Name: STARWAY FM 100 ES - 10S142

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SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: STARWAY FM 100 ES

Product code: 10S142.

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

Lubricant

For professional use

1.3. Details of the supplier of the safety data sheet

Registered company name: TTA Techniques & Technologies Appliquées.

Address: Z.I de Lonrai - BP 153.61005.Alençon Cedex .France. Telephone: +33 (0)2 33 82 38 00. Fax: +33 (0)2 33 26 88 69.

info@tta-lubrifiants.com www.tta-lubrifiants.com

1.4. Emergency telephone number: +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION AND LABELING "CLP" (1272/2008/CE) IS APPLICABLE TO MIXTURES MADE FROM 1 JUNE 2015. FOR MIXTURES MANUFACTURED BEFORE JUNE 2015, LABELLING "DPD" (1999/45/CE) REMAINS VALID UNTIL 31 MAI 2017 (art 61.4 of regulation CLP). Labelling Wrapping - see §2 and §16.

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

No labelling requirements for this mixture.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

No substances fulfil the criteria set forth in annexe II section A of the REACH regulation (EC) no 1907/2006.

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

This risk does not exist under normal conditions of use. However in the case of exposure to high concentrations of vapors or fumes, remove to fresh air, keep warm and at rest.

In the event of splashes or contact with eyes:

Rinse immediately with plenty of water, holding the eyelids, for at least 15 minutes. If discomfort persists, consult a physician.

In the event of splashes or contact with skin :

Wash off with soap and plenty of water. Contaminated clothing should be laundered before reuse. If irritation persists, call a doctor.

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In the event of swallowing:

Seek medical attention, showing the label.

If swallowed, rinse mouth with water (only if the person is conscious). Consult physician immediately and show him the label. Keep the victim calm.

Do not induce vomiting.

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

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Information for the doctor:

In case of incident, treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

Use water spray, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- various hydrocarbons

...etc

5.3. Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Prevent the spread and flow into drains, ditches or rivers by using sand, earth, or adapted dams. Inform local authorities if this can not be prevented.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

Collect in a suitable container, clearly marked for disposal or reclamation in accordance with regulations.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Avoid splashes.

After contact with skin, wash with soap and water, do not use abrasives, solvents or fuel.

Do not dry hands with rags that have been contaminated with product.

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Prevent small spills and leakage to avoid slip hazard.

Fire prevention:

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Provide air exchange and / or exhaust in work rooms.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Recommended to protect from moisture and weather (rain in particular) storage

Storage temperature : 4 - 40°C.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

mineral oil: 10 mg/m3 (OEL - STEL) - 5 mg/m3 (OEL - TWA)

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state : Viscous liquid.
Color : colorless

Important health, safety and environmental information

pH: Not relevant. Boiling point/boiling range: Not specified. Flash Point Interval: $PE > 100^{\circ}C$. Vapour pressure (50°C): Not relevant. 0.87 à 15°C Density: Water solubility: Insoluble. 105 Cst à 40°C Viscosity: Melting point/melting range: Not specified. Self-ignition temperature: Not specified.

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Decomposition point/decomposition range : Not specified.

9.2. Other information

Pour point : $-15^{\circ}\text{C} (5^{\circ}\text{F})$

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid:

The heat, sparks, ignition points, flames, static electricity ...

10.5. Incompatible materials

Keep away from:

- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- various hyrocarbures

N/A

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data available.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

Acute toxicity:

Acute oral toxicity: LD50 seen > 2000 mg / kg Acute dermal toxicity: LD50 seen > 2000 mg / kg

Skin corrosion/skin irritation:

Not available

Serious damage to eyes/eye irritation:

Not available

Respiratory or skin sensitisation:

Not available

Germ cell mutagenicity:

Not available

Carcinogenicity:

Not available

Reproductive toxicant:

Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

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No data available.

12.4. Mobility in soil

Given its physical and chemical characteristics, the product is generally not mobile in soil. Insoluble product floats on water.

12.5. Results of PBT and vPvB assessment

This product is not a PBT or vPvB, or does not contain.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2001/573/EC, Directive 2006/12/EEC, Directive 94/31/EEC on hazardous waste):

The following waste codes are only suggestions: waste code is not on the new product itself but its use. The waste classification should be assigned by the user based on the application he makes of the product.

13 08 99 - wastes of oil not otherwise specified

SECTION 14: TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

SECTION 15: REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

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Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefahrdungsklasse (Water Hazard Class).

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.