# SAFETY DATA SHEET

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

### 1.1 Product Identifier

| Product Name: | Fame Tallow |
| Product Description: | V3023a- Fame Tallow-Fame |
| Trade name: | Fame |
| CAS No.: | 61789-61-2 |
| EC No.: | 262-989-7 |

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

| Identified use(s): | Fuel for engines |
| Blend component |

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

| Company Identification: | Vitol SA Boulevard du Pont d’Arve 28 P.O. Box 384 1211 Geneva 4 Switzerland |
| Telephone: | +31 10 498 7200 |
| Fax: | +31 10 452 9545 |
| E-Mail (competent person): | xreach@vitol.com |

### 1.4 Emergency telephone number

| Emergency Phone No. (24 h): | +44 (0) 1235 239 670 (24 hours, 7 days) |

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 (CLP)

- Not classified as hazardous


- Not classified as hazardous

### 2.2.1 Label elements

| Hazard pictogram(s): | None. |
| Signal word(s): | None. |
| Hazard statement(s): | None. |
| Supplemental Hazard Information: | None. |
| Precautionary statement(s): | None. |

### 2.2.2 Label elements


| Hazard pictogram(s): | None. |
| Hazard Symbol: | None. |
| Risk Phrases: | None. |
| Safety Phrases: | None. |

### 2.3 Other hazards

- May cause eye irritation. Spillages may cause slippery road.
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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
EC Classification No. 1272/2008

<table>
<thead>
<tr>
<th>Hazardous ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Hazard symbol(s) and hazard statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, tallow, Me esters</td>
<td>100</td>
<td>61788-61-2</td>
<td>262-989-7</td>
<td>None.</td>
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EC Classification No. 67/548/EC

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4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Remove patient from exposure, keep warm and at rest. If symptoms persist, obtain medical attention.

Skin Contact: Remove contaminated clothing immediately and drench affected skin with plenty of water, then wash with soap and water. Contaminated clothing should be thoroughly cleaned. If symptoms persist, obtain medical attention.

Eye Contact: If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. If symptoms persist, obtain medical attention.

Ingestion: Do not induce vomiting. Provided the patient is conscious, wash out mouth with water and give 200-300 ml (half a pint) of water to drink. If symptoms persist, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause eye irritation.

4.3 Indication of the immediate medical attention and special treatment needed

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media: Foam, CO2 or dry powder.

Unsuitable Extinguishing Media: For large fire use: Water. Do not use water jet.

5.2 Special hazards arising from the substance or mixture

May give off toxic fumes in a fire. Carbon monoxide, Carbon dioxide and various hydrocarbons.

5.3 Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep fire exposed containers cool by spraying with water.

Flash Point (°C): > 173
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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Avoid contact with skin and eyes. Wear suitable protective clothing and gloves. (See Section: 8). Contaminated clothing should be thoroughly cleaned.

6.2 Environmental precautions
Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up
Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Wash spill area with soapy water. Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorised waste disposal contractor.

6.4 Reference to other sections
Personal Protection: See Section: 8.
Other advice
Caution - spillages may be slippery.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves. (See Section: 8).
Do not eat, drink or smoke at the work place. Wash hands and exposed skin after use. Contaminated clothing should be thoroughly cleaned.

7.2 Conditions for safe storage, including any incompatibilities
Keep only in the original container in a cool, well-ventilated place.

7.3 Specific end use(s)
Industrial use only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
No Occupational Exposure Limit assigned.

8.2 Exposure controls
8.2.1 Appropriate engineering controls
Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded.

8.2.2 Personal Protection
Eye/face protection
Goggles giving complete protection to eyes. (EN 166)

Skin protection
Protective gloves. (EN 374)
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. (BS EN 14387:2004+A1)

Other: Apron or other light protective clothing, boots and plastic or rubber gloves.

8.2.3 Environmental Exposure Controls
Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Appearance: Oily liquid.
Colour: Green/ Yellow.
Odour: Characteristic.
Boiling Point (°C): 354.3
Melting Point (°C): -16.29 – 15.59
Flash Point (°C): 173 (+/- 1)
Vapour Pressure (Pascal): 420 (@ 25 °C)
Specific Gravity: 0.8881 (@ 20° C)
Flash Point (°C): 173 (+/- 1)
Vapour Pressure (Pascal): 420 (@ 25 °C)
Specific Gravity: 0.8881 (@ 20° C)
Partition Coefficient: (n-Octanol/water) Log Kow: 6.2 (@ 25 °C)
Auto Ignition Temperature (°C): 261 (+/- 5)
Viscosity: 6.2 mPa/s (@ 20° C)
Explosive Properties: Not explosive. Vapour may create explosive atmosphere.
Oxidising Properties: Not oxidising.

9.2 Other information
None.

10. STABILITY AND REACTIVITY

10.1 Reactivity
Reacts with - Strong oxidising agents.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
No information available.

10.4 Conditions to avoid
Keep away from heat, sources of ignition and direct sunlight.

10.5 Incompatible materials
Oxidising agents.

10.6 Hazardous Decomposition Product(s)
May give off toxic fumes in a fire. Carbon monoxide, Carbon dioxide and various hydrocarbons.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity:
Ingestion: LD₅₀ (oral/rat): >5000 mg/kg
Inhalation: No information available.
Skin Contact: LD₅₀ (dermal/rabbit): >2000 mg/kg
Eye Contact: No information available.

Skin corrosion/irritation: Non-irritant.
Serious eye damage/irritation: May cause eye irritation.
Respiratory or skin sensitization: Negative.
Mutagenicity: There is no evidence of mutagenic potential.
Carcinogenicity: No evidence of carcinogenicity.
Reproductive toxicity: Negative.
STOT-single exposure: Negative.
STOT-repeated exposure: Negative.
Aspiration hazard: Negative.
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Other information: No information available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
- LC₅₀ (Fish): 100,000 mg/l
- EC₅₀ (Fish: Brachydanio rerio): >100,000 mg/l/48h
- EC₅₀ (Daphnia magna): 2504 mg/l/48h
- EC₅₀ (Algae): 73729 mg/l/72h
- NOEL: 1000 mg/l/days
- NOEC: 5250 mg/l
- log Kₗow: 6.2
- WGK: 1.

12.2 Persistence and degradability
- Readily biodegradable.

12.3 Bioaccumulative potential
- The substance has low potential for bioaccumulation.

12.4 Mobility in soil
- Degradation rate (%): 100

12.5 Results of PBT and vPvB assessment
- Not classified as PBT or vPvB.

12.6 Other adverse effects
- No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
- Do not empty into drains; dispose of this material and its container in a safe way. To be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

14.1 UN number
- Not classified according to the United Nations ‘Recommendations on the Transport of Dangerous Goods’.

14.2 Proper Shipping Name
- Not applicable.

14.3 Transport hazard class(es)
- Not applicable.

14.4 Packing Group
- Not applicable.

14.5 Environmental hazards
- Readily biodegradable.

14.6 Special precautions for user
- Slipping hazard.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Not applicable.

15. REGULATORY INFORMATION

According to Regulation (EC) No. 1272/2008 (CLP)
- Hazard pictogram(s): None.
- Signal word(s): None.
- Hazard statement(s): None.
- Supplemental Hazard Information: None.
- Precautionary statement(s): None.

- Hazard pictogram(s): None.
- Hazard Symbol: None.
- Risk Phrases: None.
- Safety Phrases: None.
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16. OTHER INFORMATION

Full text of Hazard statements and Risk phrases for pure substances listed in section 3.

Hazard Symbol: None.

Risk Phrases: None.

The following sections contain revisions or new statements: 1-16.

Abbreviations:
CAS = Chemical Abstracts Service;
CNS = Central Nervous System;
EINECS = European Inventory of Existing Commercial Chemical Substances;
EC50 = Effective Concentration 50%;
IARC = International Agency for Research on Cancer;
IC50 = Inhibitory Concentration 50%;
LC50 = Lethal Concentration 50%;
LD50 = Lethal Dose 50%;
LTEL = Long Term Exposure Limit;
STEL = Short Term Exposure Limit;
TWA = Time Weighted Average;

References:
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Disclaimer:
The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391 and 98/24.

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Fame Tallow
Date: 21 February 2011
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