



MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 35358

KASSILLA GMP 460

Date of the previous version: 2011-12-19

Revision Date: 2012-11-16

Version 1.01

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

1.1. Product identifier

| | |
|-------------------------------|-------------------------|
| Product name | KASSILLA GMP 460 |
| Number | FRD |
| Pure substance/mixture | Mixture |

1.2. Relevant identified uses of the substance or mixture and uses advised against

| | |
|------------------------|----------------------|
| Identified uses | Industrial gear oil. |
|------------------------|----------------------|

1.3. Details of the supplier of the safety data sheet

| | |
|-----------------|--|
| Supplier | TOTAL LUBRIFIANTS 562 Avenue du Parc de L'île 92029 Nanterre Cedex Tél: +33 (0)1 41 35 40 00 Fax: +33 (0)1 41 35 84 71 |
|-----------------|--|

For further information, please contact:

| | |
|-----------------------|------------------------|
| Contact Point | HSE |
| E-mail Address | rm.msds-lubs@total.com |

1.4. Emergency telephone number

+33 1 49 00 00 49 (24h/24, 7d/7)
 France - ORFILA (INRS) Tél : +33 (0)1 45 42 59 59
 In France : - PARIS : Hôpital Fernand Widal 200, rue du Faubourg Saint-Denis 75475 Paris Cédex 10 , Tel : 01.40.05.48.48. -
 MARSEILLE : Hopital Salvator, 249 bd Ste Marguerite 13274 Marseille cedex 5, Tel : 04.91.75.25.25. - LYON : Hopital Edouard
 Herriot, 5 place d'Arsonvol, 69437 Lyon cedex 3, Tel : 04.72.11.69.11. - NANCY : Hopital central, 29 Av du Mal De Lattre de
 Tassigny, 54000 Nancy, Tel : 03.83.32.36.36 ou le SAMU : Tel (15)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

For the full text of the H-Statements mentioned in this Section, see Section 2.2.

DIRECTIVE 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

The substance/mixture is classified as dangerous in accordance with Directive(s) 67/548/EEC with amendments and/or 1999/45/EC with amendments

Classification

R52-53

2.2. Label elements

Labelled according to Directive 1999/45/EC

R-phrase(s)

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrase(s)

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets
Contains Long chain alkylamine. May produce an allergic reaction.

2.3. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS3.2. Mixture

| Chemical Name | EC-No | REACH registration No | CAS-No | Weight % | Classification (Dir. 67/548) | Classification (Reg. 1272/2008) |
|-------------------------|-------|-----------------------|--------|----------|--|---------------------------------|
| Long chain alkylamine | - | no data available | ^ | <0.5 | Xn;R22-48/20 C;R34 T;R23/24 R43 N;R50-53 | |
| Alkyl phosphonate | - | no data available | ^ | <0.3 | Xi;R38-41 N;R51-53 | |
| Long chain alkenylamine | - | no data available | ^ | <0.2 | Xn;R22 C;R35 N;R50 | |

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

For the full text of the R-phrases mentioned in this Section, see Section 16
For the full text of the H-Statements mentioned in this Section, see Section 16.



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

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 immediately with plenty of water, also under the eyelids, for at least 15 minutes. |
| Skin contact | Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse. |
| Inhalation | Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract. |
| Ingestion | Give nothing to drink. Do NOT induce vomiting. |

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

| | |
|---------------------|--|
| Eye contact | Not classified. Avoid contact with eyes. |
| Skin contact | Not classified. Avoid contact with skin. May produce an allergic reaction. |
| 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 | Foam. Carbon dioxide (CO ₂). ABC powder. Water spray. |
| 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 | No information available. |
|-----------------------|---------------------------|

5.3. Advice for fire-fighters



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

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 Use personal protective equipment. Avoid contact with skin, eyes and inhalation of vapors. Do not touch or walk through spilled material. Keep people away from and upwind of spill/leak. Contaminated surfaces will be extremely slippery.

6.2. Environmental precautions

General Information Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. 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. Soak up with inert absorbent material. After cleaning, flush away traces with water. 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).

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 Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. 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. When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and at the end of workday. Do not dry hands with rags that have been contaminated with product. Do not use abrasives, solvents or fuels. Do not put product contaminated rags into workwear pockets.



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep out of the reach of children. Keep container tightly closed in a dry and well-ventilated place. Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Protect from moisture. Store in original container.

Materials to Avoid Oxidizing agents. Strong acids.

7.3. Specific end uses

Specific use(s) No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits oil mist : 10mg/m³, for 15 minutes
oil mist : 5mg/m³, for 8 hours

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 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.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

Eye 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. Long sleeved clothing.



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

Hand Protection

Hydrocarbon-proof gloves. Nitrile rubber. Fluorinated 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. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

| | | | |
|---|-----------------------------|---|---|
| Color | | black | |
| Physical State @20°C | | liquid | |
| Odor | | Characteristic | |
| Property | Values | Remarks | Method |
| pH | | Not applicable | |
| Boiling point/boiling range | | Not applicable | |
| Flash point | >= 200 °C >= 392 °F | | Cleveland Open Cup (COC) Cleveland Open Cup (COC). |
| Evaporation rate | | No information available | |
| Flammability Limits in Air | | No information available | |
| Vapor Pressure | | No information available | |
| Vapor density | | No information available | |
| Density | 898 - 912 kg/m ³ | @ 15 °C | |
| Water solubility | | Insoluble | |
| Solubility in other solvents | | No information available Soluble in many common organic solvents | |
| logPow | | No information available | |
| Autoignition temperature | | No information available | |
| Viscosity, kinematic | 460 mm ² /s | @ 40 °C | ISO 3104 |
| Explosive properties | Not explosive | | |
| Oxidizing Properties | Not applicable | | |
| Possibility of hazardous reactions | No information available | | |

9.2. Other information**10. STABILITY AND REACTIVITY****10.1. Reactivity****General Information**

No information available.



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

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, flames and sparks. Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.

10.5. Incompatible Materials

Materials to Avoid Strong oxidizing agents.

10.6. Hazardous Decomposition Products

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity Local effects Product Information

Skin contact . Not classified. Avoid contact with skin. May produce an allergic reaction.

Eye contact . Not classified. Avoid contact with eyes.

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.

Acute toxicity - Component Information

Sensitization

Sensitization Not classified as a sensitizer. Contains sensitizer(s). May produce an allergic reaction.

Specific effects



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

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.
Repeated Dose Toxicity

Subchronic toxicity No information available.

Target Organ Effects (STOT)

Target Organ Effects (STOT) No information available.

Other information

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

| |
|----------------------------|
| 12. ECOLOGICAL INFORMATION |
|----------------------------|

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Acute aquatic toxicity - Product Information

No information available.

Acute aquatic toxicity - Component Information

No information available.

Chronic aquatic toxicity - Product Information

No information available.

Chronic aquatic toxicity - Component Information

No information available.

Effects on terrestrial organisms

No information available.

12.2. Persistence and degradability**General Information**

No information available.

12.3. Bioaccumulative potential

Product Information No information available.



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

logPow No information available
Component Information No information available.
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 from Residues / Unused Products Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

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

EWC Waste Disposal No. The following Waste Codes are only suggestions: 13 02 05.

Other information According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

ADR/RID Not regulated

IMDG/IMO Not regulated

ICAO/IATA Not regulated



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

ADN

Not regulated

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

International Inventories

| | |
|----------------------|---|
| EINECS/ELINCS | - |
| TSCA | - |
| DSL | - |
| ENCS | - |
| IECSC | - |
| KECL | - |
| PICCS | - |
| AICS | - |
| NZIoC | - |

Legend**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**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**NZIoC** - New Zealand Inventory of Chemicals

Further information

15.2. Chemical Safety Assessment**Chemical Safety Assessment** No information available

16. OTHER INFORMATION



SDS # : 35358

KASSILLA GMP 460

Revision Date: 2012-11-16

Version 1.01

Full text of R-phrases referred to under sections 2 and 3

R34 - Causes burns

R43 - May cause sensitization by skin contact

R41 - Risk of serious damage to eyes

R38 - Irritating to skin

R35 - Causes severe burns

R50 - Very toxic to aquatic organisms

R22 - Harmful if swallowed

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R23/24 - Toxic by inhalation and in contact with skin

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Abbreviations, acronyms

Legend Section 8

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

Revision Date: 2012-11-16

Revision Note *** Indicates updated section.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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 precautions 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