



**SAFETY DATA SHEET**  
According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083927

**MULTIS COMPLEX ET 2**

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

**1. IDENTIFICATION**Product identifier

Product name MULTIS COMPLEX ET 2

Other means of identification

Product Code(s) 083927

Number 83C  
Substance/mixture MixtureRecommended use of the chemical and restrictions on use

Identified uses Lithium Grease.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheetSupplier Address TOTAL Specialties USA Inc  
1201 Louisiana Street, Suite 1800  
Houston, TX 77002  
Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

E-mail Address USRMLIN-info@total.com

Emergency telephone numberCompany Phone Number +1 (908) 862-9300  
Emergency telephone CHEMTREC: +1 800 424 9300 (24h)**2. HAZARDS IDENTIFICATION**Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)



SDS # : 083927

## MULTIS COMPLEX ET 2

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

### Unknown Acute Toxicity

No information available

### Hazards not otherwise classified (HNOC)

- None known

### Other information

- Contaminated surfaces will be extremely slippery
- Should not be released into the environment

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). The product contains no substances which at their given concentration, are considered to be hazardous to health.

### Additional information

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

## 4. FIRST AID MEASURES

### First aid measures for different exposure routes

<b>General advice</b>	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
<b>Eye contact</b>	Rinse immediately with plenty of water and seek medical advice.
<b>Skin contact</b>	Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse. In the event of a high pressure injection injury, worker should obtain immediate medical assistance. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
<b>Inhalation</b>	Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

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

<b>Skin contact</b>	May cause slight irritation.
<b>Eye contact</b>	May cause slight irritation.
<b>Inhalation</b>	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.



SDS # : 083927

## MULTIS COMPLEX ET 2

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

<b>Ingestion</b>	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Symptoms</b>	Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

<b><u>Suitable Extinguishing Media</u></b>	Water spray or fog. Dry chemical. Foam. Carbon dioxide (CO <sub>2</sub> ).
<b><u>Unsuitable Extinguishing Media</u></b>	Do not use a solid water stream as it may scatter and spread fire.
<b><u>Special Hazard</u></b>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.
<b><u>Explosion Data</u></b>	
<b><u>Sensitivity to Mechanical Impact</u></b>	None.
<b><u>Sensitivity to Static Discharge</u></b>	None.
<b><u>Protective Equipment and Precautions for Firefighters</u></b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>General Information</b>	Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Contaminated surfaces will be extremely slippery. Ensure adequate ventilation. Full encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
<b>Other information</b>	See Section 12 for additional information.

### Environmental precautions

<b>General Information</b>	Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses. See Section 12 for additional Ecological Information.
----------------------------	--

### Methods and materials for containment and cleaning up



SDS # : 083927

## MULTIS COMPLEX ET 2

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

### Methods for cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Powdered material may form explosive dust-air mixtures. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### Advice on safe handling

When using, do not eat, drink or smoke. For personal protection see section 8. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Use only in well-ventilated areas.

#### Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

### Conditions for safe storage, including any incompatibilities

#### Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep in a banded area. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture. Keep in properly labeled containers.

#### Materials to Avoid

Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

Mineral oil mist:  
USA: OSHA (PEL) TWA 5 mg/m<sup>3</sup>, NIOSH (REL) TWA 5 mg/m<sup>3</sup>, STEL 10 mg/m<sup>3</sup>, ACGIH (TLV) TWA 5 mg/m<sup>3</sup> (highly refined).

### Exposure controls



SDS # : 083927

## MULTIS COMPLEX ET 2

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

**Engineering Measures** Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

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

**General Information** If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

**Eye/Face Protection** If splashes are likely to occur, wear: Safety glasses with side-shields.

**Skin and body protection** Wear suitable protective clothing. Protective shoes or boots.

**Hand Protection** Protective gloves.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures** Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

Color	red
Physical State @20°C	solid
Odor	Slight Hydrocarbon-like
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range		Not applicable	
Flash point		No information available	
Evaporation rate		No information available	
Flammability Limits in Air		No information available	



SDS # : 083927

**MULTIS COMPLEX ET 2**

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

upper	-	No information available	
Lower	-	No information available	
Vapor Pressure	< 0.13 kPa @ 25 °C		
Vapor density	< 1	(Air = 1)	
Relative density	<= 1	@ 15 °C	
Density	<= 1000 kg/m <sup>3</sup>	@ 15 °C	
Water solubility		Insoluble	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, kinematic	160		ASTM D 445
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
<b>Other information</b>			
Freezing Point		No information available	
Drop point	278 °C		ASTM D 2265

**10. STABILITY AND REACTIVITY**

<b>Reactivity</b>	None under normal processing.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to Avoid</b>	Extremes of temperature and direct sunlight. Heat, flames and sparks. Take precautionary measures against static discharges.
<b>Incompatible Materials</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

**11. TOXICOLOGICAL INFORMATION****Acute toxicity****Information on likely routes of exposure****Product Information**

<b>Skin contact</b>	May cause slight irritation.
<b>Eye contact</b>	May cause slight irritation.



SDS # : 083927

## MULTIS COMPLEX ET 2

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

<b>Inhalation</b>	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
<b>Ingestion</b>	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### Numerical measures of toxicity - Product Information

#### Information on toxicological effects

**Symptoms** Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

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

**Sensitization** Not classified as a sensitizer.  
**Carcinogenicity** This product is not classified carcinogenic.

**Mutagenicity** This product is not classified as mutagenic.  
**Reproductive toxicity** This product does not present any known or suspected reproductive hazards.  
**Aspiration Hazard** No known effect based on information supplied.

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

##### **Acute aquatic toxicity - Product Information**

No information available

##### **Acute aquatic toxicity - Component Information**

No information available

##### **Chronic aquatic toxicity - Product Information**

No experimental data available

##### **Chronic aquatic toxicity - Component Information**

No information available

**Effects on terrestrial organisms** No experimental data available .

#### Persistence and degradability



SDS # : 083927

## MULTIS COMPLEX ET 2

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

**General Information** Not readily biodegradable.

### Bioaccumulative potential

**Product Information** No information available.

**logPow** No information available

**Component Information** No information available.

### Mobility

**Soil** Adsorbs on soil

### Other adverse effects

**General Information** No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment

**Waste Disposal Methods** Dispose of in accordance with local regulations. Should not be released into the environment.

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

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**ICAO/IATA** Not regulated

**IMDG/IMO** Not regulated

**ADR/RID** Not regulated

**ADN** Not regulated

## 15. REGULATORY INFORMATION





SDS # : 083927

## MULTIS COMPLEX ET 2

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

### International Inventories

All the substances contained in this product are listed or exempted from listing in the following inventories:

U.S.A. (TSCA)  
 Canada (DSL/NDL)  
 China (IECSC)  
 Korea (KECL)  
 New Zealand (NZIoC)  
 Australia (AICS)  
 Philippines (PICCS)

### 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

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

#### 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).

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPS) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

#### 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.

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

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

No information available

## 16. OTHER INFORMATION



SDS # : 083927

**MULTIS COMPLEX ET 2**

Date of the previous version: not applicable

Revision Date: 2015-05-06

Version 1

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Physical and chemical hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 1	<b>Physical Hazard</b> 0	<b>Personal protection</b> X

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

**Revision Date:** 2015-05-06  
**Revision Note** No information available  
**Abbreviations, acronyms**

**Legend**

Section 8  
 ACGIH - American Conference of Governmental Industrial Hygienists  
 OSHA - Occupational Safety and Health Administration  
 NIOSH - National Institute for Occupational Safety and Health  
 TLV - Threshold Limit Values  
 PEL - Permissible Exposure Limits  
 IDHL - Immediately Dangerous to Life or Health concentrations  
 TWA - Time Weight Average  
 STEL - Short Term Exposure Limits  
 S\* - Skin notation  
 TSCA - Toxic Substance Control Act

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 the safety data sheet