

MATERIAL SAFETY DATA SHEET

SECTION I - MATERIAL IDENTIFICATION AND USE

Material Name Identifier:

Copal Cavity Varnish

Supplier Name: Sterling Marking Products Inc. Webpage: <http://www.sterling.ca>
 Street Address: 349 Ridout St. N., P.O. Box 5055
 City and Province: London, Ontario Postal Code: N6A 5S4
 Telephone Numbers: (519) 434-5785, (800) 265-5957 Fax Number: (519) 434-9516, (800) 667-6600
 Emergency Telephone Number: Poison Control Centre _____

Material Use: **Denture marking kit – with scrub pads, lead pencils, and Identure Sealing Liquid**
 (This MSDS is for the Identure Sealing Liquid, only).

TDG Shipping Information:

FLAMMABLE LIQUID, N.O.S. (Isopropanol), UN1219

Class: 3 - Flammable Liquid

PG: II - Medium Danger

WHMIS Classification:

Class B, Division 2 - Flammable Liquids
 Class D, Division 2B - Skin/Eye Irritant

IATA Shipping (Air):

FLAMMABLE LIQUID, N.O.S. (Isopropanol)
Packaging Instruction for Limited Quantity: Y341
Maximum Net Quantity (per outer package): 1L
 Refer to Pkg. Inst. No. for inner packaging type and maximum quantity per inner package. DGR – 54th edition

SECTION II - HAZARDOUS INGREDIENTS

Component	CAS Registry	Toxicology	Concentration % (w/w)
Isopropyl Alcohol	67-63-0 / 200-661-7	TWA ACGIH TLV: 200 ppm; STEL 400 ppm	80-90
Gum Copal	9000-14-0 / 232-527-9	Not classified as dangerous	10-20

SECTION III - PHYSICAL DATA

Physical State: Liquid
 Specific Gravity: Not available
 Colour: Clear Yellowish
 Viscosity: Not available

Boiling Point (°C): 82.5
 Odour: Alcohol
 Solubility in Water (20 °C): Not soluble
 Flash Point (°C): 12

SECTION IV - FIRE AND EXPLOSION DATA

Flammability: Flammable

Flash Point (°C CC): 12

LEL (% vol) lowest value of components: 2.0%

UEL (% vol) highest value of components: 12.7%

Hazardous Combustion Products: Oxides of carbon, oxides of nitrogen, phosgene (extremely poisonous and corrosive gas), hydrochloric acid, and other organic combustion products.

Potential Hazards: **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames. Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapours are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapour explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated.

Means of Extinction of Small Fire: **CAUTION:** This product has a low flash point: Use of water spray when fighting fire may be inefficient. Small Fires: Dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use media suitable for surrounding fire. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

Special Fire-Fighting Procedures: Clear area of unprotected personnel. Firefighters should wear NIOSH-approved, self-contained breathing apparatus (SCBA). Use water spray to cool fire-exposed surfaces. Also, use water to flush spilled material away from source. Vapours are harmful; stay upwind of a fire to minimize breathing of vapours, gases, fumes, or decomposition products being generated.

Unusual Fire & Explosion Hazards: Containers exposed to intense heat from fire must be cooled to prevent vapour pressure build-up that may result in container rupture. Cool containers exposed directly to flames with large quantities of water as needed to prevent weakening of container itself. Never use a welding or cutting torch on or near container.

Empty Container Warning: "Empty" containers contain residues (liquid, solid, and/or vapour) that can be dangerous. **DO NOT** pressurize, cut, weld, braze, grind, drill, solder, or expose containers to heat, sparks, open flame. They may explode and cause injury and/or death. **DO NOT** attempt to clean drums. Residues are difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioned. Dispose of all containers in an environmentally safe way and in accordance with governmental regulations. For work on tasks, refer to OSHA regulations ANSIZ49.1 and other governmental and industrial references pertaining to cleaning, repairing, welding, or other operations.

SECTION V - REACTIVITY DATA

Stability: Stable

Incompatibility: Avoid strong oxidizing agents, strong acids and bases.

Hazardous Decomposition Products: Thermal decomposition may produce carbon monoxide and carbon dioxide.

SECTION VI - TOXICOLOGICAL PROPERTIES

Route of Entry: Eye, Skin, Inhalation, Ingestion

Effects of Acute Exposure:

Isopropyl alcohol: Oral rat LD50 5,045 mg/kg, Skin rabbit LD50 12,800 mg/kg

Eye: Vapors may cause eye irritation with redness, tearing and swelling.

Skin: Prolonged contact may cause irritation and drying of the skin.

Inhalation: Inhalation of vapors may cause respiratory tract irritation and central nervous system effects including headache, dizziness, drowsiness, narcosis and unconsciousness.

Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhea and other symptoms listed under inhalation.

Effects of Chronic Exposure:

Prolonged and/or repeated overexposure to isopropanol may cause damage to the kidneys, liver, and central nervous system based on animal data.

Irritancy: Hazardous by WHMIS criteria

Carcinogenicity: Isopropyl alcohol: There is inadequate evidence of carcinogenicity in humans and animals.

Reproductive Effects: Isopropyl alcohol: A 73 week chronic study found male reproductive effects at 2,500 and 5,000 ppm.

Teratogenicity: Not established

Mutagenicity: Isopropyl alcohol: In an in-vivo study, isopropanol did not induce micronuclei in bone marrow of mice. Studies conducted in mammalian cells in-vitro, did not induce sister chromatid exchanges or gene mutations.

SECTION VII - PREVENTATIVE MEASURES

Gloves: Solvent impermeable gloves are required for repeated or prolonged contact.

Eye Protection: Wear safety glasses meeting the specification of ANSI Z87.1 where no contact with the eye is anticipated.

Chemical safety goggles meeting the specifications of ANSI Z87.1 should be worn whenever there is a possibility of splashing or other contact with the eyes.

Respiratory Protection: Proper selection of respiratory protection depends upon many factors, including duration and level of exposure and conditions of use. In general, exposure to organic chemicals, such as those contained in this product, may not require the use of respiratory protection, if used in a well-ventilated area. In areas of restricted ventilation, a NIOSH approved organic vapour respirator may be required. Under certain conditions, such as spraying, a mechanical pre-filter may also be required. In confined areas, or in high exposure situations, a NIOSH/MSHA approved air-supplied respirator may be required. If the TLV's listed in Section II are exceeded, use a properly fitted NIOSH/MSHA approved respirator with an appropriate protection factor.

Use material only with adequate ventilation to prevent exceeding the recommended exposure limit or a build-up of explosive concentrations in the air. Use explosion proof equipment. No smoking or open lights. Air-dry contaminated clothing in a well ventilated area before laundering.

Other Protective Equipment: Safety shower and eye wash fountain in the immediate work area.

Engineering Controls: Use general dilution and local exhaust in sufficient volume, and pattern to keep concentrations of hazardous ingredients listed in Section II below the lowest exposure limit stated. Fumes emitted while baking this product must be properly vented.

Leak and Spill Procedure:

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Waste Disposal: Review federal, provincial and local government requirements prior to disposal. Use a licensed waste treatment facility or reclaimer.

Storage Requirements: Store in a tightly closed container. Store away from incompatible materials. Store in a cool, dry, well-ventilated area. Ensure storage area has adequate ventilation, and no source of open flame or sparks. Limit quantity of the material in storage. Ensure all bottles are properly labeled.

Special Precautions: Ground all equipment to prevent static discharge. Keep containers away from heat, sparks, and open flame. Wash thoroughly with soap and water after handling material.

SECTION VIII - FIRST AID

Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Eye: Immediately flush eyes with a directed stream of water for 15 minutes, while holding eyelids open. If irritation or redness develops or persists, get medical attention.

Skin: Flush affected areas with large amounts of water, remove contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation or redness develops or persists, get medical attention.

Inhalation: Remove victim to fresh air. If breathing difficulties develop, administer oxygen and get medical attention. If victim is not breathing, administer artificial respiration and get medical attention.

Ingestion: DO NOT INDUCE VOMITING. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs (Aspiration pneumonitis can be fatal). If victim conscious and alert, give victim lukewarm water. GET IMMEDIATE MEDICAL ATTENTION.

SECTION IX - PREPARATION AND ADDITIONAL INFORMATION

Prepared by: Sterling Marking Products Inc.
Quality Planning and Engineering Department
349 Ridout St., N.
London, Ontario N6A 5S4

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Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond the control of the supplier, it is assumed that user of this material has been fully trained according to the mandatory requirements of WHMIS. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (1-800-263-8276) or CSST in Montreal, Quebec (514-873-3990).