

MEK Cleaning Solution**SECTION 1: IDENTIFICATION**

Product Identifier:	MEK Cleaning Solution
Other Means of Identification:	
Part Number:	Part Number(s): MEK-32
Recommended Use:	Cleaning Solution
Restrictions on Use:	None known
Supplier Identifier:	Sterling Marking Products Inc., 1147 Gainsborough Road, London, ON Canada N6A 5L5 1-800-265-5957, 519-434-5785
Emergency Phone Number:	CANUTEC (613) 966-6666, Cellular *666

SECTION 2: HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the U.S. Hazardous Communication Standard (HCS 2012)

Class B, Division 2 – Flammable Liquids Liquids

Class D, Division 2B - Skin/Eye Irritant



Signal Word: Danger

Hazard Statements:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

Precautionary Statements

P210 Keep away from Heat, Open Flames, Sparks. _ No Smoking

P233 Keep container tightly closed

P240 Ground/bond container and receiving equipment

P242 Use only non-sparking tools

P243 Take precautionary measures against static discharge

P271 Use only outdoors or in a well-ventilated area.

Wear protective gloves and eye protection

Wash hands and skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapours/spray.

In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Dispose of contents/container in accordance with local regulations.

Supplemental label information

Repeated exposure may cause skin dryness or cracking.

If in eyes, flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur consult a physician, preferably an ophthalmologist.

If ingested, there is no specific antidote. Do not induce vomiting. Seek prompt medical attention.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Percentage (%)	Other Identifiers
Diprotium oxide	7732-18-5	<=5%	None available
Butanone	78-93-3	40 – 90%	None available
Ethyl (S)-2-hydroxypropionate, ethyl L-Lactate, ethyl-(S)-lactate	687-47-8	<=5%%	None available
Surfactants	Proprietary	<=5%	None available

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.

This product contains organic solvents.

SECTION 4: FIRST AID MEASURES
General information.

NOTE! Keep affected person away from heat, sparks and flames!

Inhalation:

Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion:

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! DO NOT INDUCE VOMITING! Get medical attention immediately!

Skin contact:

Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact:

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Immediately transport to hospital or eye specialist.

Most important symptoms and effects, both acute and delayed.
General information:

The severity of the symptoms described will vary dependent of the concentration and the length of exposure.

Inhalation:

Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion:

May cause nausea, headache, dizziness and intoxication.

Skin contact:

Prolonged contact may cause redness, irritation and dry skin.

Eye contact:

May cause severe irritation to eyes.

Indication of any immediate medical attention and special treatment needed:

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

Notes to Physician: No specific antidote. Treatment based on sound judgement of physician and individual reactions of patient. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

SECTION 5: FIRE-FIGHTING MEASURES**Extinguishing Media.****Suitable Extinguishing Media:**

Water fog or fine spray, carbon dioxide, dry chemical, foam. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function but much less effectively.

Unsuitable Extinguishing Media:

Do not use direct water stream, which will spread fire.

Specific Hazards arising from the Product:

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards:

Take precautionary measures against static discharges.

Specific Hazards:

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂)

Hazardous Decomposition/Combustion Materials (under fire conditions):

The smoke may contain unidentified toxic and/or irritating compounds. Carbon monoxide. Carbon dioxide.

Special Protective Equipment:

Fire fighters should wear full protective clothing including self-contained breathing equipment.

Special Fire Fighting Procedures:

Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

Use water to keep fire exposed containers cool and disperse vapours. Move container from fire area if it can be done without risk.

SECTION 6: ACCIDENTAL RELEASE MEASURES**Personal Precautionary Measures:**

Wear appropriate protective equipment.

Environmental Precautionary Measures:

Prevent entry into sewers or streams, dike if needed.

Methods and material for containment and cleaning up:

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Clean-up personnel should use respiratory and/or liquid contact protection.

Runoff or release to sewer, waterway or ground is forbidden.

Small Spillages: Collect with absorbent, non-combustible material into suitable containers.

Large Spillages: Absorb in vermiculite or dry sand and dispose of at a licensed hazardous waste collection point.

Inform Authorities if large amounts are involved.

SECTION 7. HANDLING AND STORAGE**Precautions for Safe Handling:**

Flammable. Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Avoid breathing vapour. Keep the containers closed when not in use. Use with adequate ventilation. Never use air pressure for transferring product. No smoking or open flame in storage, use or handling areas. Ensure proper electrical grounding procedures are in place. Use non-sparking tools. Containers, even those that have been emptied, will retain product residue and vapour

and should be handled as if they were full until they have been cleaned. This product is a poor conductor of electricity and can become electrostatically charged during handling and use (for example: during mixing, filtering or pumping). If this charge reaches a sufficiently high level, static discharges or sparks capable of causing ignition might occur. Risk of vapour concentration on the floor and in low-lying areas.

Conditions for Safe Storage:

Store in a cool, dry, well-ventilated area, away from heat and ignition sources. Use explosion-proof ventilation to prevent vapour accumulation. Keep containers tightly closed. Store in original container. Store in accordance with good industrial practice.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Control Parameters

Chemical Name	CAS Number	TWA	STEL	Remarks
Diprotium oxide	7732-18-5	Not applicable		None available
Butanone	78-93-3	200 ppm	300 ppm	URT irr; CNS & PNS impair
Ethyl (S)-2-hydroxypropionate, ethyl L-Lactate, ethyl-(S)-lactate	687-47-8	Not applicable		None available
Surfactants	Proprietary	Not applicable		None available

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.

Appropriate Engineering Controls:

Local exhaust ventilation as necessary to maintain exposure to within acceptable limits.

Personal Protective Equipment

Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. For concentrations exceeding the recommended exposure limit, use NIOSH-approved air purifying respirator.

Gloves: Use gloves chemically resistant to this material. **NOTICE:** the selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/specifications provided by the glove supplier.

Skin Protection: The selection of personal protective equipment varies depending upon conditions of use. Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance. Impervious clothing. Impervious boots.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Environmental Exposure Controls: Keep container tightly sealed when not in use.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work station location.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Colour: Lightly coloured

Odor: Ketonic

pH: Not available.

Boiling Point: 79.6°C to 154°C

Solubility: Slightly Soluble in water
Flash Point (°C): -9°C
Auto-Ignition Temperature: Not Available
Other: Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:

Not reactive.

Chemical Stability:

Stable.

Hazardous Polymerization:

Not Available.

Conditions to Avoid:

Product can oxidize at elevated temperatures. Avoid contact with strong oxidizers. Avoid contact with heat, sparks, open flame and static discharge.

Materials to Avoid:

Oxidizing materials. Strong acids or bases.

Hazardous Decomposition Products:

Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide.

Additional Information:

No additional remarks.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects.

Toxicological information: No information available.

Acute toxicity:

Chemical Name	CAS Number	Toxicological Information
Butanone	78-93-3	LD ₅₀ oral rat, 2737 mg/kg LD ₅₀ dermal rabbit, 6480 mg/kg LC ₅₀ inhalation rat, 34 mg/l/4h LC ₅₀ inhalation rat, 11300 ppm/4h
Ethyl (S)-2-hydroxypropionate, ethyl L-Lactate, ethyl-(S)-lactate	687-47-8	LD ₅₀ oral rat, >5000 mg/kg LD ₅₀ dermal rabbit, >5000 mg/kg

Germ cell mutagenicity:

Genotoxicity - In Vitro:

Not determined.

Carcinogenicity:

Carcinogenicity:

Not determined.

Reproductive Toxicity:

Reproductive Toxicity – Fertility:

Not determined.

Specific target organ toxicity - single exposure:

STOT - Single exposure:

May cause dizziness or drowsiness

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure:

No information available.

Aspiration hazard:

Not anticipated to present an aspiration hazard based on chemical structure.

Inhalation:

Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion:

May cause nausea, headache, dizziness and intoxication.

Skin contact:

Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

Eye contact:

Irritating to eyes.

Route of entry:

Ingestion. Skin absorption. Inhalation.

Medical Symptoms:**NERVOUS SYSTEM.**

Drowsiness, dizziness, disorientation, vertigo. Mild intoxication (incl. fatigue, lassitude, irritability, headache, nausea).

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity:**

No data on possible environmental effects have been found.

Toxicity:**Acute Fish Toxicity:**

Avoid discharge to the aquatic environment.

Persistence and degradability:**Degradability:**

There are no data on the degradability of this product.

Bioaccumulative potential:**Bioaccumulative potential:**

No data available on bioaccumulation.

Mobility in soil:**Mobility:**

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

Other adverse effects:

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS**General information:**

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Waste treatment methods:

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION**IATA Shipping (Air):**

Alcohols, Flammable, Toxic, N.O.S.

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.



TDG Shipping Information:

Alcohols, Flammable, Toxic, N.O.S., UN1210

Class: 3 - Flammable Liquid

(6.1) – Poisonous Substances

PG: II - Medium Danger

WHMIS Classification:

Class B, Division 2 – Flammable Liquids Liquids

Class D, Division 2B - Skin/Eye Irritant

SECTION 15: REGULATORY INFORMATION

Chemical Safety Assessment

No chemical safety assessment has been carried out.

WHMIS Hazardous Class:

Class B, Division 2 – Flammable Liquids Liquids

Class D, Division 2B - Skin/Eye Irritant

SECTION 16: OTHER INFORMATION

Additional Information: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

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End of SDS.