

SECTION 1. IDENTIFICATION

Product name	: Resinate UltraCast Resin	
Manufacturer or supplier's de	tails	
Company name of supplier Address	 Polymer Science Corp 6027 79 Ave SE, Calgary, AB T2C 5P1 Canada 	
Telephone	: 403-287-2751	
Emergency telephone number	: Canutec (613) 996 – 6666 (24 hour	s)
Recommended use of the che	emical and restrictions on use	
Recommended use	: Component of a Epoxy Coating or Casting System.	

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accord Acute toxicity (Oral)	ance with the Hazardous Products Regulations : Category 4
Acute toxicity (Dermal)	: Category 4
Serious eye damage	: Category 1
Short-term (acute) aquatic hazard	: Category 2
Long-term (chronic) aquatic hazard	: Category 2
GHS label elements Hazard pictograms	
Signal word	: Danger
Hazard statements	 H302 + H312 Harmful if swallowed or in contact with skin. H318 Causes serious eye damage. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	 Prevention: P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product.



 P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. P362 + P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage. Storage: Not available
Storage:
Disposal:
P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Substance

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Propylidynetrimethanol, propoxylated,	39423-51-3	80 - 100
reaction products with ammonia		

SECTION 4. FIRST AID MEASURES

General advice	:	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Treat symptomatically. Get medical attention if symptoms occur.
If inhaled	:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	:	If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness.



		In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	:	None known.
Notes to physician	:	Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Carbon oxides
Specific extinguishing methods	:	No data is available on the product itself.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.



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		If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Neutralise with acid. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers.
Materials to avoid	:	For incompatible materials please refer to Section 10 of this SDS.
Further information on storage stability	:	Stable under normal conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipmer Respiratory protection	 Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection	
Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	 Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing



	problems.
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	 When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	light yellow
Odour	:	ammoniacal
Odour Threshold	:	No data is available on the product itself.
рН	:	11.6
Melting point/range	:	Not applicable
Freezing point		< -20 °C
Initial boiling point and boiling range	:	No information available.
Flash point	:	218.5 °C Method: closed cup
Evaporation rate	:	No data is available on the product itself.
Flammability (solid, gas)	:	No data is available on the product itself.
Flammability (liquids)	:	No data is available on the product itself.
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	6.82 hPa (20 °C)
Relative vapour density	:	1
Relative density	:	No data is available on the product itself.
Density	:	0.9658 g/cm3 (20 °C) Method: Relative Density
Solubility(ies) Water solubility	:	562 g/l (20 °C)



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Solubility in other solvents	: No data is available on the product itself.
Partition coefficient: n- octanol/water	: log Pow: -1.13 (20 - 25 °C)
	pH: 12.7 Method: Partition coefficient
Auto-ignition temperature	: 320 °C
Decomposition temperature	: 236 °C
Self-Accelerating decomposition temperature (SADT)	: No data is available on the product itself.
Viscosity Viscosity, kinematic	: 110 mm2/s
Explosive properties	: No data is available on the product itself.
Oxidizing properties	: None. Method: Directive 67/548/EEC, Annex V, A.21
Molecular weight	: No data available
Metal corrosion rate	: Not corrosive to metals
Particle size	: No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use. Stable under normal conditions. No hazards to be specially mentioned.
Conditions to avoid	:	None known.
Incompatible materials	:	None known.
Hazardous decomposition : products	:	carbon dioxide
		carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : No data is available on the product itself. exposure

Acute toxici



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Acute oral toxicity - Product	:	LD50 (Rat, male and female): 550 mg/kg Method: OECD Test Guideline 425
Acute inhalation toxicity	:	No data available
Acute dermal toxicity - Product	:	LD50 (Rat, male and female): > 1,000 mg/kg Method: OECD Test Guideline 402
Acute toxicity (other routes of	:	No data available

Skin corrosion/irritation

Components:

administration)

Propylidynetrimethanol, propoxylated, reaction products with ammonia: Species: Rabbit Method: OECD Test Guideline 404 Result: Mild skin irritation

Serious eye damage/eye irritation

Components:

Propylidynetrimethanol, propoxylated, reaction products with ammonia: Result: Irreversible effects on the eye Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Components:

Propylidynetrimethanol, propoxylated, reaction products with ammonia: Exposure routes: Skin Species: Guinea pig Result: Does not cause skin sensitisation.

Assessment:

No data available

Germ cell mutagenicity

Product:

Genotoxicity in vitro	 Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
	Metabolic activation: Metabolic activation Method: OECD Test Guideline 482 Result: negative
	Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative

Product:





Genotoxicity in vivo	:	Cell type: Somatic Application Route: Intraperitoneal injection Dose: 2.5 mg/kg Method: OECD Test Guideline 474 Result: negative
Carcinogenicity No data available		
Carcinogenicity - Assessment	:	No data available
ACGIH	e	o component of this product present at levels greater than or qual to 0.1% is identified as a carcinogen or potential arcinogen by ACGIH.
Reproductive toxicity		
Product:		
Effects on fertility	:	Species: Rat, male and female Application Route: Dermal Method: OECD Test Guideline 421
Components:		
Propylidynetrimethanol, propox Effects on foetal		ated, reaction products with ammonia: Species: Rat
development	•	Application Route: Oral
		Dose: 0, 10, 100, 125, 200 mg/kg General Toxicity Maternal: No-observed-effect level: > 100
		mg/kg body weight
		Embryo-foetal toxicity: No-observed-effect level: > 100 mg/kg body weight
		Method: ŎECD Test Guideline 414
Reproductive toxicity - Assessment	:	No data available
STOT - single exposure		
No data available		
STOT - repeated exposure		
No data available		
Repeated dose toxicity		

Components:

Propylidynetrimethanol, propoxylated, reaction products with ammonia: Species: Rat, male and female NOAEL: >= 100 mg/kg Application Route: Oral Exposure time: 90 d Dose: 0, 10, 75, 100, 150, 200 mg/kg



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Method: OECD Test Guideline 408

Repeated dose toxicity - : No data available Assessment

Aspiration toxicity

No data available

Experience with human exposure

Inhalation:	No data available

- Skin contact: No data available
- Eye contact: No data available
- Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Ingestion: No data available

Other health hazards

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Propylidynetrimethanol, propoxylated, reaction products with ammonia: Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 203





Components:

		ated, reaction products with ammonia:			
aquatic invertebrates	•	EC50 (Daphnia magna (Water flea)): 13 mg/l Exposure time: 48 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 202			
Components:					
Propylidynetrimethanol, propoxy Toxicity to algae/aquatic plants		tted, reaction products with ammonia: ErC50 (Selenastrum capricornutum (green algae)): 4.4 mg/l Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 201			
		NOEC (Selenastrum capricornutum (green algae)): 1 mg/l Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 201			
M-Factor (Acute aquatic toxicity)	:	No data available			
Toxicity to fish (Chronic toxicity)	:	No data available			
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	No data available			
M-Factor (Chronic aquatic toxicity)	:	No data available			
Components:					
		ated, reaction products with ammonia: EC50 (activated sludge): ca. 1,000 mg/l Exposure time: 0.5 h Test Type: static test Test substance: Fresh water Method: OECD Test Guideline 209			
Toxicity to soil dwelling organisms	:	No data available			
Plant toxicity	:	No data available			
Sediment toxicity	:	No data available			
Toxicity to terrestrial organisms	:	No data available			
Ecotoxicology Assessment					



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Acute aquatic toxicity	:	No data available
Chronic aquatic toxicity	:	No data available
Toxicity Data on Soil	:	No data available
Other organisms relevant to the environment	:	No data available
Persistence and degradabilit	y	
Components: Propylidynetrimethanol, propox Biodegradability		ated, reaction products with ammonia: Concentration: 100 mg/l Result: Not readily biodegradable. Biodegradation: < 5 % Exposure time: 28 d Method: OECD Test Guideline 301F
Biochemical Oxygen Demand (BOD)	:	No data available
Chemical Oxygen Demand (COD)	:	No data available
BOD/COD	:	No data available
ThOD	:	No data available
BOD/ThOD	:	No data available
Dissolved organic carbon (DOC)	:	No data available
Physico-chemical removability	:	No data available
<u>Components:</u> Propylidynetrimethanol, propox Stability in water	cyla :	ated, reaction products with ammonia: Degradation half life(DT50): > 1 yr (25 °C) pH: ⁻ Method: OECD Test Guideline 111 Remarks: Fresh water
Photodegradation	:	No data available
Impact on Sewage Treatment	:	No data available
Bioaccumulative potential Bioaccumulation	:	No data available
Partition coefficient: n- octanol/water - Product	:	log Pow: -1.13 (20 - 25 °C) pH: 12.7

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		Method: Partition coefficient
Mobility in soil		
Mobility	:	No data available
Distribution among environmental compartments	:	No data available
Stability in soil	:	No data available
Other adverse effects		
Environmental fate and pathways	:	No data available
Results of PBT and vPvB assessment	:	No data available
Endocrine disrupting potential	:	No data available
Adsorbed organic bound halogens (AOX)	:	No data available
Hazardous to the ozone laye	r	
Ozone-Depletion Potential		Not applicable
Additional ecological information - Product	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.
Global warming potential (GWP)	:	No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of contents/ container to an approved waste disposal plant.
Contaminated packaging :		Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.



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SECTION 14. TRANSPORT INFORMATION

International Regulations

Class

TDG UN number Proper shipping name Class Packing group Labels	 UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIMETHYLOLPROPANE POLYOXYPROPYLENE TRIAMINE) 9 III 9 			
IATA UN/ID No.	: UN 3082			
Proper shipping name	 Environmentally hazardous substance, liquid, n.o.s. (TRIMETHYLOLPROPANE POLYOXYPROPYLENE TRIAMINE) 			
Class	: 9			
Packing group	: 111			
Labels	: Miscellaneous			
Packing instruction (cargo aircraft)	: 964			
Packing instruction (passenger aircraft)	: 964			
IMDG				
UN number	: UN 3082			
Proper shipping name	 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIMETHYLOLPROPANE POLYOXYPROPYLENE TRIAMINE) 			
Class	: 9			
Packing group	: 111			
Labels				
EmS Code Marine pollutant	:F-A, S-F :yes			
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code				
Not applicable for product as s	upplied.			
National Regulations				
TDG				
UN number	: UN 3082			
Proper shipping name	 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIMETHYLOLPROPANE POLYOXYPROPYLENE TRIAMINE) 			

TRIAMINE)

: 9



Packing group	:	Ш
Labels	:	9
ERG Code	:	171
Marine pollutant	:	yes

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

The components of this product are reported in the following inventories:CH INV: On the inventory, or in compliance with the inventory				
DSL	: All components of this product are on the Canadian DSL			
AICS	: On the inventory, or in compliance with the inventory			
NZIoC	: On the inventory, or in compliance with the inventory			
ENCS	: On the inventory, or in compliance with the inventory			
KECI	: On the inventory, or in compliance with the inventory			
PICCS	: On the inventory, or in compliance with the inventory			
IECSC	: On the inventory, or in compliance with the inventory			
TCSI	: On the inventory, or in compliance with the inventory			
TSCA	: On the inventory, or in compliance with the inventory			

Inventories

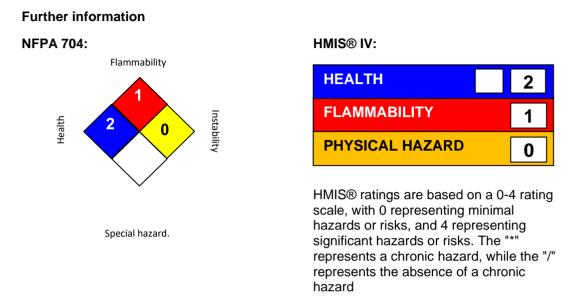
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

Canada. CEPA 1999 Significant New Activity (SNAc) List

No substances are subject to a Significant New Activity Notification.



SECTION 16. OTHER INFORMATION



Revision Date

: 03/06/2020

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.