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Section 1: IDENTIFICATION**Product identifier****Product Name** CONATHANE® CE-1164 Urethane Prepolymer**Other means of identification****Product Code(s)** 0006152**Recommended use of the chemical and restrictions on use****Recommended Use** Conformal Coating**Details of the supplier of the safety data sheet****Manufacturer Address**ELANTAS PDG, INC.
1405 Buffalo Street
Olean, New York 14760**Emergency telephone number****Company Phone Number** (716) 372-9650**E-mail address** Ross.Roberson@altana.com**Emergency Telephone** INFOTRAC - 1-800-535-5053**Section 2: HAZARDS IDENTIFICATION****Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 2
Acute toxicity - Inhalation (Vapors)	Category 1
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1B
Skin sensitization	Category 1B
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements**Danger**

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Hazard statements

Fatal if swallowed
Fatal if inhaled
Causes skin irritation
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Suspected of causing cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
Highly flammable liquid and vapor



Appearance Low viscosity liquid

Physical state Liquid

Odor Characteristic

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
If skin irritation or rash occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth
In case of fire: Use CO₂, dry chemical, or foam for extinction

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Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

May be harmful in contact with skin

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**Substance**

Not applicable.

Mixture

Chemical nature Mixture.

Chemical name	CAS No.	Weight-%	Trade secret
1-Methoxy-2-propanol acetate	108-65-6	20 - 30	*
Toluene	108-88-3	10 - 20	*
Xylene	1330-20-7	5 - 10	*
Ethylbenzene	100-41-4	1 - 5	*
4-methyl-m-phenylene diisocyanate	584-84-9	1 - 5	*
2-methyl-m-phenylene diisocyanate	91-08-7	0.1 - 1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES**Description of first aid measures**

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

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Section 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	No information available.
Hazardous combustion products	Carbon monoxide. Nitrogen oxides (NOx).
Explosion data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of waterways. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Reference to other sections See section 13 for more information.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Contents under pressure. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. See section 8 for more information. Take precautionary measures against static discharges. S53 - Avoid exposure - obtain special instructions before use. Dispose of in accordance with local regulations.

Conditions for safe storage, including any incompatibilities

Storage Conditions Observe technical data sheet. P210 - Keep away from heat. - No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Observe all label precautions until container is cleaned, reconditioned or destroyed.

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Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
1-Methoxy-2-propanol acetate 108-65-6	No data available	-	50 ppm TWA
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m ³ Ceiling: 300 ppm	
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m ³	
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m ³	
4-methyl-m-phenylene diisocyanate 584-84-9	STEL: 0.005 ppm inhalable fraction and vapor TWA: 0.001 ppm inhalable fraction and vapor S*	(vacated) TWA: 0.005 ppm (vacated) TWA: 0.04 mg/m ³ (vacated) STEL: 0.02 ppm (vacated) STEL: 0.15 mg/m ³ Ceiling: 0.02 ppm Ceiling: 0.14 mg/m ³	
2-methyl-m-phenylene diisocyanate 91-08-7	STEL: 0.005 ppm inhalable fraction and vapor TWA: 0.001 ppm inhalable fraction and vapor S*	-	

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering controls

Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

Face protection shield. Tight sealing safety goggles.

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Hand protection	Impervious gloves.
Skin and body protection	Impervious clothing. Wear suitable protective clothing.
Respiratory protection	Use appropriate respiratory protection.
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Low viscosity liquid
Color	amber
Odor	Characteristic
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	> 38 °C / 100 °F	
Flash point	> 7 °C / 45 °F	Tag Closed Cup
Evaporation rate	< 1	
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.03	
Water solubility	Reacts with water	
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	100	
Dynamic viscosity	No data available	None known
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	~50%
Liquid Density	No information available
Bulk density	No information available

Section 10: STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.

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Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products Nitrogen oxides (NOx). Carbon oxides. Hydrogen cyanide. Toluene Diisocyanate.

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 22.04 mg/kg
ATEmix (dermal) 4,286.00 mg/kg
ATEmix (inhalation-dust/mist) 0.83 mg/l
ATEmix (inhalation-vapor) 0.15 mg/l

Unknown acute toxicity No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1-Methoxy-2-propanol acetate 108-65-6	= 8532 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
Xylene 1330-20-7	= 3500 mg/kg (Rat)	> 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h
Ethylbenzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
4-methyl-m-phenylene diisocyanate 584-84-9	= 5800 mg/kg (Rat)	> 16 mL/kg (Rabbit)	= 14 ppm (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

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Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Toluene 108-88-3	-	Group 3	-	-
Xylene 1330-20-7	-	Group 3	-	-
Ethylbenzene 100-41-4	A3	Group 2B	-	X
4-methyl-m-phenylene diisocyanate 584-84-9	A3	Group 2B	-	X
2-methyl-m-phenylene diisocyanate 91-08-7	A3	Group 2B	-	X

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects liver, kidney, Respiratory system, Eyes, Skin, Central nervous system, Pancreas.

Subchronic toxicity Not applicable.

Neurological effects None known.

Other adverse effects No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity No information available.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1-Methoxy-2-propanol acetate 108-65-6	-	161: 96 h Pimephales promelas mg/L LC50 static	-	500: 48 h Daphnia magna mg/L EC50
Toluene 108-88-3	12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 433: 96 h Pseudokirchneriella subcapitata mg/L EC50	12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	-	11.5: 48 h Daphnia magna mg/L EC50 5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static

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		<p>15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 54: 96 h Oryzias latipes mg/L LC50 static 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static</p>		
Xylene 1330-20-7	-	<p>13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 13.4: 96 h Pimephales promelas mg/L LC50 flow-through 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static 19: 96 h Lepomis macrochirus mg/L LC50</p>	-	<p>0.6: 48 h Gammarus lacustris mg/L LC50 3.82: 48 h water flea mg/L EC50</p>
Ethylbenzene 100-41-4	<p>2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static</p>	<p>4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static</p>	-	<p>1.8 - 2.4: 48 h Daphnia magna mg/L EC50</p>

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Bioconcentration factor (BCF) No data available

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Component Information

Chemical name	Partition coefficient
1-Methoxy-2-propanol acetate 108-65-6	0.43
Toluene 108-88-3	2.7
Xylene 1330-20-7	3.15
Ethylbenzene 100-41-4	3.2

Mobility No information available.

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations.

Contaminated packaging Do not reuse empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty remaining contents.

US EPA Waste Number U220 U223 U239 D001.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Toluene 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151	-	U220
Xylene 1330-20-7	-	Included in waste stream: F039	-	U239
Ethylbenzene 100-41-4	-	Included in waste stream: F039	-	-

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene 108-88-3	-	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one	-

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			to and including five, with varying amounts and positions of chlorine substitution.	
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California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Toluene 108-88-3	Toxic Ignitable
Xylene 1330-20-7	Toxic Ignitable
Ethylbenzene 100-41-4	Toxic Ignitable

Section 14: TRANSPORT INFORMATION

DOT

UN/ID no. UN1993
Proper shipping name Flammable liquid, n.o.s. [Toluene, Xylene]
Hazard Class 3
Packing Group II
Reportable Quantity (RQ) Xylene - Reportable Quantity Pounds of Product 500 Lbs., Toluene - Reportable Quantity Pounds of Product 5000 Lbs., Toluene Diisocyanate Reportable Quantity Pounds of Product - 100 Lbs.

IATA

UN/ID no. UN1993
Proper shipping name Flammable liquid, n.o.s. [Toluene, Xylene]
Hazard Class 3
Packing Group II

IMDG

UN/ID no. UN1993
Proper shipping name Flammable liquid, n.o.s. [Toluene, Xylene]
Hazard Class 3
Packing Group II

Section 15: REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDL Complies

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Per the June 13, 2016 Federal Register notice, EPA harmonized the EPCRA 311/312 hazard categories with the 2012 OSHA hazard communication standard for classifying and labeling chemicals (i.e. GHS). Please refer to Section 2 of the SDS to identify

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the appropriate hazard categories for reporting purposes.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3	1000 lb	X	X	X
Xylene 1330-20-7	100 lb	-	-	X
Ethylbenzene 100-41-4	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Toluene 108-88-3	1000 lb	-
Xylene 1330-20-7	100 lb	-
Ethylbenzene 100-41-4	1000 lb	-
4-methyl-m-phenylene diisocyanate 584-84-9	100 lb	100 lb
2-methyl-m-phenylene diisocyanate 91-08-7	100 lb	100 lb

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Toluene - 108-88-3	Developmental
Ethylbenzene - 100-41-4	Carcinogen
Propylene oxide - 75-56-9	Carcinogen
Benzene - 71-43-2	Carcinogen Developmental Male Reproductive
Toluene diisocyanate - 26471-62-5	Carcinogen

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Toluene 108-88-3	X	X	X
Xylene 1330-20-7	X	X	X
Ethylbenzene 100-41-4	X	X	X
4-methyl-m-phenylene	X	X	X

