# KORZITE COATINGS INC.

# SAFETY DATA SHEET

## SECTION 1: Identification of the product and of the company

**Product Identifier**
**Product Code**: 98T022

**Product Trade Name:** Isopropyl Alcohol

**Product Class:** Solvent

**Material Uses:** Thinner / Reducer

**Detail of the Manufacturer/Supplier**

Korzite Coatings Inc.
7134 Wellington Road 124
Guelph, N1H 6N3
519-821-1250

**Emergency Telephone Number for emergency Transportation information:**

| | |
|---|---|
| During business hours | 519 821 1250 |
| After business hours | 613 996 6666 |

## SECTION 2: Hazards Identification

Physical State: Liquid

Classification of the substance:

EXTREMELY FLAMMABLE LIQUID AND VAPOUR. FLAMMABLE. VAPOUR MAY CAUSE FLASH FIRE. HARMFUL IF INHALED OR SWALLOWED. CAUSES SEVERE EYE AND SKIN IRRITATION. CAUSES RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Label Elements: DANGER!

Emergency Overview: Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

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

Potential acute health effects:

Inhalation: Toxic by inhalation. Irritating to respiratory system.
Other effects of inhalation may include: anesthesia, blood effects, CNS effects, cough, dizziness, drowsiness, fatigue, headache, kidney damage, liver damage, nausea, weakness,

Ingestion: Harmful if swallowed.
Other effects of ingestion may include: abdominal pain, CNS effects, diarrhea, dizziness, drowsiness, fatigue, gastric disturbance, headache, high blood sugar, incoordination, kidney damage, liver damage, nausea, vomiting, weakness,

Skin: Harmful in contact with skin. Severely irritating to the skin.
Other effects of skin contact: dehydration, dermatitis, discoloration,
Effects due to absorption through skin may include: blood effects, CNS effects, depression, dizziness, drowsiness, fatigue, kidney damage, liver damage, weakness.

Eyes: Severely irritating to eyes. Risk of serious damage to eyes.
Other effects of eye contact may include: burning, eye damage, redness, swelling, tearing.

Potential chronic health effects:

**Carcinogenicity:** Not Applicable

**Mutagenicity:** No known significant effects or critical hazards.

**Teratogenicity:** No known significant effects or critical hazards.

**Target organs:** Contains material which may cause damage to the following organs: blood, kidneys, liver, skin, central nervous system (CNS)

**Medical conditions aggravated by over-exposure** pulmonary conditions, skin disorders, liver conditions, respiratory conditions,

NOTICE: Reports have associated repeated and prolonged OVEREXPOSURE to solvent with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this package may be harmful or fatal.

**See toxicological information (Section 11)**

## SECTION 3: Composition/Information on ingredients

| Hazardous Ingredient: | Approximate Concentration by weight | C.A.S. Number: |
|---|---|---|
| Isopropyl Alcohol | 90.0 - 100 % | 67-63-0 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## SECTION 4: First Aid Measures

**Protection of First –Aiders:**

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves

**Eye Contact:** Check and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Occasionally lifting the upper and lower eyelids. Get medical attention immediately if symptoms occur.

**Skin Contact**: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately if symptoms occur.

**Inhalation:** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately if symptoms occur.

**Ingestion:** Wash out mouth with water. If material has been swallowed and the person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately

## SECTION 5: Firefighting Measures

**Flammability of the product:**

Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

**Flash Point:** 12 C (54 F), Closed Cup

**Autoignition Temperature:** Not available
**Flammable Limit %:** **Lower:** 2.0 % **Upper**: 12.0 %

**Extinguishing media:**

**Suitable:** Use dry chemical, CO2, water spray (fog) or foam
**Not suitable:** Do not use water jet

**Special exposure hazards:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Carbon monoxide, carbon dioxide, and various hydrocarbons.

**Hazardous thermal Decomposition products:** Decomposition products may include the following materials: Smoke. Fumes. Incomplete combustion products. Oxides of carbon.

**Special Protective Equipment for fire-fighters:** Fire-fighters should wear appropriate equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode..
UNUSUAL FIRE HAZARDS: During emergency conditions, overexposure to products of combustion may cause a health hazard; symptoms may not be immediately apparent. Obtain medical attention.

**Special remarks on fire Hazard:** Not available

**Special remarks on Explosion hazard:** Not available

**Special exposure hazard:** Not available

## SECTION 6: Accidental release measure

**6.1 Personal precautions:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8)

**Environmental precautions:**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods for cleaning up:**

**Small spill:** Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed contractor.

**Large spill:** stop leak if without risk. Move containers from spill area. Approach from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g, sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

## SECTION 7: Handling and Storage

**Precautions for safe Handling:** Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Do not enter confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other source. Use explosion-proof electrical (ventilation, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring materials. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Conditions for safe storage:**

Store in accordance with local regulations. Store in approved area. Store in original container protected from direct sunlight in a dry and well-ventilated, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials, Keep container tightly closed and sealed unit ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store unlabeled containers. Use appropriate containment to avoid environmental contamination.

**SECTION 8: Exposure controls/personal protection**

**Engineering measures:** Use only with adequate ventilation. Use process enclosure, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas or vapor concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Hygiene measures:** Wash hands, forearms and face thoroughly after handling chemical products. Before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protection:** Selection of personal protective equipment (PPE) is to be established by the employer performing a PPE hazard assessment**.**

**Respiratory:** Use properly fitted respiratory protection 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.
If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

**Hands:** Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Eyes:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes or mists. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin:** Personal protective equipment for the body should be selected based on the task being performed and the risk involved and should be approved by a specialist before handing this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overall, boots and gloves.

**Other Protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task performed and the risks involved

**Control parameters**

**Occupational exposure limits:**

| Product/ingredient name | ACGIH TLV United States, 4/2014) | OSHA | Immediately dangerous to Life or Health - IDLH |
|---|---|---|---|
| Isopropyl Alcohol (CAS#: 67-63-0) | TWA: 200 ppm | Not available | Not available |

**Legends**

ACGIH – American Conference of Industrial Hygienists
TLV – Threshold Limit Value
TWA – Time weighted average
OSHA – Occupational Safety and Health Administration
STEL – Short Term Exposure Limit
PEL – Permissible Exposure Limit

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Colourless
**Odor:** Alcohol-like
**Physical state:** Liquid
**pH:** Not applicable
**Flash Point/Range** 12 C/54 F
**Flash Point Method:** Top closed cup (T.C.C)
**Boiling Point/Range:** 82 C/180 F degree Celsius
**Melting Point** -89 C/-128 F
**Freezing Point** Not available
**Flammability Limits in Air:** % by volume
**Lower:** 2.0
**Upper:** 12.0
**Specific Gravity:** 0.78 +/_ 0.1 @ 20 C
**Evaporation Rate:** 2.9
**Percent Volatile:** 100% by volume
**VOC Content:** 100%
**Viscosity:** Not available

## SECTION 10: STABILITY AND REACTIVITY

**Chemical Stability:** The product is stable, under normal conditions of storage and use.

**Hazardous Polymerization**: Will not undergo hazardous polymerization.

**Conditions to Avoid:** Keep away from open flames, hot surfaces and sources of ignition. Contamination.

**Incompatible Materials:** Strong oxidizing agents. Strong bases. Strong acids. Reducing agents.

**Hazardous Decomposition Products:** Material does not decompose at ambient temperatures.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

**Additional Information:** Toluene will attack some forms of plastic, rubber and coatings.

## SECTION 11: TOXICOLOGICAL INFORMATION

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Isopropyl Alcohol | LD50 Oral<br>LD50 Dermal<br>LC50 Inhalation | Rat<br>Rabbit<br>Rat | 5,500 mg/kg<br>>12,800 mg/kg<br>>10000 ppm | -<br>-<br>6 hours |

**Principle Routes of Exposure:**

**Inhalation:** Elevated temperatures or mechanical action may form vapors, mist or fumes which may be irritating to the eyes, nose, throat, or lungs.

The main effect of inhaling toluene vapor is depression of the central nervous system (CNS), with symptoms such as headache, dizziness and vomiting. Irritation of the nose and throat may also occur. High concentration may cause incoordination, loss of consciousness, respiratory failure and death. Reversible liver and kidney damage has been reported in cases of severe

Toluene exposure. Neurobehavioral effects such as impaired short term memory and reaction time and alterations in body balance have also been found in short term studies. Aspiration hazard! Small amounts aspirated into the lungs during ingestion or vomiting may cause lung injury, possibly leading to death.

Symptoms of aspiration into the lungs include coughing, shortness of breath, blush discolored skin, rapid breathing and heart rate. Chemical pneumonitis from aspiration may result in fever. Pulmonary edema or bleeding, drowsiness, confusion, coma and seizures may occur in more serious

cases. Symptoms may develop immediately or as late as 24 hours after the exposure, depending on how much chemical entered the lungs.

**Eye Contact:** Causes moderate eye irritation. Symptoms of exposure may include: a burning sensation, redness, swelling and blurred vision.

**Skin Contact:** Causes moderate skin irritation. Skin irritation signs and symptoms may include a burning sensation, redness, swelling and blisters. May be absorbed through the skin.

**Ingestion:** May be slightly toxic. Ingestion of large amounts of Toluene is likely to cause CNS effects such as dizziness, nausea and vomiting. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

**Additional information:** Long term exposure of toluene may cause nervous system effects with symptoms such as headaches, irritability, depression, insomnia, agitation, extreme tiredness, tremors, impaired concentration and short term memory. The blood platelet count may be reduced on exposure to Toluene which is reversible when exposure is stopped. Repeated contact can produce dermatitis (dryness and cracking). Chronic inhalation exposure to Toluene causes mid-frequency hearing loss in laboratory animals. Very high exposure (confined spaces/ abuse) to light hydrocarbons may result in abnormal heart rhythm (arrhythmias). Concurrent high stress levels and/or co-exposure to high levels of hydrocarbons (above occupational limits), and to heart –stimulating substances like epinephrine, nasal decongestants, asthma drugs, or cardiovascular drugs may initiate arrhythmias.

**Carcinogenicity** Not applicable

**Mutagenicity:** Not mutagenic

## SECTION 12: ECOLOGICAL INFORMATION

**Do not allow product or any runoff from fire control to enter storm or sanitary sewers, lakes, rivers, or public waterways.**
**Federal regulations and other agencies may require to be notified of a spill incident.**

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste disposal method:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products at all times comply with the requirements of environmental protection and waste disposal legislation and any

regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Avoid disposal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Disposal should be in accordance with applicable regional, national and local laws and regulations.

## SECTION 14: TRANSPORT INFORMATION

**Note:** Information contained in this section may vary from the actual shipping description depending on quantity in containers, mode of shipment and use of exemptions.

| Regulatory information | UN number | Proper shipping name | Classes | PG | Label | Additional information |
|---|---|---|---|---|---|---|
| DOT Classification | UN 1219 | Isopropanol | 3 | II | | |
| TDG Classification | UN 1219 | Isopropanol | 3 | II | | |

PG: Packing Group

## SECTION 15: REGULATORY INFORMATION

**Canada**

**WHMIS (Canada)**

Class B2: Flammable liquid
Class D2B: Material causing other toxic effects (Toxic)

**Canada Inventory** All components of this product are on the CEPA DSL inventory.

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations**

**United States**
**U.S. Federal regulations**
**United States inventory (TSCA 8b): All components are listed or exempted**

## SECTION 16: OTHER INFORMATION

**HMIS:**

| | |
|---|---|
| **Health** | 2 |
| **Flammability** | 3 |
| **Physical Hazards** | 0 |
| **Personal protection** | |

| **Legend HMIS/NFPA** | |
|---|---|
| **Severe** | 4 |
| **Serious** | 3 |
| **Moderate** | 2 |
| **Slight** | 1 |
| **Minimal** | 0 |

**Note: The customer is responsible for determining the PPE code for this material.**

**Prepared By:** Mary Guirguis - Korzite Coatings Inc.
Phone Number: 519-821-1250

**Revision Date:** **December 21, 2015**
**Revision Number:** **Not applicable**

**Important Note:**
The information in this safety data sheet is not intended to be exhaustive and is based on the present state of Korzite's knowledge and on current laws; any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Safety Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of Korzite's knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. A copy of this document should be requested and reviewed carefully.
The information contained in this safety data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data is current prior to using the product.