

SAFETY DATA SHEET

SECTION 1 IDENTIFICATION

PRODUCT

Product Name: MOBILCUT 140
Product Description: Base Oil and Additives
SDS Number: 21578
Product Code: 2015703010J0
Intended Use: Water-miscible cutting fluid

COMPANY IDENTIFICATION

Supplier:	Imperial Oil Downstream P.O. Box 2480, Station M Calgary, ALBERTA T2P 3M9 Canada
24 Hour Emergency Telephone	1-866-232-9563
Transportation Emergency Phone Number	1-866-232-9563
Product Technical Information	1-800-268-3183
Supplier General Contact	1-800-567-3776

SECTION 2 HAZARD IDENTIFICATION

This material is considered to be hazardous according to regulatory guidelines.

This product has been classified in accordance with hazard criteria of the Hazardous Products Regulations (HPR) SOR/2015-17 and the SDS contains all the information required by the HPR SOR/2015-17.

CLASSIFICATION:

Skin Irritation — Category 2
Serious Eye Damage — Category 1

LABEL:

Pictogram:



Signal Word: Danger

Hazard Statements:

H315: Causes skin irritation. H318: Causes serious eye damage.

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Precautionary Statements:

P264: Wash skin thoroughly after handling. P273: Avoid release to the environment. P280: Wear protective gloves and eye protection/face protection. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTER/doctor/physician. P362 + P364: Take off contaminated clothing and wash it before reuse. P501: Dispose of contents and container in accordance with local regulations.

Contains: 3,3'-METHYLENEBIS (5-METHYLOXAZOLIDINE); CARBAMIC ACID, BUTYL-, 3-iodo-2-propynyl ester; fatty acids, tall-oil, reaction products with ethanolamine

Other hazard information:

Health Hazards Not Otherwise Classified: None as defined under HPR SOR/2015-17.

Physical Hazards Not Otherwise Classified: None as defined under HPR SOR/2015-17.

PHYSICAL / CHEMICAL HAZARDS

No significant hazards.

HEALTH HAZARDS

High-pressure injection under skin may cause serious damage. Mists may be irritating to the eyes, nose, throat, and lungs.

ENVIRONMENTAL HAZARDS

Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

NFPA Hazard ID:	Health: 3	Flammability: 1	Reactivity: 0
HMIS Hazard ID:	Health: 3	Flammability: 1	Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

Hazardous Substance(s) or Complex Substance(s) in Hazardous product

Name	CAS#	Concentration*	GHS Hazard Codes
2-PROPANOL, 1-(2-BUTOXY-1-METHYLETHOXY)-,	29911-28-2	1 - < 5%	H302
3,3'-METHYLENEBIS (5-METHYLOXAZOLIDINE)	66204-44-2	1 - < 5%	H302, H312, H314(1B), H402
ALCOHOLS C11-C14-ISO-, C13-RICH	68526-86-3	1 - < 5%	H305, H315, H400(M factor 1), H411
BORIC ACID, COMPOUND WITH 2-AMINOETHANOL	26038-87-9	1 - < 5%	H315, H319(2A)
CARBAMIC ACID, BUTYL-, 3-iodo-2-propynyl ester	55406-53-6	0.1 - < 1%	H302, H317, H331, H318, H372, H400(M factor 10),

			H410(M factor 1)
ETHANOL, 2,2,2-NITRILOTRIS-	102-71-6	1 - < 5%	None
ETHANOL, 2-(2-BUTOXYETHOXY)-	112-34-5	1 - < 5%	H319(2A)
FATTY ACIDS, TALL-OIL COMPOUNDS WITH DIISOPROPANOLAMINE	68953-28-6	1 - < 5%	H315, H319(2A)
FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH ETHANOLAMINE	68440-25-5	1 - < 5%	H315, H318
FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH TRIETHANOLAMINE	67784-78-5	1 - < 5%	H315, H319(2A)

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The exact ingredient concentration and/or specific chemical identity have been withheld as Confidential Business Information. HMIRA RN# 11143 Filing date 03-09-2017

SECTION 4 FIRST-AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

EYE CONTACT

Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes.

INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

PRE-EXISTING MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE

Pre-existing conditions which may be aggravated by exposure include emphysema and asthma.

SECTION 5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Inappropriate Extinguishing Media: Straight streams of water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering

streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Pressurised mists may form a flammable mixture. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Aldehydes, Incomplete combustion products, Nitrogen oxides, Oxides of carbon, Smoke, Fume, Sulphur oxides

FLAMMABILITY PROPERTIES

Flash Point [Method]: >100°C (212°F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: >150°C (302°F)

SECTION 6

ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do so without risk. Do not touch or walk through spilled material. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so without risk. Seek advice of a specialist. This product emulsifies, disperses or is miscible in water.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7

HANDLING AND STORAGE

HANDLING

Avoid breathing mists or vapour. Avoid contact with skin. Avoid contact with eyes. Small metal particles from machining may cause abrasion of the skin and may predispose to dermatitis. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or earthing procedures. However, bonding and earthing may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Static Accumulator: This material is a static accumulator.

STORAGE

The type of container used to store the material may affect static accumulation and dissipation. Do not store in open or unlabelled containers.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Substance Name	Form	Limit/Standard			Note	Source
ALCOHOLS C11-C14-ISO-, C13-RICH		TWA	50 ppm			Supplier
ETHANOL, 2,2,2-NITRILOTRIS-		TWA	5 mg/m ³			ACGIH
ETHANOL, 2-(2-BUTOXYETHOXY)-	Inhalable fraction and vapour	TWA	10 ppm			ACGIH

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:
Eye washes and showers for emergency use.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Particulate air-purifying respirator approved for dust or oil mist is recommended.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended.

Eye Protection: Chemical goggles and face shield are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

Chemical/oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practise good housekeeping.

ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
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Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

GENERAL INFORMATION

Physical State: Liquid
Colour: Amber
Odour: Characteristic
Odour Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15.6 °C): 0.95
Flammability (Solid, Gas): N/A
Flash Point [Method]: >100°C (212°F) [ASTM D-92]
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: >150°C (302°F)
Boiling Point / Range: > 100°C (212°F) [Estimated]
Decomposition Temperature: N/D
Vapour Density (Air = 1): > 1 at 101 kPa [Estimated]
Vapour Pressure: < 0.013 kPa (0.1 mm Hg) at 20°C [Estimated]
Evaporation Rate (n-butyl acetate = 1): < 1

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pH: 9
Log Pow (n-Octanol/Water Partition Coefficient): N/D
Solubility in Water: Emulsifies
Viscosity: [N/D at 40°C]
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/A
Pour Point: < 0°C (32°F)

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Heat/ Freezing temperatures., High energy sources of ignition.

MATERIALS TO AVOID: Strong Acids, Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data for material.	Elevated temperatures or mechanical action may form vapours, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin Corrosion/Irritation: No end point data for material.	Irritating to the skin. Based on assessment of the components.
Eye	
Serious Eye Damage/Irritation: No end point data for material.	Severely irritating, and may seriously damage eye tissue. Based on assessment of the components.
Sensitisation	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. Based on assessment of the components.

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Aspiration: Data available.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: No end point data for material.	Not expected to be a germ cell mutagen. Based on assessment of the components.
Carcinogenicity: No end point data for material.	Not expected to cause cancer. Based on assessment of the components.
Reproductive Toxicity: No end point data for material.	Not expected to be a reproductive toxicant.
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children. Based on assessment of the components.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components.

TOXICITY FOR SUBSTANCES

NAME	ACUTE TOXICITY
CARBAMIC ACID, BUTYL-, 3-iodo-2-propynyl ester	Inhalation Lethality: 4 hour(s) LC50 0.68 mg/l (Aerosol) (Rat); Oral Lethality: LD 50 1056 mg/kg (Rat)

OTHER INFORMATION

For the product itself:

Component concentrations in this formulation would not be expected to cause skin sensitization, based on tests of the components, this formulation, or similar formulations.

Oil Mist (highly refined oils): Animals exposed to high concentrations of mist developed oil retention, inflammation, and oil granulomas in the respiratory tract. Oils exposed to high temperatures, cracking conditions, or mixing with tramp / used oils may introduce polycyclic aromatic compounds or microbial contaminants that could result in cancer or severe respiratory hazards.

Contains:

Alkanolamines: Repeated overexposure to alkanolamines caused liver and kidney damage in laboratory animals.

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitising in test animals. GLYCOL ETHERS:

Some glycol ethers cause adverse effects in animals that include the reproductive system, offspring, blood, kidney and liver.

CMR Status: None.

Chemical Name	CAS Number	List Citations
ETHANOL, 2,2,2-NITRILOTRIS-	102-71-6	4
ETHANOL, 2-(2-BUTOXYETHOXY)-	112-34-5	4

--REGULATORY LISTS SEARCHED--

1 = IARC 1
2 = IARC 2A

3 = IARC 2B
4 = ACGIH ALL

5 = ACGIH A1
6 = ACGIH A2

SECTION 12

ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

MOBILITY

Components -- Expected to remain in water or migrate through soil.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Components -- Expected to be inherently biodegradable

BIOACCUMULATION POTENTIAL

Components -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

OTHER ECOLOGICAL INFORMATION

VOC: 75.5 G/L [ASTM E1868-10]

SECTION 13

DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.



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SECTION 14	TRANSPORT INFORMATION
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LAND (TDG): Not Regulated for Land Transport

LAND (DOT): Not Regulated for Land Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

Marine Pollutant: No

AIR (IATA): Not Regulated for Air Transport

SECTION 15	REGULATORY INFORMATION
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CEPA: Contains one or more components that are on the NDSL and have been notified under CEPA.

Listed or exempt from listing/notification on the following chemical inventories (May contain substance(s) subject to notification to the EPA Active TSCA inventory prior to import to USA): IECSC, TCSI, TSCA

Special Cases:

Inventory	Status
NDSL	Restrictions Apply

The Following Ingredients are Cited on the Lists Below:

Chemical Name	CAS Number	List Citations
3,3'-METHYLENEBIS (5-METHYLOXAZOLIDINE)	66204-44-2	2
POLYETHYLENE	9002-88-4	6

--REGULATORY LISTS SEARCHED--

1 = TSCA 4

3 = TSCA 5e

5 = TSCA 12b

2 = TSCA 5a2

4 = TSCA 6

6 = NPRI

SECTION 16	OTHER INFORMATION
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N/D = Not determined, N/A = Not applicable

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):

H302: Harmful if swallowed; Acute Tox Oral, Cat 4

H305: May be harmful if swallowed and enters airways; Aspiration, Cat 2

H312: Harmful in contact with skin; Acute Tox Dermal, Cat 4

H314(1B): Causes severe skin burns and eye damage; Skin Corr/Irritation, Cat 1B

H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H317: May cause allergic skin reaction; Skin Sensitization, Cat 1

H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1

H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A

H331: Toxic if inhaled; Acute Tox Inh, Cat 3

H372: Causes damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 1

H400: Very toxic to aquatic life; Acute Env Tox, Cat 1

H402: Harmful to aquatic life; Acute Env Tox, Cat 3

H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1

H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Updates made in accordance with implementation of GHS requirements.

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