

MATERIAL SAFETY DATA SHEET

Flammability	Reactivity
Health	Personal Protection

SECTION – MATERIAL IDENTIFICATION AND USE

Material Name Isopropyl Alcohol 99 Anhyd
Manufacturer Crown Chemical Products Inc **Supplier's Name**
Street Address 6125 Netherhart Rd **Suppliers Address**
 Mississauga Ontario
 L5T 1G5
Emergency Tel# (905) 5640904
Chemical Formula Formula (CH3) 2CHOH **Chemical Family** Organic
Molecular Weight 60.10 **Material Use** Solvent

SECTION II – HARZODOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	%	C.A.S. Numbers	TLV	LD/50, Route, Species	LC/50, Route, Species
Isopropyl Alcohol	100	67 – 63 – 0	400 ppm TWA (ACGIH 1993-94)	>4720 MG/KG (Oral–Rat) >12.9 G/KG (DRM–RBT)	12000 ppm/8H (Rat)

SECTION III – PHYSICAL DATA FOR MATERIAL

Physical Liquid **Odour and Appearance** Mild Hydrocarbon odour, colourless, mobile liquid.
Odour Threshold 40 ppm **Vapour Pressure (MMHG)** >33 **Vapour Density (AIR=1)** 2.1
Specific Gravity 0.790 **Evaporation Rate** 1.44 **ph** N/AV
Freezing Point(°C) -86, -89 (C) **Solubility in Water (20°C)** Complete
Boiling Point 82 (C) , 83 (C) **Coefficient of Water/Oil Distribution** N/AV

SECTION IV – FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability (if yes, under which conditions:) Yes.
Means of Extinction Carbon Dioxide, Dry Chemical, Foam. Water fog.
Special Procedures Flammable. Use water spray to cool fire-exposed containers and structures. Do not enter confined fire space without adequate protective clothing and an approved positive pressure self-contained breathing apparatus.
Flashpoint (°C) and Method 14. (T.O.C) **UEL (% By Vol.)** 12.0 **LEL (% By Vol.)** 2.0
Auto Ignition Temp. (°C) 399 (C) **TDG Flammability Classification** 3
Hazardous Combustion Vapour forms an explosive mixture with air between upper and lower flammable limits.
Unusual Combustion Products Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat. Vapours may settle in low or confined areas, or travel a long distance to an ignition source and flash back explosively.
Explosion Data – Sensitivity to Chemical Impact N/AV **Rate of Burning** N/AV
Explosive Power N/AV **Sensitivity to Static Discharge** N/AV

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SECTION V – REACTIVITY DATA

Chemical Stability Yes.
Incompatibility to Other Substances Yes. Strong oxidizing agents. Acids. Aluminum at high temperatures.
Reactivity and Under What Conditions? Avoid excessive heat, open flames and all ignition sources.
Hazardous Decomposition Products Carbon Monoxide and Carbon Dioxide are produced on combustion.
Hazardous Polymerization Will not occur.

SECTION VI – TOXICOLOGICAL PROPERTIES OF PRODUCT

Route Of Entry Skin Absorption X Eye Contact X Inhalation Acute Inhalation Chronic Ingestion X Skin Contact

Effects Of Acute Exposure To Product: This product is irritating to the eye but is not a primary skin irritant after exposure of short duration. And is not a skin sensitizer. Data is insufficient to further classify according to WHMIS criteria. Although ingestion is unlikely, liquid would irritate upper digestive tract if swallowed. Ingestion may cause headache, dizziness, fatigue and central nervous system depression.

Effects Of Chronic Exposure To Product: Prolonged and repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis. Exposure to high vapour concentrations may cause eye and respiratory tract irritation, headache, dizziness, nausea, incoordination, drowsiness and loss of consciousness.

Medical Conditions Aggravated By Overexposure Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

Environmental Toxicity Information Do not allow product or run off from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial regulations require and federal regulation may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities. May be harmful to aquatic life. No food chain concentration potential. Biodegradability: Yes. Rapid volatilization.

Irritancy Of Product: Exposure Limits Of Product: See section 2

Sensitization To Product: None Synergistic Materials: None

Carcinogenicity Reproductive Effects Teratogenicity Mutagenicity
No known Systemic Effects

SECTION VII – PREVENTIVE MEASURES

Gloves Wear impervious gloves.

Respiratory If exposure exceeds occupational exposure limits, wear a Niosh – approved respirator. Use either an atmosphere – supplying respirator or an air-purifying respirator for organic vapours. Proper equipment for high concentrations includes an atmosphere supplied, positive pressure demand, self-contained or airline breathing apparatus.

Eye Chemical safety goggles.

Footwear Rubber safety boots.

Clothing Wear a rubber apron.

Engineering Controls General: highly recommended for all indoor situations to control fugitive emissions. Electrical and mechanical equipment should be explosion-proof. Concentrations in air should be maintained below the recommended threshold limit value if unprotected personnel are involved. Local: also recommended where mechanical ventilation is ineffective in controlling airborne concentrations below the recommended occupational exposure limit. Make-up air should always be supplied to balance air exhausted (either generally or locally).

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SECTION VII – PREVENTIVE MEASURES (CONTINUED)

- Leak And Spill Procedure** Issue warning 'flammable'. Eliminate all sources of ignition. Handling equipment must be grounded. Isolate hazard area and restrict access. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Dike and contain land spills; contain water spills by booming. Use water fog to knock down vapours; contain run-off. For large spills remove by mechanical means and place in containers. Absorb residue or small spills with absorbent material and remove to non-leaking containers for disposal. Recommended materials: clay or sand. Flush area with water to remove trace residue. Notify fire and environmental authorities.
- Storage Needs** Flammable. Store in a dry and well-ventilated area. Store in a cool area, away from all sources of heat and ignition. Aluminum containers are not recommended for storage.
- Handling Procedures and Equipment** Maintain a good personal hygiene. Avoid breathing vapours. Avoid prolonged or repeated skin contact. Do not cut, drill, grind, or weld on or near this container. Vapours may accumulate and travel to distant ignition sources and flashback. Use adequate ventilation. Empty product containers may contain product residue. Follow labelled warnings even after container is emptied. Hot surfaces may be sufficient to ignite liquid even in the absence of sparks or flames. Never use pressure to empty drums – container is not a pressure vessel. Can attack aluminums at elevated temperature.
- Waste Disposal** Disposal at a licensed waste disposal facility. Do not attempt to combust waste on-site. Incinerate at a licensed waste disposal site with approval of environmental authority.

Special Shipping Information N/AP

SECTION VII – FIRST AID MEASURES

- Skin** Start rinsing and remove contaminated clothing while rinsing. Wash skin with soap and water. If irritation persists, get medical attention.
- Eye** Flush eyes with large amounts of running water at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get immediate medical attention.
- Ingestion** Do not induce vomiting. Call a physician.
- Inhalation** Remove victim from further exposure and restore breathing, if required. Seek medical attention.

WHMIS B2, D2B
Classifications

SECTION IX – PREPARATION DATE OF M.S.D.S.

Additional Information/Comments Crown Chemical Products Inc. assumes no responsibility by its issuance of this information.

Sources Used

Prepared By: Crown Chemical Products Inc.

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