

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: IMPRANIL C
Material Number: 00268836
Chemical Family: Aromatic Polyester Urethane Resin
Use: Raw material for coatings, adhesives, sealants, or elastomers in industrial applications
Restrictions on use: Pesticides

2. Hazards Identification

GHS Classification

Reproductive toxicity: Category 2

GHS Label Elements

Hazard pictograms:



Signal word: Warning

Hazard statements: Suspected of damaging fertility or the unborn child.
If fine particles are generated during further processing, handling or by other means, product may form combustible dust concentrations in air.

Precautionary statements: **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear permeation resistant protective gloves and clothing. Wear eye and face protection.

Response:
IF exposed or concerned: Get medical attention.

Storage:

Material Name: IMPRANIL C

00268836

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

<u>Concentration</u>	<u>Components</u>	<u>CAS-No.</u>
0.1 - 1%	Toluene	108-88-3

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: May cause mechanical irritation of the respiratory tract, skin, and/or eyes. Eyes may become red, feel scratchy and may tear., Contact with heated material can cause thermal burns.

Eye Contact

In case of contact, flush eyes with plenty of lukewarm water. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Get medical attention if irritation develops.

Skin Contact

In case of skin contact, wash affected areas with soap and water. Wash clothing and shoes before reuse.

Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. 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: Water, Foam, Dry chemical

Unsuitable Extinguishing Media: Carbon dioxide (CO₂)

Fire Fighting Procedure

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

Hazardous Decomposition Products

By Fire and Thermal Decomposition: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen

Material Name: IMPRANIL C

00268836

(NOx), dense black smoke, Isocyanate, Isocyanic Acid and other undetermined compounds., Hydrogen cyanide

Unusual Fire/Explosion Hazards

Product is a granular solid. If ground into powder form, conditions may exist for a dust explosion. Avoid dusting.

6. Accidental Release Measures

Spill and Leak Procedures

Avoid creating dusty conditions. Remove mechanically by a method that minimizes the generation of airborne dust (vacuum cleaner, wet mopping, etc.) Collect and place in appropriately marked sealable containers for disposal. If molten, allow material to cool and place into an appropriate marked container for disposal. Wash spill area with soap and water.

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. Take precautionary measures against static discharges. Avoid breathing dust. Material is hygroscopic and may absorb small amounts of atmospheric moisture.

Storage Period:

6 Months: after receipt of material by customer

Storage Temperature

Minimum: 20 °C (68 °F)

Maximum: 20 °C (68 °F)

Storage Conditions

Store in a dry place in original or waterproof containers. Minimize dust generation and accumulation. Material can be stored safely at ambient temperatures. Store separate from food products.

Substances to Avoid

Strong oxidizing agents, Strong acids and strong bases, 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

Toluene (108-88-3)

US. ACGIH Threshold Limit Values
Time weighted average 20 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)
Time weighted average 200 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Material Name: IMPRANIL C

00268836

Ceiling Limit Value 300 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)
Maximum concentration: 500 ppm (10 minutes)

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

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. Thermal processing operations should be ventilated to control gases and fumes given off during processing.

Respiratory Protection

Maintain levels below the recommended exposure limits., During high-temperature processing and/or circumstances where decomposition is suspected, a NIOSH-approved supplied air respirator is recommended to protect against fumes and vapors.

Hand Protection

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

Wear heat resistant gloves when handling molten material.

Eye Protection

Safety glasses with side-shields

Skin Protection

No special skin protection requirements during normal handling and use.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Emergency showers and eye wash stations should be available. 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. Store separate from food products.

9. Physical and Chemical Properties

State of Matter:	solid
Appearance:	flakes, granules
Color:	Colorless
Odor:	Odorless
Odor Threshold:	No Data Available
pH:	No Data Available
Melting Point:	ca. 115 °C (239 °F)
Boiling Point:	No Data Available
Flash Point:	> 93 °C (199.4 °F) @ 1,013 hPa
Evaporation Rate:	No Data Available
Flammability:	No Data Available
Lower Explosion Limit:	No Data Available
Upper Explosion Limit:	No Data Available
Vapor Pressure:	No Data Available

Material Name: IMPRANIL C

00268836

Vapor Density:	No Data Available
Density:	No Data Available
Relative Vapor Density:	No Data Available
Specific Gravity:	No Data Available
Solubility in Water:	insoluble
Partition Coefficient: n-octanol/water:	No Data Available
Auto-ignition Temperature:	No Data Available
Decomposition Temperature:	No Data Available
Dynamic Viscosity:	40,000 mPa.s @ 23 °C (73.4 °F)
Kinematic Viscosity:	No Data Available
Bulk Density:	ca. 600 kg/m ³

10. Stability and Reactivity

Hazardous Reactions

Hazardous polymerisation does not occur.

Stability

Stable

Materials to Avoid

Strong oxidizing agents, Strong acids and strong bases, Isocyanates

Conditions to Avoid

None known.

Hazardous Decomposition Products

By Fire and Thermal Decomposition: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke, Isocyanate, Isocyanic Acid and other undetermined compounds., Hydrogen cyanide

11. Toxicological Information

Likely Routes of Exposure:

Inhalation
Skin Contact
Eye Contact
Ingestion

Health Effects and Symptoms

Acute: May cause mechanical irritation of the respiratory tract, skin, and/or eyes. Eyes may become red, feel scratchy and may tear., Contact with heated material can cause thermal burns.

Chronic: Suspected of damaging fertility or the unborn child.

Toxicity Data for: IMPRANIL C

Acute Inhalation Toxicity

Acute toxicity estimate: 29.72 mg/l, 4 h, vapour (Calculation method)

Acute Dermal Toxicity

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

Toxicity Data for: Toluene

Material Name: IMPRANIL C

00268836

Acute Oral Toxicity

LD50: 5,580 mg/kg (rat, male) (Directive 67/548/EEC, Annex V, B.1.)

Acute Inhalation Toxicity

LC50: 28.1 mg/l, 4 h, vapour (rat, male/female) (OECD Test Guideline 403)

Acute Dermal Toxicity

LD50: > 5,000 mg/kg (rabbit, male)

Skin Irritation

rabbit, Exposure Time: 4 h, irritating

Eye Irritation

Human, Irritating to eyes.

Sensitization

ambiguous (Guinea pig)

non-sensitizer (rat)

Skin sensitisation according to Magnusson/Kligmann (maximizing test):: negative (Guinea pig)

Repeated Dose Toxicity

13 weeks, Inhalation: NOAEL: 312 mg/kg, (rat, Male/Female, 6 hrs/day 5 days/week)

Chronic exposure damages the brain and the central nervous system.

Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic Activation: with/without)

Mammalian cell - gene mutation assay: Negative results were reported in various in vitro studies. (Mouse lymphoma cells (L5178Y/TK), Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Dominant Lethal Assay: positive, negative (Mouse, male)
positive, negative

Sister Chromatid Exchange: negative, Negative results were reported in various in vivo studies. (rat,)
negative, Negative results were reported in various in vivo studies.

Cytogenetic assay: negative (rat,)
negative

Carcinogenicity

rat, Male/Female, inhalation, 18 months, 6 hrs/day 5 days/week negative
Mouse, Male/Female, inhalation, 2 years, 6 hrs/day 5 days/week negative

Toxicity to Reproduction/Fertility

Fertility Screening, inhalation, 6 hrs/day 5 days/week, (Mouse, male) NOAEL (parental): 400 ppm,
Reproductive effects have been observed in animal studies. Two generation study, inhalation, (rat,
Male/Female) NOAEL (parental): 500 ppm, NOAEL (F1): 500 ppm, NOAEL (F2): 500 ppm
Two generation study, inhalation, 6 hrs/day 7 days/week, (rat, Male/Female)

Developmental Toxicity/Teratogenicity

Material Name: IMPRANIL C

00268836

rabbit, inhalation, gestation, 6 hrs/day 7 days/week, NOAEL (teratogenicity): 1.14 mg/l, NOAEL (maternal): 1.14 mg/kg, No Teratogenic effects observed at doses tested. rat, female, inhalation, gestation, 6 hrs/day 5 days/week, NOAEL (teratogenicity): 400 ppm, NOAEL (maternal): 400 ppm No fetotoxicity observed at doses tested. rat, female, Inhalative, pregnancy, 6 hours/day 7 days/week, NOAEL (teratogenicity): 4500 mg/m³, NOAEL (maternal): 2250 mg/m³ Fetotoxicity has been observed in animal studies.

Other Relevant Toxicity Information

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Carcinogenicity:

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

12. Ecological Information

Ecological Data for: IMPRANIL C

No data available for this product.

Ecological Data for Toluene

Biodegradation

Aerobic, 86 %, Exposure time: 20 d

Biochemical Oxygen Demand (BOD)

2,150 mg/l

Chemical Oxygen Demand (COD)

2,520 mg/g

Bioaccumulation

Golden orfe (Leuciscus idus), Exposure time: 3 Days, 90 BCF

Acute and Prolonged Toxicity to Fish

LC50: 13 mg/l (Goldfish (Carassius auratus), 96 h)

LC50: 26 mg/l (Fathead minnow (Pimephales promelas), 96 h)

LC50: 24 mg/l (Rainbow (Donaldson) Trout (Oncorhynchus mykiss), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: 11.5 mg/l (Water flea (Daphnia magna), 48 h)

Toxicity to Aquatic Plants

EC50: > 433 mg/l, (Green algae (Selenastrum capricornutum), 96 h)

Toxicity to Microorganisms

EC0: 29 mg/l, (Pseudomonas putida, 16 h)

13. Disposal Considerations

Material Name: IMPRANIL C

00268836

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. Empty containers retain product residue; observe all precautions for product.

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**

>=1%

Components

Polyurethane Resin

CAS-No.

CAS# is a trade secret

Material Name: IMPRANIL C	00268836
---------------------------	----------

1 - 5%

Talc (non-asbestos form)

14807-96-6

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%	Toluene	108-88-3

California Proposition 65 List:

<u>Concentration</u>	<u>Components</u>	<u>CAS-No.</u>
0.1 - 1%	Toluene	108-88-3

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.

This product, or any part of the product, is not approved for and should not be used in the formulation of a pesticide or pesticide product, as those terms are defined in 40 CFR 152.3.

Contact: Product Safety Department
Telephone: (412) 413-2835
SDS Number: 112000013419
Version Date: 12/18/2018
SDS Version: 4.4

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.