



SAFETY DATA SHEET (SDS)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: PACT-8000 A
Other means of identification: None
Recommended use: Polyaspartic polyurea resin
Manufactured by: CTM Adhesives Inc.
8320 Grenache
Montréal, Québec
Canada H1J 1C5
E-mail Address : www.ctmadhesives.com
Prepared by: The Health, Safety and Environmental Department of CTM Adhesives
Telephone number of preparer: 1-514-321-5540
Fax number: 1-514-321-5570

Emergency Telephone Number:

24-Hour Emergency Telephone Number Canada (CANUTEC) : (613) 996-6666

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification of hazardous product

Flammable liquid (Category 3)
Carcinogen (Category 2)
Aspiration Hazard (Category 1)
Serious eye damage/eye irritation (Category 2A)
Skin Sensitization (Category 1)

GHS Label Elements

Hazard Pictograms/symbols



Signal Word: DANGER

Hazard and Precautionary Statements:

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.

P201 Obtain special instructions before use. **P202** Do not handle until all safety precautions have been read and understood. **P210** Keep away from heat/sparks/open flames/ hot surfaces. No smoking. **P233** Keep container tightly closed. **P240** Ground/bond container and receiving equipment. **P241** Use explosion proof electrical/ventilating/lighting equipment. **P242** Use only non-sparking tools. **P243** Take action to prevent static discharge. **P280** Wear protective gloves/protective clothing/eye protection/face protection. **P261** Avoid breathing dust/fume/gas/mist/vapors/spray. **P264** Wash hands thoroughly after handling. **P272** Contaminated work clothing must not be allowed out of the workplace. **P301 + P310 IF SWALLOWED:** Immediately call a POISON CENTER/doctor. **P331** Do NOT induce vomiting. **P305 + P351 + P338 IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **P337 + P313** If eye irritation persists: Get medical advice/attention. **P303 + P361 + P353 IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower. **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention. **P308 + P313** If exposed or concerned: Get medical advice/attention. **P362 + P364** Take off contaminated clothing and wash before reuse. **P370 + P378** In case of fire: Use foam, dry chemical, water spray or carbon dioxide (CO2) to extinguish. **P403 + P235** Store in a well-ventilated place. Keep cool. **P405** Store locked up. **P501** Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other Hazards Known: None known

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Concentration (%)</u>
Aspartic ester	136210-32-7	25 - 50 %
Aspartic ester	136210-30-5	25 - 50 %
4-methyl-1,3-dioxolane-2-one	108-32-7	1 - 10 %
Light aromatic solvent naphtha, petroleum	64742-95-6	1 - 10 %

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1,2,4-trimethylbenzene	95-63-6	1 – 5%
Cumene	98-82-8	0 – 1%
xylene	1330-20-7	0 – 1%

SECTION 4. FIRST AID MEASURES

- Inhalation** IF INHALED: Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.
- Ingestion** IF SWALLOWED: Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.
- Skin Contact** IF ON SKIN: Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.
- Eye Contact** IF IN EYES: In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

Most important symptoms and effects (acute and delayed)

The most important known symptoms and effects are described in the labelling (section 2) and/or in section 11. Eye irritation, skin irritation, allergic symptoms. Symptoms may be delayed.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General Information

If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure the medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: In case of fire: water fog, foam, dry chemical powder, carbon dioxide (CO2)

Unsuitable extinguishing media: Do not use water jet as it might spread flame.

Specific hazards arising from the hazardous product: During fire, nitrous gases, fumes/smoke, isocyanates and vapour may be formed. Combustion products may include: acidic hydrogen chloride & hydrogen fluoride, carbon oxide, hydrocarbons, nitrogen oxides and smoke.

Special protective equipment and precautions for fire-fighting: Flammable. Evacuate area. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Use water spray to cool fire exposed surfaces and to protect personnel. Self-contained breathing apparatus and turn-out gear must be worn in case of fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Isolate area. Keep unnecessary and unprotected personnel away. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental Precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.



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SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Keep away from heat/sparks/open flames/ hot surfaces. – No smoking. Vapors may form explosive mixtures with the air. Provide suitable exhaust ventilation at the processing machines. Ensure thorough ventilation of stores and work areas. Avoid aerosol formation. When handling heated product, vapours of the product should be ventilated and respiratory protection used. Wear respiratory protection when spraying. Danger of bursting when sealed gastight. Protect against moisture. If bulging of drum occurs, transfer to well-ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds. Segregate from acids and bases. Segregate from bases. Formation of CO₂ and build-up of pressure possible. Keep container tightly closed and in a well-ventilated place. Outage of containers should be filled with dry inert gas at atmospheric pressure to avoid reaction with moisture.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters (biological limit values or exposure limit values and source of those values)

Exposure limits:

- CAS 136210-32-7 No exposure limits noted for the ingredient(s)
- CAS 136210-30-5 No exposure limits noted for the ingredient(s)
- CAS 108-32-7 No exposure limits noted for the ingredient(s)
- CAS 64742-95-6 ACGIH: NIOSH (petroleum distillates) TWA 350 mg/m³ / Ceil 1800 mg/m³
OSHA: 500 ppm (2000 mg/m³) PEL-TWA (Petroleum distillates)

CAS 95-63-6

Ontario TWAEV	25ppm/123mg/m ³	Ontario TW STEV	Not listed
ACGIH TLV	25ppm/123mg/m ³	ACGIH STEL	Not listed
OSHA PEL	25ppm/120mg/m ³	OSHA STEL	Not listed

CAS 98-82-8

Ontario TWAEV	50ppm/245mg/m ³	Ontario TW STEV	Not listed
ACGIH TLV	50ppm/246mg/m ³	ACGIH STEL	Not listed
OSHA PEL	50ppm/245mg/m ³	OSHA STEL	Not listed

CAS 1330-20-7

Ontario TWAEV	100ppm/435mg/m ³	Ontario TW STEV	150ppm/650mg/m ³
ACGIH TLV	100ppm/434mg/m ³	ACGIH STEL	150ppm/651mg/m ³
OSHA PEL	100ppm/435mg/m ³	OSHA STEL	150ppm/655mg/m ³

Engineering Controls

Provide good local exhaust ventilation to control vapour/mist. Eye wash facilities and emergency showers must be available when handling this product. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

Personal Protective Equipment

Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. Wear appropriate chemical resistant protective gloves. Wear tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists. Wear appropriate protective clothing. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eyewash fountains and safety showers are recommended in the work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State/ Appearance/ Color:	Transparent liquid, Light yellow	Vapour Pressure:	Not available
Odour:	Aromatic	Vapour Density:	Not available
Odour threshold:	Not available	Relative Density:	1.059 (g/ml)
pH:	Not available	Solubility:	Insoluble in water
Melting/freezing point:	Not available	Partition coefficient-n-octanol/water:	Not available
Initial boiling point/range:	142-182°C (300-360°F)	Auto-ignition temperature:	Not available
Flash point:	>41°C (106°F)	Decomposition temperature:	Not available
Evaporation rate:	Not available	Viscosity:	250-350 cps
Flammability (solids and gases):	Flammable	VOC:	Not available
Upper and lower flammability/explosive limits	Lower 0.6% (V) Upper 7% (V)	Other:	None known



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SECTION 10. STABILITY AND REACTIVITY

Reactivity: This product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability: This product is stable under normal conditions.

Possibility of hazardous reactions: Risk of bursting. Reacts with alcohols. Reacts with acids. Reacts with alkalis. Reacts with amines. Risk of exothermic reaction.

Conditions to Avoid: Keep away from heat, sparks and open flame. Avoid high temperatures. Avoid contact with incompatible materials.

Incompatible materials: Amines, alcohols, water, substances/products that react with polyureas.

Hazardous decomposition products: None known

SECTION 11. TOXICOLOGICAL INFORMATION

Likely routes of exposure (inhalation, ingestion, skin and eye contact):

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Symptoms related to the physical, chemical and toxicological characteristics:

May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash. May cause skin irritation with symptoms of reddening, itching, and swelling. May cause eye irritation with symptoms of reddening, tearing, stinging, and swelling. May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

Delayed and immediate effects (chronic effects from short- term and long-term exposure):

Skin Sensitization – Sensitization after skin contact possible; **Respiratory Sensitization** – The substance may cause sensitization of the respiratory tract; **Germ Cell Mutagenicity** – Results could not be confirmed in tests with mammals; **Carcinogenicity** – A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure; **Reproductive Toxicity** – No data available; **Specific Target Organ Toxicity – Single Exposure** – Causes temporary irritation of the respiratory tract; **Specific Target Organ Toxicity - Repeated Exposure** – The substance may cause damage to the olfactory epithelium after repeated inhalation; effect are not relevant to humans at occupational levels of exposure; **Aspiration Hazard** – May be harmful if swallowed and enters airways; **Health Hazards Not Otherwise Classified** – No data available.

Carcinogenicity Comment: Light aromatic solvent naphtha, petroleum (CAS 64742-95-6) contains traces of cumene. The International Agency for Research on Cancer has evaluated cumene and classified it as a possible human carcinogen (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

Numerical measures of toxicity (ATE; LD₅₀ & LC₅₀):

CAS 136210-32-7	LD ₅₀ , Oral - Rat >2000 mg/kg LD ₅₀ , Dermal – Rat >2000 mg/kg LC ₅₀ , Inhalation – Rat (aerosol) >4.224 mg/L, 4hr
CAS 136210-30-5	LD ₅₀ , Oral - Rat >2000 mg/kg LD ₅₀ , Dermal – Rat >2000 mg/kg LC ₅₀ , Inhalation – Rat (dust/mist) >4.224 mg/L, 4hr
CAS 108-32-7	LD ₅₀ , Oral - Rat >5000 mg/kg LD ₅₀ , Dermal – Rabbit >2000 mg/kg
CAS 64742-95-6	LD ₅₀ , Oral- Rat – 2900-3200mg/kg, 8400 mg/kg LC ₅₀ , Inhalation - Rat – 2900ppm LD ₅₀ , Dermal- Rabbit - > 3160 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial information):

Not considered hazardous to the aquatic environment.

Product	Species	Result
CAS 136210-32-7	EC ₅₀ scenedesmus subspicatus	113 mg/l -72 h
CAS 136210-30-5	LC ₅₀ Danio rerio (zebra fish)	66 mg/l - 96 h
	IC ₅₀ scenedesmus subspicatus	113 mg/l - 72 h
	EC ₅₀ Daphnia magna (Water flea)	88.6 mg/l - 48 h
CAS 108-32-7	LC ₅₀ cyprinus carpio	> 1000 mg/l - 96 h
	EC ₅₀ Daphnia magna (Water flea)	> 1000 mg/l - 48 h
CAS 64742-95-6	LC ₅₀ Oncorhynchus mykiss	9.22 mg/l - 96 h

Persistence and degradability: Not enough data available.

Bioaccumulative potential: Not enough data available.

Mobility in soil: Not enough data available.

Other adverse effects: No data available.



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SECTION 13. DISPOSAL CONSIDERATIONS

Information on safe handling for disposal/methods of disposal/contaminated packaging: Dispose of contents/container into safe container in accordance with local, regional or national regulations. Do not reuse empty container without proper cleaning. Do not heat or cut container with electric or gas torch.

SECTION 14. TRANSPORT INFORMATION

UN Number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations:
UN1263; PAINT RELATED MATERIAL; CLASS 3; PG III

UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):
UN1263; PAINT RELATED MATERIAL; CLASS 3; PG III

UN Number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air):
UN1263; PAINT RELATED MATERIAL; CLASS 3; PG III

Special Precautions (transport/conveyance): None known.
Environmental hazards (IMDG or other): None known.
Bulk transport (usually more than 450L in capacity): Possible

SECTION 15. REGULATORY INFORMATION

Safety/health Canadian regulations specifics: Refer to section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).

Environmental Canadian regulations specifics: Refer to section 3 for ingredient(s) of the DSL.

Safety/health/environmental outside regulations specifics: None

SECTION 16. OTHER INFORMATION

Date of latest revision of the safety data sheet: 30 January 2019

Disclaimer:

NOTICE TO READER:

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END OF S.D.S.