



# SAFETY DATA SHEET

Revision Date 12/04/2015

REVISION NUMBER: 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product name** COMBAT

### Other means of identification

**Product code** 112336

**UN/ID No.** 1993

**Synonyms** NONE

### Recommended use of the chemical and restrictions on use

**Recommended Use** Cleaner/Degreaser.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Rochester Midland Corporation  
155 Paragon Drive  
Rochester, New York 14624 USA

#### **Importer**

Rochester Midland Canada Corporation  
5353 John Lucas Drive  
Suite 103  
Burlington, ON L7L 6G5  
Canada

### Emergency telephone number

#### **EMERGENCY TELEPHONE**

INFOTRAC: 1-800-535-5053

OUTSIDE U.S.: +1-352-323-3500

CANUTEC: 613-996-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is considered hazardous by the WHMIS 2015 Hazardous Products Regulation.

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Flammable liquids	Category 3
Corrosive to metals	Category 1

### Label elements

#### **Emergency Overview**

**DANGER**

#### **Hazard statements**

Causes severe skin burns and eye damage

May cause an allergic skin reaction

Flammable liquid and vapor

May be corrosive to metals



**Appearance** Clear, orange liquid. **Physical state** Liquid **Odor** Orange

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Contaminated work clothing should not be allowed out of the workplace  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ventilating/lighting/equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep only in original container

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting  
 In case of fire: Use CO2, dry chemical, or foam for extinction  
 Absorb spillage to prevent material damage

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep cool  
 Store in corrosive resistant container

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

No information available

**Other Information**

- Toxic to aquatic life with long lasting effects.
- Toxic to aquatic life.

**Unknown Acute Toxicity** 8.8% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

PRODUCT COMPOSITION	CAS No.	%	TRADE SECRET
Diethylene glycol butyl ether	112-34-5	6.5	
d-Limonene	5989-27-5	4	

#### 4. FIRST AID MEASURES

##### First aid measures

<b>General advice</b>	Immediately call a POISON CENTER or doctor/physician.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
<b>Skin contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** May cause allergic skin reaction.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Water fog, carbon dioxide, foam, dry chemical.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** NONE.

**Sensitivity to Static Discharge** NONE.

##### Protective equipment and precautions for firefighters

Cool exposed containers with water spray. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate affected area. Wear adequate personal protective equipment, see Section 8, Exposure Controls/Personal Protection.

##### Environmental precautions

**Environmental precautions** Keep out of drains, sewers, streams, or other bodies of water. See Section 12 for additional ecological information.

##### Methods and material for containment and cleaning up

**Methods for containment** Dike to contain. Pick up with absorbant material. Put in suitable container for disposal.

**Methods for cleaning up** Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use only in well-ventilated areas.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Do not store near heat, sparks or flame. DO NOT pressurize, weld, or heat containers. Empty containers may retain product residue, follow SDS/label precautions even after container is emptied. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Acids. Strong oxidents, such as nitric acid, or hypochlorites.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH IDLH
Diethylene glycol butyl ether 112-34-5	TWA: 10 ppm inhalable fraction and vapor	NA	-

#### Appropriate engineering controls

**ENGINEERING CONTROLS** Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Safety glasses are recommended to minimize eye contact.

**Skin and body protection** Chemical resistant gloves are recommended to minimize skin contact. It is the responsibility of the end user of this product to determine level of PPE required that is consistent with safe use of this product.

**RESPIRATORY PROTECTION** Use approved NIOSH respiratory protection if TLV/PEL exceeded or if over exposure is likely.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Orange
<b>Appearance</b>	Clear, orange liquid.	<b>Odor threshold</b>	No information available
<b>Color</b>	Orange		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	12.25	+/- 0.25
Melting point/freezing point	No information available	
Boiling point / boiling range	100 °C / 212 °F	
Flash point	54 °C / 129 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		

<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific gravity</b>	1.02 - 1.03
<b>Water solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>VOC (EPA METH.24) (G/L):</b>	41
<b>Density</b>	8.53 lbs/gal (1.02 kg/l)
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****REACTIVITY**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**CONDITIONS TO AVOID**

Avoid sources of ignition. Extremes of temperature and direct sunlight.

**Incompatible materials**

Acids. Strong oxidents, such as nitric acid, or hypochlorites.

**Hazardous Decomposition Products**Incomplete combustion produces: Fumes. Smoke. Carbon dioxide (CO<sub>2</sub>). Carbon Monoxide.**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Product Information</b>	Causes severe skin burns and eye damage.
<b>Inhalation</b>	Causes burns.
<b>Eye contact</b>	Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin contact</b>	Causes burns. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
<b>Ingestion</b>	Causes burns.

PRODUCT COMPOSITION	Oral LD50	Dermal LD50	Inhalation LC50
Diethylene glycol butyl ether 112-34-5	= 3384 mg/kg ( Rat )	= 2700 mg/kg ( Rabbit )	-
d-Limonene 5989-27-5	= 4400 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	-

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** May cause sensitization by skin contact.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

PRODUCT COMPOSITION	ACGIH	IARC	NTP	OSHA
d-Limonene 5989-27-5	-	Group 3	-	-

**Reproductive Toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 8.8% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 18320 mg/kg

**ATEmix (dermal)** 31186 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

11.1% of the mixture consists of component(s) of unknown hazards to the aquatic environment

PRODUCT COMPOSITION	Algae/aquatic plants	Fish	Crustacea
Diethylene glycol butyl ether 112-34-5	100: 96 h Desmodesmus subspicatus mg/L EC50	1300: 96 h Lepomis macrochirus mg/L LC50 static	100: 48 h Daphnia magna mg/L EC50
d-Limonene 5989-27-5	-	0.619 - 0.796: 96 h Pimephales promelas mg/L LC50 flow-through 35: 96 h Oncorhynchus mykiss mg/L LC50	-

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**14. TRANSPORT INFORMATION**

**DEPT. OF TRANSPORTATION**

**UN/ID No.** 1993  
**Proper shipping name** FLAMMABLE LIQUID, N.O.S. (D-Limonene, Glycol Ethers)  
**Hazard Class** 3  
**Packing Group** III  
**Description** 5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY.

**TDG**

**UN/ID No.** 1993  
**Proper shipping name** FLAMMABLE LIQUID, N.O.S. (D-Limonene, Glycol Ethers)  
**Hazard Class** 3  
**Packing Group** III  
**Description** 5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY.

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

PRODUCT COMPOSITION	SARA 313 - Threshold Values %
Diethylene glycol butyl ether - 112-34-5	1.0

**SARA 311/312 Hazard Categories**

**ACUTE HEALTH HAZARD** YES  
**CHRONIC HEALTH HAZARD** YES  
**FIRE HAZARD** YES  
**Sudden release of pressure hazard** No  
**REACTIVE HAZARD** YES

**CWA (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**

This material, as supplied, does not contain any substances regulated as hazardous substances under the 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

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

PRODUCT COMPOSITION	NJRTK:	MARTK:	PARTK:
Diethylene glycol butyl ether 112-34-5			Listed

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

**NFPA**

Health hazards 1

Flammability 2

Instability 0

Physical and Chemical Properties -

**HMIS**

Health hazards 1

Flammability 2

Physical hazards 0

Personal protection B

Revision Date 12/04/2015

Revision Note

**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 SDS \*\*\*