



MATERIAL SAFETY DATA SHEET
680-01 / 680-016 / 680-032 / 680-55

Canutec 1-613-996-6666 (24 hours)

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product identification : 680-01 / 680-016 / 680-032 / 680-55
Product name : Crystal seal
Chemical family : Mixture
Supplier / Manufacturer : Auto-Chem Inc.
33 de Lyon
Repentigny, QC, Canada
J5Z 4Z3
Tel : 450-654-9292
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www.autochem.com
Contact : Jean Dagenais

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS</u>	<u>Percentage</u>	<u>Exposure limits</u>
Aliphatic petroleum distillates	64742-48-9	5 – 10	DL50 >5000 mg/kg, rat, oral DL50 >3000 mg/kg, rabbit, dermal
Mineral spirits	64742-88-7	15 – 40	LD50 >6216 mg/kg, rat, oral LD50 >3108 mg/kg, rat, dermal LC50 >14.1mg/l/4 hrs, rat TWA 100 ppm (ACGIH)
Kaolin clay	66402-68-4	5 – 10	PEL TWA 10 mg/m ³ , OSHA TLV TWA 10 mg/m ³ , ACGIH
Diatomaceous earth	61790-53-2	1 – 5	No data available.
Tall oil fatty acid	61790-12-3	1 – 5	LD50 >10000 mg/kg, rat, oral LD50 >2000 mg/kg, rabbit, dermal
Polydiméthylsiloxane	9016-00-6	1 – 5	No data.
Amorphous silica	7631-86-9	1 – 5	LD50 >5110 mg/kg, rat, oral LD50 >5000 mg/kg, rabbit, dermal
Carnauba wax	8015-86-9	1 – 5	No data.

3. HAZARDS IDENTIFICATION

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects :

Eye contact : Vapours are moderately irritating to the eyes.
Skin contact : Not a primary skin irritant after exposure of short duration.
Inhalation : Vapours are moderately irritating to respiratory passages. In rare case, may sensitize heart muscle causing heart arrhythmia.
Ingestion : Liquid when accidentally aspirated into lungs can cause a severe inflammation of the lungs.

Potential chronic health effects :

Eye contact : None known.
Skin contact : Dermatitis, may defat the skin, allergic reactions.
Inhalation : Prolonged or repeated inhalation can cause coughing, shortness of breath, dizziness and intoxication, nausea and central nervous system depression.

Ingestion : None known.

4. FIRST AID MEASURES

- Eyes : Rinse immediately with water or saline solution 15 to 20 minutes, lifting upper and lower eyelids. Remove contact lenses. Get medical attention without delay.
- Skin : In case of direct contact, rinse with running water 15 to 20 minutes. Wash thoroughly with soap and water. Remove contaminated clothing and wash with soap and water. If irritation persists, obtain medical attention.
- Inhalation : Remove person to fresh air. In case of respiratory failure, give artificial respiration. In case of respiratory distress, obtain medical attention.
- Ingestion : In case of ingestion, obtain medical attention immediately. Do not induce vomiting, guard against aspiration into the lungs. Never give anything by mouth to an unconscious or convulsing person. In case of respiratory or cardiac arrest, start cardio-pulmonary resuscitation and obtain medical attention.

Note to physician: Main hazard following accidental ingestion is aspiration of the liquid into the lungs, producing chemical pneumonitis. Cardiac arrhythmias have been reported with solvent exposure. If more than 2.0 ml/kg has been ingested, vomiting should be induced with supervision. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before vomiting, gastric lavage with a cuffed endotracheal tube should be considered.

5. FIRE FIGHTING MEASURES

- Flash point : 42 C (Mineral spirits 64742-88-7)
- Auto-ignition temperature: 240 C (Mineral spirits 64742-88-7)
- Flammability limits – air (%): LEL: 1.0 UEL: 5.0 (Mineral spirits 64742-88-7)
- Extinguishing media : Carbon dioxide (CO₂), alcohol foam, dry chemical powder or water fog, according to the nature of the fire. Dry chemical powder or water can be used to cool containers. Do not use water except as a fog.
- Protective equipment : Fire fighters should wear full protective clothing, including self contained breathing equipment.
- Hazardous combustion materials : Carbon oxides, silicon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. Remove contaminated clothing. Shut off leaks if safe to do so. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or waterways using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location. Take precautionary measures against static discharge. Ensure electrical continuity by grounding all equipment.

- Small spill : For less than one drum, transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
- Large spill : For more than one drum, transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with

appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

7. HANDLING AND STORAGE

Handling : Flammable. Do not cut, drill, grind, weld or perform similar operations on or near containers. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. Hot surfaces may be sufficient to ignite liquid in the absence of sparks or flames. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapours are gone. Do not pressurize drum containers to empty them. Avoid breathing vapours and prolonged or repeated contact with skin. Launder contaminated clothing prior to reuse. Use good personal hygiene. Air-dry contaminated clothing in a well ventilated area before laundering.

Storage : Store in a cool, dry, well ventilated area, away from heat and ignition sources. Use explosion proof ventilation to prevent vapour accumulation.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering controls : Mechanical ventilation is recommended for all indoor situations to control fugitive emissions. Electrical and mechanical equipment should be explosion proof. For personnel entry into confined spaces, a proper procedure must be followed including ventilation and testing of tank atmosphere.

Personal protection equipment for routine handling :

Eye : Chemical safety goggles and /or full face shield to protect eyes and face, if product is handled such that it could be splashed into eyes.
Skin : In confined spaces or where the risk of skin exposure is much higher, impervious clothing should be worn.
Gloves : Impervious gloves, Viton gloves, polyvinyl alcohol gloves.
Inhalation : If exposure exceeds occupational exposure limits, use appropriate NIOSH-approved respirator. Use a NIOSH-approved chemical cartridge respirator with organic vapour cartridges or use a NIOSH-approved supplied-air respirator.

Personal protection equipment for spills :

Eye : Chemical safety goggles and /or full face shield to protect eyes.
Skin : In confined spaces or where the risk of skin exposure is much higher, impervious clothing should be worn.
Gloves : Impervious gloves, Viton gloves, polyvinyl alcohol gloves.
Inhalation : Use a NIOSH-approved chemical cartridge respirator with organic vapour cartridges or use a NIOSH-approved supplied-air respirator.

Note : These precautions are for room temperature handling. Use at elevated temperatures or aerosol spray applications may require added protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Viscous liquid.
Colour : Tan.
Odour : Solvent.
pH @ 1% : 7.87
Relative density (g/cm³) : 0.983
Boiling point : Not determined.
Freezing point : Not determined.

Vapour pressure : Not determined.
 Volatiles (weight) : Not determined.
 Solubility (water) : Not soluble.
 VOC (%) : Not determined.
 Viscosity (cps) : 2800, Brookfield.

10. STABILITY AND REACTIVITY

Chemical stability : Stable.
 Hazardous polymerization : None known.
 Conditions to avoid : Heat, sparks, open flames and other ignition sources.
 Materials to avoid : Strong oxidants, strong acids and alkalis.
 Dangerous decomposition products : Carbon oxides, silicon dioxide, formaldehyde.

11. TOXICOLOGICAL INFORMATION

Ingredient	CAS	Percentage	Exposure limits
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Potential acute health effects :

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 Skin contact : Not a primary skin irritant after exposure of short duration.
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 Ingestion : Liquid when accidentally aspirated into lungs can cause a severe inflammation of the lungs.

Potential chronic health effects :

Carcinogenic effects: None known.
 Mutagenic effects: None known.
 Teratogenic effects: None known.

12. ECOLOGICAL INFORMATION

Ingredient	CAS	Test	Species
Aliphatic petroleum distillates	64742-48-9	EL50 >1000 mg/l/48 hrs LL50 >1000 mg/l/96 hrs	Daphnia magna Fathead minnows

Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams or public waterways. Block off drains and ditches. Spill areas must be cleaned and restored

to original condition or to the satisfaction of authorities. Some components may be harmful to aquatic life.

13. DISPOSAL CONSIDERATIONS

Waste disposal method : Dispose according to municipal, provincial and federal regulations.
Contaminated packaging : According to municipal, provincial and federal regulations.

14. TRANSPORT INFORMATION

Regulatory Information	Shipping name	UN	Class	PG
TDG Classification	Flammable liquid, n.o.s. (Mineral spirits)	1993	3	III

15. REGULATORY INFORMATION

WHIMS : B2 Flammable liquid
D2B Toxic material with other effects

DSL : All components of this product are either on the Domestic Substance List (DSL), the Non-Domestic Substance List (NDSL) or exempt.

TSCA : U.S. TSCA Inventory Status : All components of this product are either on the Toxic Substances Control Act Inventory List or exempt.

16. OTHER INFORMATION

Prepared by : Auto-Chem Inc.

Date : Sept. 2015

Notice to reader :

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Auto-Chem makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Auto-Chem's control and therefore users are responsible to verify this data under their own operation conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.