



Stearic Acid
Safety Data Sheet
Technical Specifications
Intolerance Data

We don't just sell machines—
we provide service.

Contents

1. Safety Data Sheet	3
1.1 Description	3
1.2 Ingredients/Identity Information	3
1.3 Hazards Identification	4
1.4 First Aid Procedures	5
1.5 Fire and Hazard Data	6
1.6 Release/Spill Measures	7
1.7 Storage	7
1.8 Control Methods/PPE	7
1.9 Physical and Chemical Properties	8
1.10 Stability and Reactivity	8
1.11 Toxicological Information	9
1.12 Ecological Information	10
1.13 Disposal Considerations	10
1.14 Transport Information	10
1.15 Regulatory Information	10
1.16 Other Information	11
2. Technical Specifications	12
2.1 Product Data	12
2.2 Microbiological Test	13
2.3 Metals	13
2.4 Confirmation of Status List	14
3. Intolerance Data	15
3.1 Intolerance Data Table	15
1.13 Disposal Considerations	19
1.14 Transport Information	19
1.15 Regulatory Information	19
1.12 Ecological Information	19

1. Safety Data Sheet



1.1 Description

Product Name	Stearic Acid
Product Code	STA
Supplier	LFA Machines Oxford Ltd. Unit 4b, 26-27 Murdock Road Bicester, Oxfordshire OX26499 United Kingdom Tel: +44 (0) 1869 250 234

1.2 Ingredients/Identity Information

Components	Stearic Acid
% in Product	100
CAS Number	57-11-4
Formula	C ₁₈ H ₃₆ O ₂
EINECS Number	N/A

1.3 Hazards Identification



Potential Acute Health Effects	Hazardous in case of serious ingestion. Hazardous in case of skin contact (corrosion/irritation), of eye contact (eye damage/eye irritation), and of inhalation.
Potential Chronic Health Effects	Not available
Carcinogenic Effects	Not available
Mutagenic Effects	Not available
Teratogenic Effects	Not available
Developmental Toxicity	Not available
Hazardous Symbol/ Pictograms	Not applicable
Signal Words	Not applicable

This substance may be toxic to liver and skin.

Repeated or prolonged exposure is not known to aggravate medical condition.

To the best of our knowledge, our products do not contain any contaminants or by-products known to the State of California that cause cancer or reproductive toxicity as listed under Proposition 65 Drinking Water and Toxic Enforcement Act.

1.4 First Aid Procedures



Eye Contact	For eyes, flush with plenty of water for 15 minutes & get medical attention.
Skin Contact	In the case of contact with skin, immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse.
Serious Skin Contact	Get medical attention.
Inhalation	After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation.
Serious Inhalation	Get medical attention.
Ingestion	If large amounts of this material are swallowed, call a physician immediately. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious or convulsing person.
Serious Ingestion	Get medical attention.

1.5 Fire and Hazard Data



Flammability of Product	Not available
Temperature	Not available
Flash Points	Not available
Flammable Limits	Not available
Products of Combustion	Not available.

Fire & Explosion Preventive Measures

NO open flames.

Suitable (& Unsuitable) Extinguishing Media

Use water spray or fog to cool the containers exposed to the heat of a fire.

Special Protective Equipment & Precautions for Fire Fighters

Water spray may be ineffective on fire but can protect fire fighters and cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves and rubber boots).

Specific Hazards of Chemical & Hazardous Combustion Products

Slightly Combustible!

Isolate from oxidizers, heat and open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Continue all label precautions.



1.6 Release/Spill Measures

Methods & Materials for Containment & Cleanup

Stop spill at source. Dike and contain. Collect leaking and spilled liquid in sealable containers as far as possible.

Personal Precautions, Protective Equipment & Emergency Procedures:

Wear the appropriate personal protective equipment given in Section 1.7 to pick up the spilled material and place in appropriate containers for recovery, disposal, or satellite accumulation. Flush the spill area with water, collect the rinsates for disposal or sewer, as appropriate.

Environmental Precautions

Keep from entering storm sewers and ditches which lead to waterways.

1.7 Storage

Precautions

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, so evaporate the residue under a fume hood.

Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the label or container.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area.

1.8 Control Methods/PPE

Precautions for Safe Handling

Isolate from oxidizers, heat and open flame. Use only with adequate ventilation. Protect eyes, skin and clothing from contact with this product. Avoid prolonged or repeated contact with skin.

Personal Protective Equipment

- Goggles
- Face shield
- Boots
- Gloves

Appropriate Engineering Controls

Respiratory Exposure Controls

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Ventilation

Local Exhaust: Necessary

Mechanical (General): Acceptable

Special: None

Other: None

Please refer to "Industrial Ventilation, A Manual of Recommended Practices" for details.

1.9 Physical and Chemical Properties



Physical State	Powder
Color	White
Odor	Slight characteristic

1.10 Stability and Reactivity

Reactivity & Chemical Stability	Stable under normal conditions, no hazardous reactions when kept from incompatibles.
Possibility of Hazardous Reactions & Conditions to Avoid	Isolate from extreme heat and open flame.
Incompatible Materials	Isolate from oxidizers, strong alkali and caustics.
Hazardous Decomposition Products	Carbon oxides with dense irritating smoke from burning.
Hazardous Polymerization	Will not occur.

1.11 Toxicological Information



Toxicity Information

Stearic Acid:

LD50 (Oral): 4640 mg/kg (Rat)

Palmitic Acid:

LD50 (Oral): >10000 mg/kg (Rat)

Irritation:

Dermal/ 3 days: 75 mg (Human) (Mild) 75 mg (Human) (Mild)

Myristic Acid:

LD50 (Oral): >10000 mg/kg (Rat)

Lauric Acid:

12000 mg/kg (Rat)

Irritation:

Eye Contact: 100 mg (Rabbit) Mild

100 mg (Rabbit) Mild

Skin Contact:

500 mg (Rabbit) Mild

1.12 Ecological Information



Effects on Plants and Animals	This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 1.11 for further data.
Effect of Material on Aquatic Life	Not available.
Mobility in Soil	Not available.
Degradability	This product is partially biodegradable.
Accumulation	Bioaccumulation of this product has not been determined.

1.13 Disposal Considerations

Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled for reuse or consigned to licensed hazardous waste haulers for disposal. ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES.

1.14 Transport Information

Marine Pollutant: No
DOT/TDG SHIP NAME: Not regulated
Drum Label: None
IATA/ICAO: Not regulated
IMO/IMDG: Not regulated
Emergency Response Guidebook Number: None

1.15 Regulatory Information

State Regulations

California Safe Drinking Water & Toxic Enforcement Act (Proposition 65): This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

1.15 Regulatory Information Cont.



International Regulations

The identified components of this product are listed on the chemical inventories of the following countries:

Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

Canada: Workplace Hazardous Materials Information System (WHMIS)

D2B: Irritating to skin/eyes.

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This document contains all information required by the CPR.

1.16 Other Information

Employee Training

See Section 1.3 (Hazards Identification). Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein, is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.

Conditions of use are beyond our control, and therefore users are responsible for the verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, or use of, or reliance upon information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

2. Technical Specifications



2.1 Product Data

Product Code	STA
Raw Material Full Name	Stearic acid
Calories per Gram	9.5
Molecular Formula	C18H36O2
CAS Number	57-11-4
Description	Powder, opaque, waxy, fine, white
Bulk Density	0.253 g/cm ³
Loss of Moisture On Drying	0.20%
Tapped Bulk Density	0.38 g/cm ³
Carr's Index	33.46
Hausner Ratio	1.5
A (Freezing Point)	To Pass Test
B (Acid Value)	205-210
C (Retention Time Peaks)	To Pass Test
Residue on Ignition (%)	<0.01%
Fat & Fixed Oils, Iodine Value	<1.0
Particle Size	50 mesh (100% passed through)
Country of Origin	Malaysia
Country of Origin of the Manufacture	USA
Color of Solution	Pass
Acidity	Pass
Freezing Point	53-59 deg. C
Residual Solvents	None used
Storage Conditions	Dry place. Keep away from direct sunlight. Temperature <57 °C

	50 Mesh (300µm)	100 Mesh (150µm)	200 Mesh (75µ)
Steari Tab	0%	10%	70%

2.2 Microbiological Test



Total Plate Count	Less than 3000 cfu/g
Yeast & Moulds	Less than 300 cfu/g
E. Coli	Negative
Salmonella	Negative
Staphylococcus	Negative
Coli Form	Negative

2.3 Metals

Heavy Metals	<0.1 ppm
Lead (ppm)	<0.01 ppm
Arsenic (ppm)	<0.200 ppm
Mercury (ppm)	<0.1 ppm
Cadmium (ppm)	<0.1 ppm
Nickel (ppm)	<0.1 ppm

C ₁₂ /C ₁₄	3% max	0/1%
C ₁₆ (hexadecanoic acid)	42% min.	42% min.
C ₁₈ (octadecanoic acid)	50% min.	50% min.
C ₂₀	1% max	1% max
(Combination of C16 and C18 is not less than 90%)		

Packaged in 15 kg or 20 kg carton box meeting Food Grade specifications

2.4 Confirmation of Status List



CONFIRMATION OF BSE/TSE STATUS

This is to certify that this product complies with all relevant current UK and EU Legislative requirements in regard to Transmissible Spongiform Encephalopathy (TSE) and Bovine Spongiform Encephalopathy (BSE) for human food, and so is free of TSE/BSE. This is also to certify that, during the course of their manufacture, the above-mentioned product did not come into contact with any materials, which could be derived from TSE/BSE risk materials.

CONFIRMATION OF GM STATUS

This is to certify that this product is not manufactured from GM raw materials and is therefore not subject to labelling under regulations 1829/2003/EC and 1830/2003/EC.

CONFIRMATION OF NON-IRRADIATION STATUS

This is to certify that this product, whole or in part, has not been subjected to ionizing radiation as per European Directives 1999/2/EC and 1000/3/EC.

CONFIRMATION OF NANDROLONE STATUS

This is to certify that this product, whole or in part, has not come into contact with Nandrolone or any of its precursors in any way.

CONFIRMATION OF IOC PRODUCT STATUS

This is to certify that this product, whole or in part, has not come into contact with any product(s) banned by the IOC (International Olympics Committee).

CONFIRMATION OF ANIMAL TESTING STATUS

This is to certify that all the products sold by LFA Machines Oxford Ltd. have not been tested on animals in any part of its manufacture in accordance with regulation 86/609/EEC.

CONFIRMATION OF PESTICIDES STATUS

This is to certify that the above-mentioned product complies with the regulation (EC) No. 396/2005 of 23rd February 2005 and commission regulation (EU) No. 559/2011 of 7th June 2011 amending annexes II and III of the above Regulation.

3. Intolerance Data

3.1 Intolerance Data Table



Free from all animal products (beef, pork, poultry, or other)	YES
Free from bovine products or derivatives by using hormones to increase milk yield in cows	YES
Free from bone meal	YES
Free from peanuts and peanut derivatives (including possible cross contamination)	YES
Free from other nut and nut derivatives	YES
Free from nut derived oil	YES
Free from sesame seeds and sesame seed derivatives	YES
Free from poppy seeds and poppy seed derivatives	YES
Free from sunflower seeds and sunflower seed derivatives	YES
Free from other seeds and seed derivatives	YES
Free from milk and milk derivatives	YES
Free from egg and egg derivatives	YES
Free from cereals containing gluten (wheat/rye/oats/barley/spelt/kamut or their hybridized strains) and derivatives	YES
Free from soya and soya derivatives	YES
Free from maize and maize derivatives	YES
Free from corn and corn derivatives	YES
Free from lupin and lupin derivatives	YES
Free from yeast and yeast derivatives	YES
Free from cotton seeds (flour) and cotton seed derivatives	YES
Free from rice and rice derivatives	YES
Free from mustard and mustard derivatives	YES
Free from celery and celery derivatives	YES
Free from celeriac and celeriac derivatives	YES
Free from fruit and fruit derivatives	YES
Free from vegetable and vegetable derivatives	YES
Free from carrot and carrot derivatives	YES
Free from legumes/pulses	YES



Free from fish and fish derivatives	YES
Free from crustaceans and/or molluscs and their derivatives	YES
Free from additives	YES
Free from added salt	YES
Free from added sugar	YES
Free from antioxidants	YES
Free from artificial glutamates	YES
Free from aspartame	YES
Free from Azo and coal tar dyes	YES
Free from benzoates (E210/E219)	YES
Free from BHA/BHT (E320/E321)	YES
Free from caffeine	YES
Free from cinnamon	YES
Free from cocoa	YES
Free from colors (artificial/nature identical/natural/smoked)	YES
Free from dextrose	YES
Free from dioxins	YES
Free from ethanol	YES
Free from ethylene oxide	YES
Free from flavorings (artificial/nature identical/natural/smoked)	YES
Free from garlic	YES
Free from gelatine	YES
Free from glutamates (E620 to E625)	YES
Free from histamine	YES
Free from hickory	YES
Free from honey	YES
Free from lactose	YES



Free from latex	YES
Free from MSG (added and naturally occurring E621)	YES
Free from nucleotides (E627, E630, E631. E635)	YES
Free from polyols	YES
Free from preservatives	YES
Free from starch products (including maltodextrin)	YES
Free from sorbic acid (E200, E203)	YES
Free from sulphur dioxide and sulphites at levels above 10 mg/kg or 10 mg/liter express as SO²	YES
Free from sweeteners	YES
Free from vanillin	YES
Suitable for diabetics	YES
Suitable for Celiacs	YES
Suitable for Ovo-Lacto Vegetarians	YES
Suitable for Vegans	YES
Kosher Certified	YES
Halal Certified	YES



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