

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

PRODUCT IDENTIFIER:	Kelsan® Solid Lubricant (SL)
PRODUCT USE:	Solid lubricant with a low coefficient of friction.
SUPPLIER:	Kelsan Technologies Corp. 1140 West 15th Street, North Vancouver, British Columbia, Canada, V7P 1M9 Emergency telephone: (604) 986-4617, Telephone: (604) 984-6100, Facsimile: (604) 984-3419

SECTION 2 - COMPOSITION

This product does not meet the classification criteria for an OSHA hazardous substance in the United States, or a WHMIS controlled product in Canada, or a material regulated for supply under applicable European Union Commission Directives since this product qualifies as a manufactured article.

This document is formatted as a Material Safety Data Sheet for the benefit of users and may be utilised in an analogous fashion.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Low hazard product. Non-flammable. Very low toxicity.

EFFECTS OF SHORT-TERM (ACUTE) EXPOSURE:

INHALATION: Dust may cause minor respiratory tract irritation.

SKIN CONTACT: No effects are expected.

EYE CONTACT: Dust may cause transient irritation such as stinging, tearing, redness and swelling.

INGESTION: May cause gastrointestinal and mucous membrane irritation and central nervous system depression.

EFFECTS OF LONG-TERM (CHRONIC) EXPOSURE:

Some persons may experience sensitisation from repeated and/or prolonged skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None expected.

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SECTION 4 - FIRST AID MEASURES

INHALATION: Remove victim of extreme dust inhalation to fresh air. Obtain medical attention.

SKIN CONTACT: Rinse contaminated area with lukewarm soap and water. Obtain medical attention if irritation persists.

EYE CONTACT: Flush contaminated eye(s) with lukewarm, gently flowing water for at least 15 minutes while holding eyelids open. Take care not to contaminate unaffected eye. Obtain medical attention if irritation persists.

INGESTION: Never give anything by mouth if victim is unconscious, rapidly losing consciousness or convulsing. Rinse mouth thoroughly with cold water. DO NOT INDUCE VOMITING. Have victim drink several glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain immediate medical attention.

GENERAL COMMENTS: All first-aid procedures should be reviewed by a physician familiar with product and its conditions of use in the workplace.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT:	N/ap.	LOWER FLAMMABILITY LIMITS:	N/av.	SENSITIVITY TO MECHANICAL IMPACT:	Not sensitive
AUTOIGNITION TEMPERATURE:	N/av.	UPPER FLAMMABILITY LIMITS:	N/av.	SENSITIVITY TO STATIC DISCHARGE:	Not sensitive

EXTINGUISHING MEDIA: Carbon dioxide, dry powder or foam. Product is a fire retardant with 20 flame spread by ASTM E-84.

FIRE FIGHTING INSTRUCTIONS: Firefighters must use self-contained breathing apparatus.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, sulphur dioxide and various hydrocarbons.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD INDEX:

HEALTH: 1 - Causes irritation but only minor injury, **FLAMMABILITY:** 0 - Must be moderately heated or exposed to relatively high temperatures before ignition can occur. **REACTIVITY:** 0 - Normally stable, even when exposed to fire, does not react with water, **SPECIFIC HAZARDS:** None.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION: No special personal protection is required. The product is a formed solid.

ENVIRONMENTAL PRECAUTIONS: Prevent release into waterways and sewers.

REMEDATION MEASURES: Normal cleaning measures are adequate.

SECTION 7 - HANDLING AND STORAGE

HANDLING: No special requirements.

STORAGE: No special requirements.

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SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS: Normal dilution ventilation should maintain dust exposures below the exposure limit.

RESPIRATORY PROTECTION: No respiratory protection is warranted under normal use conditions. Respiratory protection may be warranted under conditions where much dust is generated.

EXPOSURE LIMITS: Recommend 10 mg/m³ TWA.

SKIN PROTECTION: Wear gloves and work clothes covering arms and legs.

EYE AND FACE PROTECTION: Not normally required.

OTHER: Eye-wash stations should be readily available where considerable dusts are generated.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Black, opaque solid.	MELTING POINT:	N/av.
ODOUR:	None.	BOILING POINT:	N/av.
pH:	Not applicable.	CRITICAL TEMPERATURE:	Not applicable.
VAPOUR PRESSURE:	Not available.	RELATIVE DENSITY:	2.15
SOLUBILITY:	Negligible solubility in water.	PARTITION COEFFICIENT: n-OCTANOL/WATER	Not available.
VAPOUR DENSITY:	>1	EVAPORATION RATE:	Not available.

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Normally stable. Product is non-volatile.

HAZARDOUS POLYMERIZATION: Will not undergo hazardous polymerisation.

INCOMPATIBILITY: Avoid contact with strong alkalis and strong mineral acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, various hydrocarbons.

SECTION 11 - TOXICOLOGICAL INFORMATION

ROUTE(S) OF ENTRY: Inhalation (dust), Eye contact (dust), Skin contact.	
ACUTE EXPOSURE: No specific animal data is available for this product.	
CHRONIC EXPOSURE: No specific animal data is available for this product.	
IRRITANCY: Not expected.	SENSITIZATION: See section 3.
MUTAGENICITY: Not reported.	REPRODUCTIVE TOXICITY: Not reported.
TERATOGENICITY: Not reported.	CARCINOGENICITY: Not reported.
POTENTIAL FOR ACCUMULATION: Not expected to accumulate.	SYNERGISTIC PRODUCTS: No significant effects expected.

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SECTION 12 - ECOLOGICAL INFORMATION

No specific data is available on this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Place used and contaminated material and packagings into suitable containers and dispose of as controlled waste. Review and follow all local, state/provincial, and national regulations.

SECTION 14 - TRANSPORT INFORMATION

ICAO TECHNICAL INSTRUCTIONS, IMDG CODE: Not regulated.

ADR/RID: Not regulated.

US HAZARDOUS MATERIALS REGULATIONS: Not regulated.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: Not regulated.

SECTION 15 - REGULATORY INFORMATION

EUROPEAN UNION:

CLASSIFICATION: Not regulated for supply.

UNITED STATES - FEDERAL REGULATIONS:

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are listed in the inventory.

OSHA, 29 CFR 1910, Subpart Z: Does not meet criteria for hazardous substance.

CERCLA, 40 CFR 302: No components are listed.

SARA 302, 40 CFR 355: No components are listed.

SARA 313, 40 CFR 372: No components are listed.

SARA 311/312, 40 CFR 370: Delayed (Chronic) Health.

CANADIAN FEDERAL REGULATIONS:

CEPA, DOMESTIC SUBSTANCES LIST: All ingredients are listed.

WHMIS CLASSIFICATION: Not a Controlled Product.

SECTION 16 - OTHER INFORMATION

PREPARATION DATE: July 13, 1998 (Reviewed December 21, 2001)

PREPARED BY: Kel-Ex Agencies Ltd., from information supplied by Kelsan Technologies Corp., Tel: (604) 986-4617

DECLARATION: This Material Safety Data Sheet meets or exceeds all the requirements of the Canadian Controlled Product Regulations, the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200 and current European Union Commission Directives.

REVISIONS: One (1)