

SDS # : 30870 **MULTIS EP 3**

Issuing date: 2015-12-22

Revision Date: 2018-07-16

Version 2

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name **MULTIS EP 3**
Number 642
Substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against 1.3.**Details of the supplier of the safety data sheet**

Identified uses lubricating grease.

Supplier

TOTAL OIL ASIA PACIFIC PTE LTD
331 North Bridge Road #23-01
Odeon Towers Singapore
188720
Tel: +65 6879 2200
Fax: +65 6879 2203

Importer

Oil Intel Limited
56 Whakatu Road, Whakatu Hastings 4172

NEW ZEALAND

Phone: +64 (06) 871 53 25

Fax: +64 (06) 870 48 90 **For****further information, please contact:**

Contact Point HSE
Email Address ms.ap-sds@total.com

1.4. Emergency telephone number

New Zealand Poisons Information Centre: 0800 764 766 New Zealand: +64 9801 0034.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture**Classification**

This product is not classified as hazardous according to Singapore Standard SS 586 on the Hazard Communication for Hazardous Chemicals and Dangerous Goods. **Label elements**

This product is not classified as hazardous according to Singapore Standard SS 586 on the Hazard Communication for Hazardous Chemicals and Dangerous Goods.

Other hazards which do not result in classification

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.
Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | EC-No | Weight % |
|---|------------|-----------|----------|
| Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts | 68457-79-4 | 270-608-0 | <2.5 |

4. FIRST AID MEASURES

4.1. Description of first-aid measures**General advice**

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids.

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| | |
|---------------------|---|
| Skin contact | Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse. |
| Inhalation | Move to fresh air. |
| Ingestion | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. |

4.2. Most important symptoms and effects, both acute and delayed

Skin contact Not classified. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.

Eye contact Not classified. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.

Inhalation Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**5.1. Extinguishing media**

Suitable Extinguishing Media Carbon dioxide (CO₂). ABC powder. Foam. Water spray or fog.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special Hazard 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.

5.3. Advice for fire-fighters

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

Other information Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

6.2. Environmental precautions

General Information Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. 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). Collect free product with suitable mechanical means. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Personal Protective Equipment See Section 8 for more detail.

Waste treatment See section 13.

7. HANDLING AND STORAGE**7.1. Precautions for safe handling**

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

Prevention of fire and explosion Take precautionary measures against static discharges. Ground/bond containers, tanks and transfer/receiving equipment.

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. Wash hands before breaks and immediately after handling the 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.



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7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage Keep away from food, drink and animal feedingstuffs. Keep in a banded area. Keep **conditions** container tightly closed. 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.

Materials to Avoid Strong oxidizing agents.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

Mineral oil mist:

USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined).

Legend

See section 16

8.2. Exposure controls

Occupational Exposure Controls

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.

Personal Protective Equipment

General Information

Respiratory protection

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.

None under normal use conditions. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). Type A/P2. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

Eye Protection

Tightly fitting safety goggles. Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing.

Hand Protection

Hydrocarbon-proof gloves: Fluorinated rubber, Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves.

Environmental exposure controls

General Information

The product should not be allowed to enter drains, water courses or the soil.

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9. PHYSICAL AND CHEMICAL PROPERTIES**General Information**

Color brown Physical State @20°C solid
Odor Characteristic
Odor Threshold No information available

Important health safety and environmental information

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> | <u>Method</u> |
|--|------------------------------|--|---------------|
| pH | | | |
| Melting point/range | | Not applicable No information available | |
| Boiling point/boiling range | | Not applicable | |
| Flash point | > 200 °C > 392 °F | | |
| Evaporation rate | | No information available | |
| Flammability Limits in Air | | No information available | |
| upper | - | | |
| Lower | - | No information available | |
| Vapor Pressure | | No information available | |
| Vapor density | 0.9 | No information available @ 20 °C | |
| Relative density | | | |
| Density | ~ 900 kg/m ³ | @ 20 °C | |
| Water solubility | | Insoluble | |
| Solubility in other solvents logPow | | No information available No information available | |
| Autoignition temperature | > 250 °C > 482 °F | | ASTM E659 |
| Decomposition temperature Viscosity, kinematic | | No information available No information available | ASTM E659 |
| Explosive properties Oxidizing Properties | Not explosive Not applicable | | |
| Possibility of hazardous reactions | Not applicable | | |
| Other information | | | |
| Freezing Point | | No information available | |
| Drop point | > 200 °C | | ISO 2176 |

10. STABILITY AND REACTIVITY**10.1. Reactivity**

General Information No information available.

10.2. Chemical stability

**Stability**

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions**Hazardous Reactions**

None under normal processing.

10.4. Conditions to Avoid**Conditions to Avoid**

Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.

10.5. Incompatible Materials**Materials to Avoid**

Strong oxidizing agents.

10.6. Hazardous Decomposition Products

Hazardous Decomposition Products None under normal use.

11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Information on likely routes of exposure****Principle Routes of Exposure**

Inhalation, Skin contact, Eye contact, Ingestion.

Skin contact

Not classified. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.

Eye contact

Not classified. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.

Inhalation

Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion

Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Acute toxicity - Product Information****Oral**

Not classified.

Dermal

Not classified.

Inhalation

Not classified.

Acute toxicity - Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--|----------------------------------|--------------------------------------|-----------------|
| Phosphorodithioic acid, mixed O,Obis(iso-Bu and pentyl) esters, zinc salts 68457-79-4 | LD50 3600 mg/kg (Rat - OECD 401) | LD50 > 20000 mg/kg (Rabbit OECD 402) | |

Skin corrosion/irritation

Not classified.

Serious eye damage/eye irritation

Not classified. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.

Sensitization

Not classified as a sensitizer.

Germ Cell Mutagenicity

This product is not classified as mutagenic.

Carcinogenicity

This product is not classified carcinogenic.

Not classified.

Reproductive toxicity**STOT-single exposure**

Not classified.



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STOT - repeated exposure Not classified.

Aspiration Hazard Not classified.

Other adverse effects Characteristic skin lesions (pimples) may develop following prolonged and repeated exposures (contact with contaminated clothing).

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Not Classified.

Acute aquatic toxicity - Product Information

No information available.

Acute aquatic toxicity - Component Information

| Chemical Name | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish | Toxicity to microorganisms |
|--|---------------------|---|--|----------------------------|
| Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4 | EbL50 (72h) 21 mg/l | (48h) 23 mg/l (Daphnia esmus subspicatus - OECD magna - OECD 202) | LC50 (96h) 4.5 mg/l (Cyprinodon variegatus - OECD 203) | |

Chronic aquatic toxicity - Product Information No information available.

Chronic aquatic toxicity - Component Information

| Chemical Name | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish | Toxicity to microorganisms |
|--|-------------------|---|------------------|----------------------------|
| Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts 68457-79-4 | | NOEC(21d) 0.8 mg/l Daphnia magna | | |

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Effects on terrestrial organisms No information available.

Persistence and degradability

General Information

No information available.

Bioaccumulative potential

Product Information

No information available.

logPow No information available **Component Information**

| Chemical Name | log Pow |
|--|---------|
| Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts - 68457-79-4 | 0.69 |

12.2.

12.3.

12.4. Mobility in soil

Soil Given its physical and chemical characteristics, the product generally shows low soil mobility.

Air Loss by evaporation is limited.

Water Insoluble. The product spreads on the surface of the water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

General Information No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Methods Should not be released into the environment. Dispose of in accordance with all applicable national environmental laws and regulations. After use, this oil must be sent to a licensed waste oil facility. Incorrect disposal of used oil poses a risk to the environment. Mixture with other waste types such as solvents, brake- and cooling liquids is forbidden.

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Contaminated packaging

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

Disposal Precautions

Refer to section 8 for safety and protective measures for disposal personnel.

14. TRANSPORT INFORMATION

ADR/RID
IMDG/IMO

Not regulated
Not regulated

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ICAO/IATA

Not regulated

15. REGULATORY INFORMATION**New Zealand Regulatory Information:**

HSNO Approval Number HSR002605
HSNO Group Standard Lubricants (Low Hazard) Group Standard 2006

HSNO Classification 6.3 - SKIN IRRITATION - Category B
6.4 - EYE IRRITATION - Category A (Irritant)
9.1 - AQUATIC ECOTOXICITY - Category D

Regulation according to other foreign laws:

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations

16. OTHER INFORMATION**Abbreviations, acronyms**

LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LL = Lethal Loading
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
NOAEL = No Observed Adverse Effect Level
EC x = Effect Concentration associated with x% response
OECD = Organization for Economic Co-operation and Development
UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

Legend Section 8

TWA: Time Weight Average
STEL: Short Time Exposure Limit
PEL: Permissible exposure limit
REL: Recommended exposure limit
TLV: Threshold Limit Values

| | | | |
|----|--------------------|----|-----------------------|
| + | Sensitizer | * | Skin designation |
| ** | Hazard Designation | C: | Carcinogen |
| M: | Mutagen | R: | Toxic to reproduction |

Revision Date: 2018-07-16
Revision Note *** Indicates updated section.

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the pre cautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet