



SAFETY DATA SHEET

STEARIC ACID

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

1.1. PRODUCT IDENTIFIER

Product name: Stearic Acid
Product No.: STEARIC
CAS-No.: 67701-03-5
EC No.: 266-928-5
REACH No.: 01-2119543709-29
Synonym: Hexadecanoic Acid, Octadecanoic Acid
Chemical Formula: $C_{18}H_{36}O_2$

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Recommended use: As food additive;
In personal care products (soaps, cosmetics) and in detergents;
Lubricants, softening and release agents;
As a negative plate additive in the manufacture of lead-acid batteries.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

HD Chemicals LTD
UNIT 9 Scott Business Park
PL2 2PB Plymouth UK

Contact Person responsible for SDS: Mr Peter Konefal, e-mail: contact@hdchemicals.co.uk

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification 67/548/EEC: Not Classified
Classification – EC 1272/2008: Not Classified

**2.2. LABEL ELEMENTS**

No labelling requirements

SIGNAL WORDS

Not Classified

RISK PHRASES

Not Classified

HAZARD PHRASES

Not Classified

PROTECTION PHRASES

Not Classified

SAFETY PHRASES

Not Classified

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

67/548/EEC/1999/45/EC

Composition information – main constituents

Substance name	Mol. Formula	REACH	Typical conc. (%w/w)	EINECS No.	CAS-No.	Classification
Stearic Acid	C ₁₈ H ₃₆ O ₂	01-2119543709-29	N/A	266-928-5	67701-03-5	Not Classified



EC 1272/2008

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SECTION 4: FIRST AID MEASURES**4.1. DESCRIPTION OF FIRST AID MEASURES**

First-aid measures general: Consult a physician when you feel unwell. Show this safety data sheet to the doctor in attendance.

Inhalation: Remove casualty from exposure ensuring one's own safety while doing so. Seek medical advice.

Ingestion: DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor.

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Seek medical advice if irritation occurs after washing.

Eye contact: Bath the eyes with running water for 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention. Continue to rinse.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Ingestion: There may be soreness and redness of the mouth and throat.

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically



SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray, carbon dioxide (CO₂), dry chemical powder, alcohol or polymer foam.

Unsuitable extinguishing media: High volume water jet.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

In combustion emits toxic fumes of carbon dioxide, carbon monoxide.

5.3. ADVICE FOR FIRE-FIGHTERS

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear suitable protective equipment (splash goggles, protective suit, boots, gloves and self-contained breathing apparatus) to prevent any contamination of skin, eyes and personal clothing. Ensure adequate ventilation of the working area. Avoid contact with skin and eyes. Avoid breathing vapours, mist or gas. Avoid formation of dust. Keep unprotected persons away.

For personal protection see section 8.1.

6.2. ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment. Do not allow to enter sewers/ surface or ground water. Do not allow to enter into soil/subsoil. Prevent further spillage using binding if safe to do so. Use appropriate container to avoid environmental contamination.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Mix with sand or vermiculite. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Wash clothing and equipment after handling. Avoid dust formation. Ensure adequate ventilation.



SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust. Do not inhale dust/smoke/mist. Do not handle in a confined space. Ensure adequate ventilation of the working area. Wear personal protective equipment. Avoid contact with eyes and skin. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

For precautions see section 2.2.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep in a cool, dry, well ventilated area. Keep in original tightly closed containers. Keep away from sources of ignition, heat and direct sunlight.

7.3. SPECIFIC END USE(S)

See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS/EXPOSURE GUIDELINES

Occupational Exposure Limit Values (Stearic Acid):

CAS NO	Exposure limit	Value	Name of Agent
67701-03-5	TWA – 8 Hrs	N/A	N/A
67701-03-5	STEL – 15 Min	N/A	N/A

Engineering controls:

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before breaks and at the end of the working day. Keep away from sources of ignition, heat and direct sunlight.



EYE PROTECTION



FACE SHIELD



RESPIRATOR



PROTECTION WEAR



HAND PROTECTION

- Protective equipment:** Use protective tightly fitting safety goggle (European standard - EN 166), gloves (European standard - EN 374) and long sleeved clothing to prevent skin, body and eyes exposure.
- Respiratory equipment:** Respiratory protection not required but self-contained breathing apparatus must be available in case of emergency.
- Skin and body protection:** Wear appropriate protective gloves and clothing to prevent skin exposure. Protective clothing with elastic cuffs and closed neck. The gloves material has to be impermeable and resistant to the product. Protective gloves should be replaced at first signs of wear. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact.
- Eye/Face protection:** Wear appropriate safety goggles as described by EU Standard. Ensure eye bath is to hand.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Flakes
Colour:	White/pale cream
Odour:	Mild
Initial boiling point (°C):	No data available
Melting point (°C):	55-66°C
Freezing point:	No data available
Relative density:	0.941 g/cm ³



Specific gravity / density:	Not available
Vapour density:	Not available
Vapour pressure:	Not available
Flash point (°C):	Not available
Molecular mass:	284.484 g/mol
Auto-ignition temperature:	Not applicable
Oxidizing properties:	Not available
Decomposition temperature:	Not available
Molecular formula:	C ₁₈ H ₃₆ O ₂

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

Stearic Acid is non-reactive under normal conditions of use, storage and transport.

10.2. CHEMICAL STABILITY

This product is stable under room temperature, normal conditions and under recommended usage and storage.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

May liberate toxic gases. See section 10.5

10.4. CONDITIONS TO AVOID

Keep away from sources of ignition, heat and direct sunlight.

10.5. INCOMPATIBLE MATERIALS

May liberate toxic gases. Incompatible with strong oxidising agents and strong acids.

10.6. HAZARDOUS DECOMPOSITION

In combustion emits toxic fumes of carbon dioxide / carbon monoxide.



SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

TOXIC DOSE **LD50 Oral – Rat – > 2000 mg/kg**

LD50 Dermal – Rabbit – > 5000 mg/kg

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Ingestion: There may be soreness and redness of the mouth and throat.

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Aquatic Toxicity:

Toxicity to freshwater fish: LC50: > 10000 mg/l, 48h

12.2. PERSISTENCE AND DEGRADABILITY

Readily biodegradable.

12.3. BIOACCUMULATIVE POTENTIAL

No bioaccumulation potential.

12.4. MOBILITY

Insoluble in water.

12.5. RESULTS OF PBT AND vPvB ASSESSMENT

This product is not identified as a PBT/vPvB substance.

12.6. OTHER ADVERSE EFFECTS

No data available.



SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal recommendations: Disposal of stearic acid be in accordance with local and national legislation. Processing, use or contamination of this product may change the waste management options. Should not be released into the environment. Dispose of container and unused contents in accordance with applicable member state and local requirements. Dispose of as normal industrial waste. Dispose of in accordance with the European Directives on waste.

Uncleaned packaging: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

IMDG

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

ADR/RID

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

IATA

UN number	N/A
UN proper shipping name	N/A
Transport hazard class(es)	N/A
Packing group	N/A

SECTION 15: REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).



15.2 CHEMICAL SAFETY ASSESSMENT

A chemical safety assessment has been carried out for the substance or the mixture by the supplier.

SECTION 16: OTHER INFORMATION

General information

The information contained in this safety data sheet is provided in accordance with the requirements of the regulations. The product should not be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instruction. As the specific conditions of use of the product are outside the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

Revision Comments

This information is provided in a revised format to that previously produced.

Revision Date: 01/10/2018

Revision: 01

Safety Data Sheet Status Approved.

Date printed 01/10/2018

Signature Initials P.K.

DISCLAIMER:

If this product is re-distributed and re-formulated for sale, details of its hazards and recommended methods for safe handling must be passed to customers. Customers are urged to ensure that the product is entirely suitable for their own purpose. It is the customer's responsibility to ensure that a suitable and sufficient assessment of the risks created by a work activity using this product is undertaken before this product is used.

NOTE:

The information contained in this Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other Health & Safety Legislation (e.g. the Health and Safety at Work Act,1974;the control of Substances Hazardous to Health Regulations,1988). The data given here is based on current knowledge and experience. The purpose of this data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.