecological Data for Hydroxylated Soy-based Polyol

Acute Toxicity to Aquatic Invertebrates

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

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

Ecological Data for Dibutyltin bis(2-ethylhexyl thioglycolate)

Biodegradation

aerobic, 30 - 40 %, Exposure time: 28 d, i.e. not readily degradable

Acute and Prolonged Toxicity to Fish

LC50: > 11.4 mg/l (Danio rerio (zebra fish), 96 h)

No toxic effects with saturated solution.

Acute Toxicity to Aquatic Invertebrates

EC50: > 1.4 mg/l (Daphnia magna (Water flea), 48 h)

No toxic effects in the water-soluble range.

Toxicity to Aquatic Plants

ErC50: > 0.646 mg/l, End Point: Growth inhibition (Desmodesmus subspicatus (Green algae), 72 h)

Toxicity to Microorganisms

EC50: > 1,000 mg/l, (activated sludge, 3 h)

Ecological Data for Calcium Oxide

Acute and Prolonged Toxicity to Fish

LC50: 1,070 mg/l (Common Carp (Cyprinus carpio), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: 159.6 mg/l (24 h)

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

Material Name: MULTRANOL 7106

Material Number: 86071789

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:

<u>Concentration</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	Polyether Polyol	25791-96-2
>=1%	Polyether Polyol	CAS# is a trade secret
7 - 13%	Hydroxylated Soy-based Polyol	693217-63-9
>=1%	Polyether Polyol	CAS# is a trade secret

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:

<u>Concentration</u>	<u>Components</u>	<u>CAS-No.</u>
0.1 - 1%	Aluminum Oxide	1344-28-1

California Proposition 65 List:

<u>Concentration</u>	<u>Components</u>	<u>CAS-No.</u>
<1 ppm	Furan	110-00-9
<1 ppm	Propylene Oxide	75-56-9
<1 ppm	Acetaldehyde	75-07-0

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: 07/22/2021
SDS Version: 4.6

Information contained in this SDS is believed to be accurate but is furnished without warranty, express or implied, including warranties of merchantability or fitness for a particular purpose. The information relates only to the specific material designated herein. Covestro LLC. assumes no legal responsibility for use of or reliance upon the information in this SDS and such information shall in no case be considered a part of our terms and conditions of sale. The user is responsible for determining whether the Covestro product is suitable for user's method of use or application. Covestro is not liable for any failure to observe the precautionary measures described in this SDS or for any misuse of the product.

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