SAFETY DATA SHEET

Revision: 6 February 2023 Version: 006

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Fame Tallow V3023

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

1.1 Product identifier

Product name	Fame Tallow
Product description	V3023- Fame Tallow-Fame
Trade Name	Fame
Product code	V3023
CAS No.	67762-26-9
EC No.	267-007-0
REACH Registration No.	01-2119471662-36-XXXX

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

Identified Use(s)	Fuel for engines.
Uses advised against	Anything other than the above.

1.3 Details of the supplier of the safety data sheet

Company Identification	Vitol SA Place des Bergues 3 1201 Geneva 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.	+44 (0) 1235 239 670, 24/7
Language(s) spoken:	All official European languages.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP) Not classified as hazardous for supply/use.

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

Product description	V3023- Fame Tallow-Fame
Hazard Pictogram(s)	None assigned
Signal Word(s)	None assigned
Hazard Statement(s)	None assigned
Precautionary Statement(s)	None assigned

2.3 Other hazards Spillages may cause slippery road.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

SUBSTANCE	CAS No.	EC No.	%W/W
Fatty acids, C14-18 and C16-18-unsatd., Me esters	67762-26-9	267-007-0	100

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Self-protection of the first aider	No action should be taken involving personal risk. Use personal protective equipment as required. Take off contaminated clothing and wash it before reuse.
Inhalation	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If irritation develops and persists, get medical attention.
Skin contact	IF ON SKIN (or hair): Remove clothing and wash thoroughly before use. Wash affected skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact	IF IN EYES: If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. If eye irritation persists, get medical advice/attention.
Ingestion	IF SWALLOWED: Do NOT induce vomiting. Wash out mouth with water and give 200-300 ml (half a pint) of water to drink. If symptoms develop, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed — None known

4.3 Indication of any immediate medical attention and special treatment needed — Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Extinguish with sand or dry chemical. Foam, Carbon dioxide, Water fog or dry powder.
Unsuitable extinguishing media	Do not use water jet. Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture — Decomposes in a fire giving off toxic fumes: A mixture of solid and liquid particulates and gases including unidentified organic and inorganic compounds. May form explosive mixture with air. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. Prevent liquid entering sewers, basements and any watercourses.

5.3 Advice for firefighters — Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid release to the environment. Dike fire control water for later disposal.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures — Caution - spillages may be slippery. Eliminate sources of ignition. Stop leak if safe to do so. Ensure suitable personal protection during removal of spillages. Avoid all contact. Keep upwind.

6.2 Environmental precautions — Avoid release to the environment. 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. Sweep up and shovel into waste drums or plastic bags. Transfer to a lidded container for disposal or recovery. Ventilate the area and wash spill site after material pick-up is complete.

6.4 Reference to other sections — See Section: 8,13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Use only outdoors or in a well-ventilated area. Prevent vapour build up by providing adequate ventilation during and after use. The vapour is heavier than air; beware of pits and confined spaces. Avoid contact with eyes. Do not ingest. Use personal protective equipment as required. See Section: 8. Keep good industrial hygiene. Wash hands thoroughly after handling. Contaminated clothing should be thoroughly cleaned.

7.2 Conditions for safe storage, including any incompatibilities

Bund storage facilities to prevent soil and water pollution in the event of spillage. Keep only in original packaging. Keep containers properly sealed when not in use. Protect from sunlight. Containers of this material may be hazardous when empty since they retain product residue.

Storage temperature	10 – 50 °C. Stable at ambient temperatures.
Storage measures	Keep only in the original container.
Incompatible materials	Keep away from oxidising agents.

7.3 Specific end use(s)

See Section: 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational exposure limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Mist	None assigned	-	10	-	-	WEL

Source: WEL: Workplace Exposure Limit (UK HSE EH40)

8.1.2 Biological limit value

Not established

8.1.3 PNECs and DNELs

Not established

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation. Guarantee that the eye flushing systems and safety showers are located close to the working place.

8.2.2 Individual protection measures, such as personal protective equipment

Fuels are typically used, transferred and transported in closed systems. If exposure is likely (i.e. during sampling) the following advice may be appropriate.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection

Wear eye protection with side protection (EN166).

Skin protection

Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Recommended: Nitrile rubber

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

Respiratory protection

Open system(s): In case of inadequate ventilation wear respiratory protection. Recommended: BS EN 14387:2004+A1

Closed system(s): Not normally required

When the product is heated/In case of inadequate ventilation wear respiratory protection. Recommended: Combination filtering device (DIN EN 141) Filter type A2

	Thermal hazards	Not applicable
8.2.3	**Environmental exposure controls**	Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	Green/Yellow
Odour	Mild odour, Characteristic
Melting point/freezing point	6.29 °C at 1 atm
Boiling point or initial boiling point and boiling range	354.3 °C at 1 atm
Flammability	Non-flammable.
Lower and upper explosion limit	Not established
Flash point	173 °C +/- 1 °C
Auto-ignition temperature	261°C +/- 5°C
Decomposition temperature	Not established
pH	Not established
Kinematic viscosity	6.1 mPa•s at 20 °C
Solubility	Water: Insoluble < 0.023 mg/l
Partition coefficient: n-octanol/water (log value)	Log Kow: 6.2 at 25°C
Vapour pressure	4.2 mbar at 25°C 420 Pa at 25°C 3.6 mbar at 20°C
Density and/or relative density	0.8881 g/cm³ at 20 °C
Relative vapour density	Not established
Particle characteristics	Not established

9.2 Other information None known

SECTION 10: STABILITY AND REACTIVITY

10.1	**Reactivity**	Stable under normal conditions. Reacts with - Strong oxidising agents, strong bases (Forms methanol).
10.2	**Chemical stability**	Stable under normal conditions.
10.3	**Possibility of hazardous reactions**	Hazardous polymerisation will not occur.
10.4	**Conditions to avoid**	Keep away from heat, sources of ignition and direct sunlight.
10.5	**Incompatible materials**	Keep away from oxidising agents. Strong acids and Alkalis.
10.6	**Hazardous decomposition products**	Decomposes in a fire giving off toxic fumes: A mixture of solid and liquid particulates and gases including unidentified organic and inorganic compounds, Carbon monoxide, Carbon dioxide, Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - Ingestion	Based upon the available data, the classification criteria are not met. LD50 (oral,rat) mg/kg: >5000 AFNOR NF T 03-021
Acute toxicity - Inhalation	Based upon the available data, the classification criteria are not met.
Acute toxicity - Skin contact	Based upon the available data, the classification criteria are not met. LD50 (skin,rabbit) mg/kg: >2000 EPA OPPTS 870.1200
Skin corrosion/irritation	Based upon the available data, the classification criteria are not met. Mean erythema score: <0.33 (rabbit) (OECD 404) Mean edema score: 0 (rabbit) (OECD 404)

Serious eye damage/irritation	Based upon the available data, the classification criteria are not met. Mean eye Irritation score – Cornea: 0 Iris: 0 Conjunctivae: 0.16 Chemosis: 0 (rabbit) (OECD 405)
Respiratory or skin sensitisation	Based upon the available data, the classification criteria are not met. Sensitisation (guinea pig) – Negative (OECD 406)
Germ cell mutagenicity	Based upon the available data, the classification criteria are not met. In vitro: No evidence of mutagenic effects. Bacteria (OECD 471) In vivo: No evidence of mutagenic effects. Hamster (OECD 475)
Carcinogenicity	Based upon the available data, the classification criteria are not met. Weight of evidence approach.
Reproductive toxicity	Based upon the available data, the classification criteria are not met. Reproductive toxicity: NOAEC >1000 mg/kg bw/day (rat) (OECD 422) Developmental toxicity: Negative (rabbit) (OECD 414)
STOT - Single Exposure	Based upon the available data, the classification criteria are not met.
STOT - Repeated Exposure	Based upon the available data, the classification criteria are not met. Ingestion: NOAEC >1000 mg/kg bw/day (rat) (OECD 422) Inhalation: No data available Skin contact: No data available
Aspiration hazard	Based upon the available data, the classification criteria are not met.

11.2 Information on other hazards

11.2.1	Endocrine disrupting properties	This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.
11.2.2	Other information	None known

SECTION 12: ECOLOGICAL INFORMATION

12.1	**Toxicity**	Based upon the available data, the classification criteria are not met. EC50 Brachydanio rerio (zebra-fish) > 100 000 mg/L (48 hour) (OECD 203)
12.2	**Persistence and degradability**	Readily biodegradable (according to OECD criteria). Degradation rate (%): 75
12.3	**Bioaccumulative potential**	The substance has low potential for bioaccumulation. Bioconcentration factor (BCF): 2.41
12.4	**Mobility in soil**	The product has low mobility in soil. Insoluble in water.
12.5	**Results of PBT and vPvB assessment**	Not classified as PBT or vPvB. None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.
12.6	**Endocrine disrupting properties**	This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.
12.7	**Other adverse effects**	None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	**Waste treatment methods**	Dispose of this material and its container as hazardous waste. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Disposal should be in accordance with local, state or national legislation. Containers of this material may be hazardous when empty since they retain product residue. Containers must not be punctured or destroyed by burning, even when empty. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company. Waste code: Fuel Oil (130701) and Diesel fuel (150110).
	Waste classification according to Directive 2008/98/EC (Waste Framework Directive)	Not classified

SECTION 14: TRANSPORT INFORMATION

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

		ADR/RID	**IMDG**	**IATA/ICAO**
14.1	**UN number or ID number**	None assigned	None assigned	None assigned
14.2	**UN proper shipping name**	None assigned	None assigned	None assigned

14.3	**Transport hazard class(es)**	None assigned	None assigned	None assigned
14.4	**Packing group**	None assigned	None assigned	None assigned
14.5	**Environmental hazards**	Not classified	Not classified as a Marine Pollutant.	Not classified
14.6	**Special precautions for user**	See Section: 2		
14.7	**Maritime transport in bulk according to IMO instruments**	No information available.	No information available.	No information available.
14.8	**Additional information**	None known		

SECTION 15: REGULATORY INFORMATION

15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	
15.1.1	**EU regulations**	
	Authorisations and/or restrictions on use	Not restricted
15.1.2	**National regulations**	
	Germany	Water hazard class: 1
15.2	**Chemical Safety Assessment**	A chemical safety assessment is not required under REACH.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: New SDS Regulation 2020/878 format, all sections have been updated to include new information. Please review SDS with care.

References:
Existing Safety Data Sheet (SDS).
Existing ECHA registration(s) for Fatty acids, C14-18 and C16-18-unsatd., Me esters (CAS No. 67762-26-9).
EU classification and labelling inventory for Fatty acids, C14-18 and C16-18-unsatd., Me esters (CAS No. 67762-26-9).

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Legend

ADR	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	ADN: European Agreement on the International Transport of Dangerous Goods by Inland Waterways
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived no effect level
EC	European Community
ECHA	European Chemicals Agency
EU	European Union
IATA	IATA: International Air Transport Association
ICAO	ICAO: International Civil Aviation Organization
IMDG	IMDG: International Maritime Dangerous Goods
LC50	Lethal Concentration at which 50% of the population is killed
LD50	Lethal Dose at which 50% of the population is killed
LTEL	Long term exposure limit
NOAEC	No Observed Adverse Effect Concentration
OECD	Organisation for Economic Cooperation and Development
PBT	PBT: Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	RID: Regulations concerning the international railway transport of dangerous goods
STEL	Short term exposure limit
vPvB	vPvB: very Persistent and very Bioaccumulative

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

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Annex to the extended Safety Data Sheet (eSDS)

Not applicable