

990088 URETHANE CURING AGENT

SECTION 1. IDENTIFICATION

Product Identifier	990088 URETHANE CURING AGENT
Other Means of Identification	PAINT RELATED MATERIAL
Product Family	99-LINE
Recommended Use	Industrial use only.
Restrictions on Use	Not applicable.
Manufacturer/Supplier Identifier	Allcolour Paint Limited, 1257 Speers Road, Oakville, Ontario, L6L 2X5, (905) 827-4173
Emergency Phone No.	CANUTEC (24 Hours), (613) 996-6666 Allcolour Paint Limited, (905) 827-4173
SDS No.	1178

SECTION 2. HAZARD IDENTIFICATION

Classification

Flammable liquid - Category 2; Acute toxicity (Oral) - Category 5; Acute toxicity (Dermal) - Category 5; Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Eye irritation - Category 2; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Reproductive toxicity - Category 1B; Reproductive toxicity - Effects on or via lactation; Specific target organ toxicity (single exposure) - Category 2; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 2; Aspiration hazard - Category 2

Label Elements



Danger

Highly flammable liquid and vapour.
 May be harmful if swallowed, in contact with skin or if inhaled.
 May be harmful if swallowed and enters airways.
 Causes skin and eye irritation.
 May cause respiratory irritation.
 May cause drowsiness or dizziness.
 May damage the unborn child.
 May cause harm to breast-fed children.
 May cause an allergic skin reaction.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause damage to organs through prolonged or repeated exposure.
 Do not handle until all safety precautions have been read and understood.
 Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.
 Keep container tightly closed.
 Ground/bond container and receiving equipment.
 Use explosion-proof electrical/ventilating/lighting/equipment.

Use non-sparking tools.
 Take precautionary measures against static discharge.
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 Wash hands thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves/eye protection/face protection.
 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
 IF ON SKIN: Wash with plenty of water.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 Get medical advice or attention if you feel unwell.
 Take off contaminated clothing and wash it before reuse.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Hexamethylene diisocyanate based isocyanurates	28182-81-2	40-50		
Ethyl acetate	141-78-6	30-40		
Propylene glycol monomethyl ether acetate	108-65-6	5-10		
Xylene (mixed isomers)	1330-20-7	5-10		
Hexamethylene diisocyanate	822-06-0	0.1-1		

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. If the heart has stopped, trained personnel should start cardiopulmonary resuscitation (CPR) or automated external defibrillation (AED).

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Brush off loose particles from skin. Rinse skin with water or shower.

Eye Contact

Quickly and gently blot or brush chemical off the face. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Do not induce vomiting. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again.

First-aid Comments

If exposed or concerned, get medical advice or attention.

Most Important Symptoms and Effects, Acute and Delayed

Can irritate the nose and throat. Can cause lung injury. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest. Can harm the nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

Immediate Medical Attention and Special Treatment

Target Organs

Eyes, kidneys, liver, nervous system, respiratory system, skin.

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

Water is not effective for extinguishing a fire. It may not cool product below its flash point.

Specific Hazards Arising from the Product

This product presents no unusual hazards in a fire situation.

Irritating chemicals; very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; extremely hazardous hydrogen cyanide.

Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Dike and recover contaminated water for appropriate disposal.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Evacuate downwind locations. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Eliminate all ignition sources if safe to do so.

Environmental Precautions

If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Minimize the use of water to prevent environmental contamination.

Methods and Materials for Containment and Cleaning Up

Small spills or leaks: stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Do NOT use combustible materials such as sawdust. Place used absorbent into suitable, covered, labelled containers for disposal. Large spills or leaks: dike spilled product to prevent runoff. Remove or recover liquid using pumps or vacuum equipment. Dike and recover contaminated water for appropriate disposal.

Other Information

Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing in this product. Avoid repeated or prolonged skin contact. Do not get in eyes, on skin or on clothing. Avoid exposure during pregnancy and while nursing. Only use where there is adequate ventilation. Avoid generating vapours or mists. Avoid generating dusts. Prevent uncontrolled release of product.

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Conditions for Safe Storage

Store in an area that is: cool, dry, ventilated, out of direct sunlight and away from heat and ignition sources, clear of combustible and flammable materials (e.g. old rags, cardboard). Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Xylene (mixed isomers)	100 ppm A4					
Propylene glycol monomethyl ether acetate					50 ppm	
Ethyl acetate	400 ppm		400 ppm			
Hexamethylene diisocyanate	0.005 ppm					

Appropriate Engineering Controls

General ventilation is usually adequate. For large scale use of this product: do not allow product to accumulate in the air in work or storage areas, or in confined spaces. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Control static electricity discharges which includes bonding of equipment to ground.

Provide eyewash in work area, if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Colourless volatile liquid.
Odour	Fruity
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	> 35 °C (95 °F)
Flash Point	~ -4.4 °C (24.1 °F) (closed cup)
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	~ 1.00
Solubility	Slightly soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available

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Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use. Peroxides can accumulate at hazardous levels during distillation, evaporation, or any other method that will concentrate the peroxides.

Conditions to Avoid

Prolonged exposure to high temperatures. Open flames, sparks, static discharge, heat and other ignition sources. Accumulation of static charge. Prolonged exposure to air. Generation of dust.

Incompatible Materials

NITRIC ACID - may detonate immediately on contact with concentrated nitric acid.

STRONG OXIDIZING AGENTS (e.g. liquid oxygen, chlorates, chromic acid, perchlorates, peroxides or permanganates) - may react violently. Increased risk of fire and explosion.

1,3-DICHLORO-5,5-DIMETHYL-2,4-IMIDAZOLIDINDIONE (DICHLOROHYDRANTOIN) - reaction can be explosive.

Water, alcohols (e.g. ethanol), strong bases (e.g. sodium hydroxide), metals (e.g. aluminum).

Not corrosive to metals.

Hazardous Decomposition Products

Irritating chemicals; very toxic carbon monoxide, carbon dioxide; extremely hazardous hydrogen cyanide; corrosive, oxidizing nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Information presented below is for the entire product, unless otherwise specified.

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Xylene (mixed isomers)	4550 ppm (male rat) (4-hour exposure) (vapour)	3523 mg/kg (male rat)	
Propylene glycol monomethyl ether acetate	> 5320 ppm (rat) (4-hour exposure) (vapour)	~ 8532 mg/kg (female rat) (vapour)	> 5000 mg/kg (rabbit) (vapour)
Hexamethylene diisocyanate based isocyanurates	~ 462 mg/m ³ (rat) (4-hour exposure) (aerosol)	~ 19800 mg/kg (rat) (aerosol)	> 15800 mg/kg (rabbit) (aerosol)
Ethyl acetate	~ 10600 ppm (mouse) (4-hour exposure) (vapour)	~ 10200 mg/kg (female rat) (vapour)	> 18000 mg/kg (rabbit) (vapour)
Hexamethylene diisocyanate	~ 18 ppm (rat) (4-hour exposure) (gas)	~ 745 mg/kg (rat)	~ 600 mg/kg (rabbit)

Skin Corrosion/Irritation

Human experience and animal tests show moderate or severe irritation.

Serious Eye Damage/Irritation

Human experience and animal tests show serious eye irritation.

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STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May be harmful based on human experience and animal tests. May be harmful.

Skin Absorption

May cause damage to organs based on animal tests.

Ingestion

May be harmful based on human experience and animal tests. May be harmful.

Aspiration Hazard

May be drawn into the lungs (aspirated) if swallowed or vomited.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause harmful effects on the kidneys, harmful effects on the liver, effects on the central nervous system. Symptoms may include restlessness, reduced ability to think, muscle tremors, memory loss and personality changes. "organic solvent syndrome". Symptoms may include headaches, fatigue, memory loss, irritability, depression and reduced ability to think or reason. Harmful effects on the hearing (auditory) system, dermatitis. Symptoms may include dry, red, cracked skin (dermatitis).

Respiratory and/or Skin Sensitization

Respiratory sensitizer. Skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Xylene (mixed isomers)	Group 3	A4		
Propylene glycol monomethyl ether acetate	Not evaluated	Not Listed	Not Listed	
Hexamethylene diisocyanate based isocyanurates	Not evaluated	Not Listed	Not Listed	
Ethyl acetate	Not evaluated	Not designated	Not Listed	
Hexamethylene diisocyanate	Not evaluated	Not designated	Not Listed	

Conclusions cannot be drawn from the limited studies available. IARC: Group 3 – Not classifiable as to its carcinogenicity to humans. ACGIH®: A4 – Not classifiable as a human carcinogen. (Xylene (mixed isomers))

Key to Abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists. IARC = International Agency for Research on Cancer. NTP = National Toxicology Program. OSHA = US Occupational Safety and Health Administration.

Reproductive Toxicity

Development of Offspring

May harm the unborn child. (Xylene (mixed isomers))

Sexual Function and Fertility

Conclusions cannot be drawn from the limited studies available.

Effects on or via Lactation

May cause effects on or via lactation.

Germ Cell Mutagenicity

Conclusions cannot be drawn from the limited studies available.

Interactive Effects

No information was located.

Other Information

exposure to related solvents, such as benzene, toluene and ethanol (alcohol) slows the rate of clearance of xylenes from the body, thus enhancing its toxic effects

SECTION 12. ECOLOGICAL INFORMATION

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Ecotoxicity

No information was located.

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

If released into the environment, this product is expected to move rapidly through the soil, based on physical and chemical properties.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	1263	PAINT RELATED MATERIAL	3	II

Environmental Hazards Potential Marine Pollutant

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Emergency Response Guide No. 128

Proof of Dangerous Goods Classification

Date of Classification July 07, 2018
Technical Name PAINT RELATED MATERIAL
Classification UN 1263, PAINT RELATED MATERIAL, CLASS 3, PG II
Classification Method Lab Formulation Report

SECTION 15. REGULATORY INFORMATION**Safety, Health and Environmental Regulations****Canada****Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

All ingredients are listed on the DSL or are not required to be listed.

USA**Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.

SECTION 16. OTHER INFORMATION

NFPA Rating Health - 3 Flammability - 3 Instability - 0

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Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists
AIHA® = AIHA® Guideline Foundation. HSDB® = Hazardous Substances Data Bank
IARC = International Agency for Research on Cancer
NFPA = National Fire Prevention Association
NIOSH = National Institute for Occupational Safety and Health
NTP = National Toxicology Program
OSHA = US Occupational Safety and Health Administration
RTECS® = Registry of Toxic Effects of Chemical Substances

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).

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