



SAFETY DATA SHEET

Revision Date 09-01-2019

Version 4

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code(s)	41023600-M
Product Name	CUT-MAX 236
Recommended Use	Metalworking fluid
Uses advised against	Any other purpose.

Manufacturer, Importer, Supplier

Houghton International Inc. Madison & Van Buren Aves. Valley Forge, PA 19482 Telephone: 610-666-4000 FAX: 610-666-1376 Website: www.houghtonintl.com Customer Service: 888-459-9844	Houghton Canada 915 Meyerside Drive Mississauga ON L5T 1R8
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Emergency telephone number

United States of America/Canada : 3E Company - 1-866-519-4752 (Code 333938)

SECTION 2: HAZARDS IDENTIFICATION

Classification

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Workplace Hazardous Materials Information System (WHMIS) 2015

Not classified

Label elements

Precautionary Statements

Precautionary Statements - Response

Hazards not otherwise classified (HNOC)

Health	Not Applicable.
Physical	Not Applicable.

Other Information

Prolonged skin contact may defat the skin and produce dermatitis
Repeated exposure may cause skin dryness or cracking

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture. Health hazard information is based on its ingredients.

Chemical name	CAS No	Weight-%
Highly refined base oil (Viscosity >20.5 cSt @40°C)	-	60% - 80%
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	-	10% - 30%

The exact percentage (concentration) of composition has been withheld as a trade secret.

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346. See Section 15 for additional information on base oils.

SECTION 4: FIRST AID MEASURES**Description of first-aid measures**

General advice	If symptoms persist, call a physician.
Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms and effects, both acute and delayed

Main Symptoms None

Indication of immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES**Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment; Use CO₂, dry chemical, or foam, Water spray or fog, Cool containers / tanks with water spray

Extinguishing media which shall not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire

Special hazards arising from the substance or mixture**Special Hazard**

In the event of fire and/or explosion do not breathe fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

This material creates a fire hazard because it floats on water. Thermal decomposition can lead to release of irritating gases and vapors. Water runoff can cause environmental damage.

Hazardous decomposition products

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide

Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Advice for non-emergency personnel

Material can create slippery conditions.

Advice for emergency responders For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

Reference to other sections

See Section 8/12/13 for additional information

SECTION 7: HANDLING AND STORAGE**Precautions for safe handling**

Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition.

Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

Recommended Shelf Life

Shelf life 12 months.

Incompatible materials

Strong oxidizing agents, Strong acids, Strong bases

Specific end uses

Specific use(s) Metalworking fluid

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Legend:

(s) - Skin; TWA - Time-Weighted Average; STEL - Short Term Exposure Limit; Ceiling - Ceiling Value; TLV® - Threshold Limit Value; PEL (Permissible Exposure Limit); IDLH (immediately dangerous to life and health); WEEL (Workplace Environmental Exposure Level Guides)

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA WEEL
Highly refined base oil (Viscosity >20.5 cSt @40°C)	5 mg/m ³ (mist)	5 mg/m ³ (mist)		
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	5 mg/m ³ (mist)	5 mg/m ³ (mist)		

ACGIH - American Conference of Governmental Industrial Hygienists
 OSHA - Occupational Safety and Health Administration of the US Department of Labor

Hydrocarbon solvent vapor mixtures which do not have substance specific occupational exposure limits may be evaluated by the Reciprocal Calculation Procedure (RCP) which assigns a recommended occupational exposure limit based on the mass composition and hydrocarbon group guidance values (GGVs). Applicable recommended occupational exposure limits are shown in the table below.

Chemical name	RCP OEL	Manufacturer
Distillates (petroleum), hydrotreated middle 64742-46-7	RCP: TWA 1200 mg/m ³ 143ppm	
Distillates (petroleum), hydrotreated light 64742-47-8	RCP: TWA 1200 mg/m ³ 182ppm	
Naphtha (petroleum), hydrotreated heavy 64742-48-9	RCP: TWA 1000 mg/m ³	
C12-C14 isoalkanes 68551-19-9	RCP: TWA 1200 mg/m ³	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP C9-C15 aliphatics: 600mg/m ³	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	TWA: 600 mg/m ³	
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics NOT AVAILABLE	RCP C9-C15 aliphatics: 600mg/m ³	
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	TWA: 150ppm TWA: 1200 mg/m ³	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics NOT AVAILABLE	TWA: 171 ppm TWA: 1200 mg/m ³	
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics NOT AVAILABLE	RCP C9-C15 aliphatics: 600mg/m ³	
Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	TWA: 165 ppm TWA: 1200 mg/m ³	
Hydrocarbons, C12-C16, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP: TWA 1200 mg/m ³ 182ppm	
Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0.03% aromatics NOT AVAILABLE	RCP: TWA 600 mg/m ³	
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP: TWA 600 mg/m ³	
Hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics,	RCP: TWA 1200 mg/m ³ 182ppm	CEFIC-HSPA: 1200 mg/m ³

<2% aromatics NOT AVAILABLE		
Hydrocarbons, C13-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics NOT AVAILABLE	RCP: TWA 600 mg/m ³	CEPIC-HSPA: 1200 mg/m ³

Exposure controls**Engineering Measures**

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hygiene measures Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	liquid	Appearance	clear brown
Odor	sulfurous	Odor threshold	Not Determined

Property	Values	Remarks
pH	Not applicable	
Melting point / freezing point	Not Determined	
Boiling point / boiling range	Not Determined	
Flash point	160 °C / 320 °F	Open cup
Evaporation rate	< 1	(BuAc = 1)
Flammability (solid, gas)	Not Determined	
Flammability Limit in Air		
Upper flammability limit:	Not Determined	
Lower flammability limit:	Not Determined	
Vapor pressure	Not Determined	
Vapor density	Not Determined	
Relative density	0.92	@ 15.5°C
Solubility(ies)	Insoluble in water	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	> 28 cSt @ 40 °C	
Explosive properties	Not applicable	
Oxidizing Properties	Not applicable	

Other Information

Viscosity, kinematic (100°C)	Not Determined	
Pour Point	Not Determined	
VOC Content (ASTM E-1868-10)	91 g/L	ASTM E 1868-10
VOC content	Not Determined	

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None under normal use conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

None under normal use conditions

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

There is no data available for this product.

Inhalation

Based on available data, the classification criteria are not met

Eye contact

Based on available data, the classification criteria are not met

Skin contact

Based on available data, the classification criteria are not met

Ingestion

Based on available data, the classification criteria are not met

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Highly refined base oil (Viscosity >20.5 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	

Information on toxicological effects**Symptoms**

Prolonged skin contact may defat the skin and produce dermatitis.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met

Sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

Persistence and degradability The product is not readily biodegradable, but it can be degraded by micro-organisms, it is regarded as being inherently biodegradable.

Bioaccumulation No information available

Mobility The product is insoluble and floats on water. Is not likely mobile in the environment due its low water solubility.

Other adverse effects No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

DOT Not Regulated

TDG Not Regulated

IATA

UN/ID no	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.
Hazard Class	9
Packing Group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKANES, CHLORO), 9, III

IMDG

UN/ID no	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.
Hazard Class	9
Packing Group	III
EmS-No	F-A, S-F

Vessel Stowage Location Code	A
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKANES, CHLORO), 9, III, Marine pollutant

SECTION 15: REGULATORY INFORMATION

International Inventories

Inventory information may be utilizing alternative CAS#s or exemptions beyond those stated within this document For further information, please contact: ProductStewardship@houghtonintl.com

TSCA	Complies
DSL	Complies
AICS	Complies
PICCS	Complies
KECL	Complies
IECSC	Complies
ENCS	Complies
TCSI	Complies
NZIoC	Does not Comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
AICS - Australian Inventory of Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
ENCS - Japan Existing and New Chemical Substances
TCSI - Taiwan National Existing Chemical Inventory
NZIoC - New Zealand Inventory of Chemicals

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

- No EPCRA 311/312 hazards

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this regulation, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

SCAQMD Rule 1144

The sale or distribution in the SCAQM District of California for metal working fluids or direct-contact lubricants is allowed if EITHER the VOC of the product itself OR the VOC of the diluted product at the point of use is less than the following limits: (1) 75 g VOC/L for metal forming, metal removal, metal treating; (2) 50 g VOC/L for metal protection, direct-contact lubricant. The VOC of this product as sold is: 91 g/L gVOC/L (ASTM E-1868-10)

California Proposition 65

This product does not contain any Proposition 65 chemicals.

International Regulations**Ozone-depleting substances (ODS)**

Not applicable

Persistent Organic Pollutants

Not applicable

Chemicals Subject to Prior Informed Consent (PIC)

Not applicable

Other Information

The highly refined base oil (Viscosity >20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical name	CAS No
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated	101316-72-7
Lubricating oils (petroleum), used, noncatalytically refined	101316-73-8
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5
Residual oils (petroleum), solvent deasphalted	64741-95-3
Distillates (petroleum), solvent-refined heavy naphthenic	64741-96-4
Distillates (petroleum), solvent-refined light naphthenic	64741-97-5
Residual oils (petroleum), solvent-refined	64742-01-4
Extracts (petroleum), residual oil solvent	64742-10-5
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9
Residual oils (petroleum), hydrotreated	64742-57-0
Lubricating oils (petroleum), hydrotreated spent	64742-58-1
Residual oils (petroleum), solvent-dewaxed	64742-62-7
Distillates (petroleum), solvent-dewaxed heavy, paraffinic	64742-65-0
Paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	72623-85-9
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0
Lubricating oils (petroleum), C20-C50, hydrotreated neutral oil-based	72623-87-1
Lubricating oils	74869-22-0
Paraffin oils	8012-95-1
White mineral oil (petroleum)	8042-47-5
C18-C50 branched, cyclic and linear hydrocarbons – Distillates	848301-69-9

The highly refined, low viscosity base oil (Viscosity <7 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical name	CAS No
Distillates (petroleum), hydrotreated middle	64742-46-7
Hydrocarbons, C13-C23, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics	64742-46-7
Distillates (petroleum), hydrotreated light	64742-47-8

Naphtha (petroleum), hydrotreated heavy	64742-48-9
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9
C12-C14 isoalkanes	68551-19-9
White mineral oil (petroleum)	8042-47-5
C18-C50 branched, cyclic and linear hydrocarbons – Distillates	848301-69-9
Alkanes, C14-16	90622-46-1
Alkanes, C12-26-branched and linear	90622-53-0
Alkanes, C11-15-iso-	90622-58-5
Alkanes, C16-20-iso-	90622-59-6
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	NOT AVAILABLE
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C11-C14, n-alkanes, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C14-C18, n-alkanes, cyclics, aromatics (2-30%)	NOT AVAILABLE
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C12-C16, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C16, isoalkanes, cyclics, < 2% aromatics	NOT AVAILABLE
Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	NOT AVAILABLE
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics	NOT AVAILABLE
Hydrocarbons, C14-C17, n-alkanes, <2% aromatics	NOT AVAILABLE

SECTION 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

STOT SE - Specific target organ systemic toxicity (Single exposure)
 STOT RE - Specific target organ systemic toxicity (repeated exposure)
 VOC - Volatile organic compounds

Revision Date 09-01-2019

Revision Note Company Logo

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet