


MATERIAL SAFETY DATA SHEET**1. Chemical Product and Company Identification**

- a. Product name : **WILFARIN STEARIC ACID**
b. Recommended use of the chemical and restrictions on use : Chemical intermediate
c. Company name : PT. Wilmar Nabati Indonesia
Address : Jl. Kapten Darmo Sugondo no. 56 Gresik.
East Java – Indonesia, 61124
Emergency contact : Tel : +62-31-3976777 Fax : +62-31-3975601

2. Hazards Identification

- a. Hazard classification : Skin irritant,
b. Label elements including precautionary statements
- Pictograms

 - Signal words : Warning
 - Hazard statements : Causes skin irritation
 - Precautionary statements :
Wear protective gloves, protective clothing, eye protection, face protection.
If skin irritation occurs : Get medical advice and attention.
Wash hands thoroughly after handling.
Take off contaminated clothing and wash before reuse.
- c. Other hazards which do not result in classification (e.g. dust explosion hazard) :
Depending on practical size and concentration explosive dust/air mixture can be formed.

3. Composition/Information on Ingredients

- Product Description : Stearic Acid
Product Code : WILFARIN SA-1810/1804/1838/1843/1845/1850/1865/1892
Formula : $C_{16}H_{32}O_2 - C_{18}H_{36}O_2$
CAS No. : 57-11-4
EC No. : 200-313-4

4. First-aid Measures

- a. Eye contact
Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open.
Obtain medical attention urgently.
- b. Skin contact
Wash skin thoroughly with soap and water. Remove contaminated clothing as washing proceeds.
- c. Inhalation
Remove from exposure. Keep warm and at rest. Seek medical Attention if you feel unwell.
- d. Ingestion
Wash out mouth with water. Do not induce vomiting. Keep warm and at rest. Seek medical.
- e. Most important acute and delayed symptoms/effects
None

- f. First aid and notes for physicians : Not available

5. Fire Fighting Measures

- a. Suitable (and unsuitable) extinguishing media
Use dry powder, water spray, foam, carbon dioxide for extinguishing. Avoid using large quantities of water.
- b. Specific hazards arising from the chemical (e.g. hazardous combustion products)
Irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- c. Special protective equipment and precautions for fire-fighters
Wear a self-containing breathing apparatus and full protective gear.

6. Accidental Release Measures

- a. Measures required for personal protection and protective equipment
Use rubber gloves, air respirator, goggles, safety shoes and lab coat. Remove contaminated clothing and wash hands between breaks and at end of duty hours. Locate eye washes and emergency showers in all work and storage areas.
- b. Measures required for environment protection : Not available
- c. Clean-up and removal method
Remove all potential ignition sources. Contain spilled material. Cover with an inert or non-combustible inorganic absorbent material, sweep up and remove to an approved disposal container. Clean with hot water & detergents. Observe state, federal & local disposal regulations.

7. Handling and Storage

- a. Precautions for safe handling
Use in well ventilated areas. Avoid creating dust. Avoid inhaling dust. Avoid contact with eyes, skin and clothing. Avoid contact with skin eyes and clothes. Wear personal protective equipment (see section 8). Wear respiratory protection. Material can be slippery underfoot.
- b. Conditions for safe storage (including incompatibilities)
Keep away from drains, soils, surface & ground waters. Store in tightly closed original container when not in use. Storage area should be cool and dry. Keep away from ignition sources & naked flames. Store according to hazard classification.

8. Exposure Controls and Personal Protective Equipment

- a. Exposure limits of the chemical substance, biological exposure limits and etc.
None established.
- b. Appropriate engineering controls
Use normal precautionary measures for handling chemicals.
- c. Personal protective equipment
 - Protection of respiratory system : Wear air respirator
 - Eye protection : Wear goggles
 - Hand protection : Wear protective gloves
 - Body protection : Wear protective clothing, safety shoes

9. Physical and Chemical Properties

a. Appearance (physical state, color, etc.)	: White Solid
b. Odor	: Typical
c. Odor threshold	: Not Available
d. pH	: Not Available
e. Melting point/freezing point	: 56 °C
f. Initial boiling point and boiling range	: > 178–191 °C
g. Flash point	: > 190 °C
h. Evaporation rate	: Not Available
i. Flammability (solid, gas)	: Not Available
j. Upper/lower flammable or explosive limits	: Not Available
k. Vapor pressure	: 0.1 at 70 °C, mmHg
l. Solubility	: soluble in organic solvent
m. Vapor density	: Not Available
n. Specific gravity	: Not Available
o. Partition coefficient : n-octanol/water	: Not Available
p. Auto-ignition temperature	: Not Available
q. Decomposition temperature	: Not Available
r. Viscosity	: Not Available
s. Molecular weight	: Not Available
t. Color	: White
u. Density, kg/L at 75/25 °C	: 0.845
v. Bulk density (20 °C)	: Not Available
w. Log P octanol / water	: Not Available
x. Volatile Fraction by Weight	: Not Available

10. Stability and Reactivity

- a. Chemical stability : Stable at room temperature in closed containers under normal storage and handling conditions.
- b. Possibility of hazardous reactions : Not available
- c. Conditions to avoid (e.g. static discharge, shock, vibration, etc.) : Strong oxidizing agents
- d. Incompatible materials : Strong acid
- e. Hazardous decomposition products
Thermal decomposition or burning may produce carbon monoxide and/or Carbon Dioxide.

11. Toxicological Information

- a. Information on the likely routes of exposure
 - (Respiratory system) : Not available
 - (Oral) : Rat was 10 gr/kg of body weight.
 - (Eye · skin) : May cause skin irritating of 75 mg/3D-I MLD
- b. Delayed and immediate effects and chronic effects from short or long term exposure
 - Acute toxicity (All routes of possible exposure shall be mentioned.) : None
 - Skin corrosion/irritation : Skin irritation
 - Serious eye damage/eye irritation : Eye irritation
 - Respiratory sensitization : None
 - Skin sensitization : None
 - Carcinogenicity : None
 - Germ cell mutagenicity : None
 - Reproductive toxicity : None

- Specific target organ toxicity (single exposure) : None
- Specific target organ toxicity (repeated exposure) : None
- Aspiration hazard : None
- c. Numerical measures of toxicity (acute toxicity estimation (ATE), etc.) : None

12. Effects on the Environment

- a. Aquatic and terrestrial ecotoxicity :
 - Daphnia magna:
 - Palmitic and stearic acids; not acutely toxic to Daphnia Magna at concentrations
 - Red killifish 96h LD50 125 mg/l (sodium salt)
- b. Persistence and degradability : Readily biodegradable when dissolved in water
- c. Bioaccumulation : Not available
- d. Mobility in soil : Not available
- e. Other adverse effects : Not available
- f. Acute fish toxicity :
 - Goldfish (lethal dose) 14 mg/l (sodium salt)
 - Red killifish 96h LD50 125 mg/l (sodium salt)
- g. Chronic bacteria toxicity : Not available

13. Disposal Considerations

- a. Disposal methods: Waste may be disposed of by a licensed waste disposal company. Follow local, state and federal disposal regulations.
- b. Precautions for disposal (including the disposal method of contaminated containers and packages).
Product and packaging should be disposed off in accordance with the local, state and federal regulations.

14. Transport Information

- a. UN number : Not available
- b. UN proper shipping name : Not available
- c. Transport hazard classes : Not available
- d. Packing group, if applicable : Not available
- e. Marine pollutant (yes/no) : no
- f. IBC Code Name : Fatty Acid C₁₆₊ (n)
- g. Information on any special precautions, which a user needs to be aware of, or needs to comply with in connection with transport
Not a hazardous material according to RID/ADR, GGVS/GGVE, ADNR, IMDG-Code, ICAO-TI/IATA-DGR.

15. Regulatory Information

- a. Industrial Safety and Health Law : Not available
- b. Toxic Chemical Control Law : Not available
- c. Dangerous Substance Safety Management Law : Not available
- d. Wastes Management Law : Not available
- e. Other regulations in domestic and foreign countries
Observe prescribed Federal, State and Local measures for dealing with chemicals listed on EINECS (EU), TSCA-CSI (USA), DSL (Canada), AICS (Australia), ENCS (Japan), ECL (Korea), PICCS (the Philippines) and IECSC (China).

16. Other Information

- a. The first date of preparation : 2009-11-10
- b. Number of revision times : 1
Revision date : 2013-5-7
- c. Others

This information presented here is believed to be accurate and pertains only to the product when stored in a sealed condition, as prescribed above. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product. PT. Wilmar Nabati Indonesia shall in no way be liable for any claims, losses and damages of any third party, or for lost profits, or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, from the use of this product.