



# METACUT 101-3

Revision Date: June 2015

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## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT

Product Name: METACUT 101-3

Product Description: Base Oil and Additives

Intended Use: Metal processing fluid

#### COMPANY IDENTIFICATION

Supplier:

Varouh Oil, Inc.

Emergency Contact: 800-424-9300 / CHEMTREC

SDS/website: [www.varouhoil.com](http://www.varouhoil.com)

### 2. HAZARDS IDENTIFICATION

SIGNAL WORD: WARNING



#### HAZARD STATEMENTS

Injection under the skin can cause severe injury. Most damage occurs in the first few hours. Initial symptoms may be minimal.

#### PRECAUTIONARY STATEMENTS

Avoid contact with eyes, skin, and clothing. MAY BE HARMFUL IF SWALLOWED. DO NOT INDUCE VOMITING.

If in eyes, Rinse cautiously with water for several minutes. If you feel unwell, seek medical attention. Handling:

Always wash hands with thoroughly with soap and water.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials

HAZARD NOT OTHERWISE CLASSIFIED (HNOC): None as defined under 29 CFR 1910.1200.

PHYSICAL / CHEMICAL HAZARDS: No significant hazards.

HEALTH HAZARDS: High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

ENVIRONMENTAL HAZARDS: No significant hazards.

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.

3. COMPOSITION 1 INFORMATION ON INGREDIENTS

This material is defined as a mixture.

Hazardous Substance(s) or Complex Substance(s) required for disclosure.

Name	CAS#	Concentration*	GHS Hazard Codes
POLY(OXY(METHYL-1,2-ETHANEDIYL)), ALPHAHYDRO-OMEGA-HYDROXY- ESTERSWITH SUCCINIC ANHYDRIDE POLYISOBUTENYL DERIVATIVES	71820-32-1		H413
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7		H304
ISOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	64742-65-0		H304

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. 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. If irritation occurs, get medical assistance.

INGESTION

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

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical, or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

## FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters 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: Pressurized mists may form a flammable mixture.

Hazardous Combustion Products: Aldehydes, Incomplete combustion products, Smoke, Fume, Sulfur oxides, Oxides of carbon.

## FLAMMABILITY PROPERTIES

Flash Point [Method] : >176<sup>o</sup>C (349<sup>o</sup>F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL•. 7.0 Autoignition

Temperature: NID

## 6. ACCIDENTAL RELEASE MEASURES

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

### PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for firefighting 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.

For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self-Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

### SPILL MANAGEMENT

Land Spill: Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

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

**HANDLING**

Avoid breathing mists or vapors. 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 ground procedures. However, bonding and grounds 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 container choice, for example storage vessel, may affect static accumulation and dissipation. Do not store in open or unlabeled containers.

**8. EXPOSURE CONTROLS 1 PERSONAL PROTECTION**

**EXPOSURE LMT VALUES**

Exposure limits/standards Note: Exposure limits are not additive)

Substance Name	Form	Limit/Standard			NOTE	Source
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	Inhalable fraction.	TWA	5 mg/m3			ACGIH
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	Mist.	TWA	5 mg/m3			ACGIH
SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	Mist.	TWA	5 mg/m3		NIA	OSHAZI
SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE			2000 m Im3	500 ppm		OSHA ZI
SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	Mist.	TWA	5 mg/m3			ACGIH

Exposure limits/standards for materials that can be formed when handling this product: When mists/aerosols can occur, the following is recommended: 5 mg/m<sup>3</sup> - OSHA PEL.

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

No biological limits allocated.

## ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

## 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 / 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/vapor 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:

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended. Chemical type goggles should be worn during misting operations.

**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:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**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. Practice 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Color: Brown

Odor: Characteristic

Odor Threshold: NID

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 °C): 0.9

Flammability (Solid, Gas): NIA

Flash Point [Method] : >176°C (349 °F) [ASTM D-921

Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0

Autoignition Temperature: NID Boiling Point/ Range: > 316°C (600°F)

Decomposition Temperature: NID

Vapor Density (Air = 1): > 2 at 101 kPa

Vapor Pressure: < 0.013 kPa (0.1 mm Hg) at 20

°C Evaporation Rate (n-butyl acetate = 1): NID

pH: NIA

Log Pow (n-Octanol/Water Partition Coefficient): NID

Solubility in Water: Negligible

Viscosity: >42.1 cSt (42.1 mm<sup>2</sup>/sec) at 40 °C | >6.8 cSt (6.8 mm<sup>2</sup>/sec) at 100°C ASTM D 445 Oxidizing Properties: See Hazards Identification Section

OTHER INFORMATION

Freezing Point: NID

Melting Point: N/A

Pour Point: 0 °C (32°F) ASTM 097

DMSO Extract (mineral oil only), IP-346: < 3 %wt.

10. STABILITY AND REACTIVITY

REACTIVITY: See sub-sections below.

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: strong oxidizers

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

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Hazard Class	Conclusion   Remarks
Inhalation	
Acute Toxicity: No end point data for material. Irritation: No end point data for material.	Minimally Toxic. Based on assessment of the components. material. Negligible hazard at ambient/normal handling temperatures.
Ingestion	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components. material.
Skin	
Acute Toxicity: No end point data for material. Skin Corrosion/irritation: No end point data for material. assessment of the components.	Minimally Toxic. Based on assessment of the components. material. Negligible irritation to skin at ambient temperatures. Based on for
Serious Eye Damage/irritation: No end point data for material. of the components.	May cause mild, short-lasting discomfort to eyes. Based on assessment data of the components.
Sensitization	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material. components.	Not expected to be a skin sensitizer. Based on assessment of the
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. of the components.	Not expected to be a germ cell mutagen. Based on assessment data for
Carcinogenicity: No end point data for components.	Not expected to cause cancer. Based on assessment of the material.
Reproductive Toxicity: No end point data assessment of the components.	Not expected to be a reproductive toxicant. Based on for material.
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children. Specific
Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure. material.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or for material.
repeated exposure. Based on assessment of the components.	

**OTHER INFORMATION**

For the product itself:

Repeated and/or prolonged exposure may cause irritation to the skin, eyes, or respiratory tract.

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:

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 sensitizing in test animals.

Chlorinated waxes (long chain greater or equal to C-18): Not carcinogenic in animal feeding studies. High oral doses

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resulted in liver and kidney damage and changes in thyroid gland and blood. Did not cause mutations in vitro. No evidence of reproductive/developmental effects in animal studies.

Petroleum wax: Not carcinogenic in lifetime animal skin painting or oral feeding studies. Did not cause mutations in vitro. High oral doses in one rat strain (F-344) resulted in microscopic inflammatory changes (microgranulomas) in liver, spleen, and lymph nodes, some increased organ weights, inflammation of the cardiac mitral valve, and accumulation of saturated mineral hydrocarbons in certain tissues. Non-sensitizing in animal tests and human subjects.

The following ingredients are cited on the lists below: None.

-REGULATORY LISTS SEARCHED- 1

= NTP CARC 3 = IARC 1 5 = IARC 2B

2 = NTP SUS 4 = IARC 2A 6 = OSHA CARC

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

ECOTOXICITY

Material - Not expected to be harmful to aquatic organisms.

MOBILITY

Base oil component - Low solubility and floats and is expected to migrate from water to the land.  
Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Base oil component - Expected to be inherently biodegradable



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## BIOACCUMULATION POTENTIAL

Base oil component — Has the potential to bio accumulate, however metabolism or physical properties may reduce the bio concentration or limit bioavailability.

## OTHER ECOLOGICAL INFORMATION

VOC: 4.2G/L [ASTME1868-101

### 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

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Pan 261 D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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.

### 14. TRANSPORT INFORMATION

LAND (DOT): Not Regulated for Land Transport

LAND (TDG): Not Regulated for Land Transport

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

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Marine Pollutant: No

AIR (IATA): Not Regulated for Air Transport Revised:

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15. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: This material is not considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, ENCS, IECSC, KECI, PICCS, TSCA

EPCRA SECTION 302: This material contains no extremely hazardous substances.

SARA (3111312) REPORTABLE HAZARD CATEGORIES: None

SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
PARAFFIN WAXES AND HYDROCARBON WAXES, CHLORINATED	63449-39-8	19

-REGULATORY LISTS SEARCHED-

1 =	6 = TSCA5a2	11 = CA P65 REPRO	16 = MN RTK
ACGIHALL	7 = TSCA5e	12 = CARTK	17 = NJ RTK 18 = PA
2 = ACGIHAI	8 = TSCA 6	13 = ILRTK	RTK
3 = ACGIHA2	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
4 = OSHA Z	10 = CAP65CARC	15 = MI 293	
5 = TSCA 4			

REPRO=Reproductive

Code key:

CARC=Carcinogen;

16. OTHER INFORMATION

NID = Not determined, N/A = Not applicable

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THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS: Updates made in accordance with implementation of GHS requirements.

The information and recommendations contained herein are, to the best of Varouh Oil's knowledge and belief, accurate and reliable as of the date issued. You can contact Varouh Oil to ensure that this document is the most current available from Varouh Oil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to ensure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law.