

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



### SECTION 1: Identification of the substance or mixture and the company or undertaking

#### 1.1 Product identifier

Product type : Mixture  
Trade name : CA1030 Triple Pressed Stearic Acid  
Label name : CA1030 Triple Pressed Stearic Acid  
Chemical name : Stearic acid, palmitic acid, myristic acid and margaric acid  
CAS number : 57-11-4  
EC number : 200-313-4

#### 1.2 Recommended and restricted uses of the substance or mixture

Recommended uses : Industrial, lubricants, personal care, cleaners, detergents, soaps, textile additives, rubber additives.  
Restricted uses : None known.

#### 1.3 Company identification

Company name : Chemical Associates – A Division of Univar USA Inc.  
Company address : 1270 South Cleveland Massillon Road  
: Copley, OH 44321-1683  
Company telephone : 330-666-5200

#### 1.4 Emergency telephone number

Company emergency telephone : 800-347-2891  
CHEMTREC telephone : 800-424-9300

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification (29CFR1910.1200 Appendix A) : None.  
GHS physical hazard : None.  
GHS health hazard : None.  
GHS environmental hazard : None.

#### 2.2 Label warnings of the substance or mixture

Signal word : None.  
Hazard statements : None.  
Precautionary statements : None.

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



Hazard symbol (pictogram) : None.

### 2.3 Hazards not otherwise classified

Other hazards : May form explosive dust clouds in air  
: Particles in air may cause eye irritation.  
: Inhalation or ingestion may cause mucous membrane irritation.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	Common name	Percent	CAS number	Health hazard
Not applicable.				

### 3.2 Mixtures

Chemical name	Common name	Typical %	CAS number	Health hazard
Hexadecanoic acid	Palmitic Acid	50 - 55	57-10-3	None
Octadecanoic acid	Stearic Acid	45 - 50	57-11-4	None
Tetradecanoic acid	Myristic Acid	2 - 5	544-63-8	None
Heptadecanoic acid	Margaric Acid	0 - 1	506-12-7	None

## SECTION 4: First-aid measures

### 4.1 Description of first-aid measures

Exposure route	First-aid measure
Inhalation	: Remove the victim into fresh air. Observe victim's breathing. If breathing is labored seek immediate medical attention.
Skin contact	: Wash with soap and water. If irritation develops, seek medical attention. Launder contaminated clothing.
Eye contact	: Rinse immediately with plenty of water for 15 minutes. Remove contact lenses if present and easy to do. If irritation occurs, seek immediate medical (ophthalmologist) attention.
Ingestion	: Rinse mouth with plenty of water. For ingestion of large quantities seek immediate medical attention. Do not induce vomiting. Contact poison control center.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms after inhalation	: May experience dizziness and headache. : Mild irritation of the nose and throat may occur.
Symptoms after skin contact	: Mild irritation of the skin may occur.
Symptoms after eye contact	: Mild irritation of the eye tissue may occur. : May cause corneal inflammation.
Symptoms after ingestion	: Mild tingling of the tongue and mouth.

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



: May cause gastrointestinal irritation, nausea and vomiting.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment after inhalation : If breathing is labored seek immediate medical attention.  
Treatment after skin contact : If skin irritation occurs seek immediate medical attention.  
Treatment after eye contact : If eye irritation occurs seek immediate ophthalmologist attention.  
Treatment after ingestion : If ingestion of a large quantity seek immediate poison control center.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable media : Carbon dioxide, alcohol resistant foam and water spray.  
Unsuitable media : None known.

### 5.2 Specific hazards arising from the substance or mixture

Direct fire hazard : Not flammable.  
Indirect fire hazard : Exposure to temperature above the flash point (196°C).  
Explosive hazard : Exposure to temperature above the flash point (196°C).  
Reactivity : Reactivity with strong oxidizers.  
Combustion products : Carbon dioxide and carbon monoxide.

### 5.3 Special protective equipment and precautions for fire-fighters

Protective equipment : Full protective clothing.  
: Self-contained breathing apparatus.  
Precautions : No additional information available.  
Emergency response guide : Not a hazardous material.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Mixture is not hazardous. If mixture is a hot mist or dust, stay upwind.  
Protective equipment : Wear rubber gloves, rubber boots, face shield and chemical hazard suit. If material is a hot mist or dust wear dust mask or self-contained breathing apparatus.  
Emergency procedures : Mark the spill area with hazard tape or cones. Contain the hot liquid spill area with suitable absorbent. Keep away from streams, rivers and lakes. If mixture is a hot mist or dust, alert immediate neighborhood to close windows and doors. Contain and dissipate hot mist or dust via spraying with water.

### 6.2 Environmental precautions

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



Precautions : Keep out of streams, rivers and lakes. Mixture is regulated as oil under the Clean Water Act. Abide by all laws per this regulation.

### 6.3 Methods and materials for containment and cleanup

Methods : Use chemical absorbent pigs or manually spread absorbent onto hot liquid spill area. After the mixture is absorbed, dispose in approved waste facility.

Materials : Approved materials include dry earth, sand, clay, chemical absorbent, vermiculite and carbon.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling temperature : About 10 - 20°C above the melt point (53 - 58°C).

Handling equipment : Rubber hoses or stainless steel (grade 304) lines. Stainless steel (grade 304) for pumps.

### 7.2 Conditions for safe storage, including any incompatibilities

Storage area : Store in dry area. Store at room temperature. Store in dyke area to contain any spills. Protect from heat.

Packaging materials : Polyethylene, stainless steel (grade 304) and rubber lined or epoxy lined tanks or drums. Graphite or rubber gaskets.

Incompatibilities : Kraft or polyethylene bags for flake, bead or powder form.  
: Strong oxidizers.

## SECTION 8: Exposure controls/personal protection

### 8.1 Exposure controls

OSHA PEL : None.

ACGIH TLV : None.

NIOSH REL : None.

### 8.2 Appropriate engineering controls

Engineering controls : If dust exists, install ventilation equipped with carbon canisters. Ventilation should be 10 air exchanges per hour. Local exhaust ventilation is recommended.

### 8.3 Personal protection equipment

Personal protective equipment : Rubber gloves and safety glasses. Dust mask if dust exists.

Personal protective equipment pictograms :

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



### SECTION 9: Physical and chemical properties

#### 9.1 Physical and chemical properties

Appearance	: White to slightly yellow flake, bead or powder in solid form. : Clear light color liquid above the mixture melt point (53 - 58°C).
Odor	: Mild fatty.
Odor threshold	: No data available.
pH	: No data available. Mixture is not readily soluble in water.
Melting point	: 53 - 58°C range.
Boiling point	: > 380°C (decomposes).
Flash point	: 196°C (Cleveland Closed Cup).
Evaporation rate	: No data available.
Flammability	: Not flammable.
Lower flammability limit	: No data available.
Upper flammability limit	: No data available.
Vapor pressure	: 1.0 mm Hg at 180°C (this mixture). : 4.3x10 <sup>-8</sup> mm Hg at 25°C (stearic acid). : 3.8x10 <sup>-7</sup> mm Hg at 25°C (palmitic acid). : 1.4x10 <sup>-6</sup> mm Hg at 25°C (myristic acid).
Vapor density	: No data available.
Relative density	: 0.849 at 75/25°C (water).
Solubility	: Complete in ethanol and acetone. : Insoluble in water.
Partition coefficient for n-octanol/water	: Log Kow = 8.23 (stearic acid). : Log Kow = 7.17 (palmitic acid). : Log Kow = 6.10 (myristic acid).
Auto-ignition temperature	: 395°C.
Decomposition temperature	: 380 - 385°C.
Viscosity	: 7.79 mPas (cps) at 80°C.

#### 9.2 Other information

Other information : No additional information available.

### SECTION 10: Stability and reactivity

Reactivity	: May react violently with oxidizers.
Chemical stability	: Stable under storage conditions.
Possibility of hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Pressure, shock, static discharge or vibration does NOT result in a hazardous condition.

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



Incompatible materials : Oxidizers and strong bases.  
Hazardous decomposition products : Carbon dioxide and carbon monoxide.

### SECTION 11: Toxicological information

#### 11.1 Information on the likely routes of exposure

Inhalation exposure : From hot mist or dust.  
Skin exposure : From hot mist or dust.  
Ingestion exposure : Not a likely route of exposure.  
Eye contact : From hot mist or dust.

#### 11.2 Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Labored breathing and mild irritation of the lungs may occur.  
Skin contact : Mild skin irritation may occur.  
Ingestion : Mild irritation of the mouth, tongue, esophagus and stomach may occur.  
Eye contact : Mild eye irritation may occur.

#### 11.3 Delayed and immediate effects and also chronic effects from short and long term exposure

Inhalation : Chronic effects are not known.  
Skin contact : Chronic effects are not known.  
Ingestion : Chronic effects are not known.  
Eye contact : Chronic effects are not known.

#### 11.4 Numerical measures of toxicity

Oral LD50 : Rat 4600 mg/kg (stearic acid).  
: Rat > 10000 mg/kg (palmitic acid).  
: Rat > 10000 mg/kg (myristic acid).  
: Mouse 57 mg/kg intravenous (palmitic acid).  
: Mouse 43 mg/kg intravenous (myristic acid).  
Skin LD50 : Rabbit > 5000 mg/kg (this mixture).  
Ingestion LD50 : Human LD100 14286 mg/kg (stearic acid).  
Inhalation LD50 : No data available.  
Skin primary irritation : Only one of 116 human subjects exposed to a repeat insult patch test of 0.1 ml of a cosmetic containing 10% stearic acid developed moderate erythema.  
: Of 100 human subjects exposed to a shave foam formulation containing 8% stearic acid over a 2 to 4 week period, none developed skin irritation.  
: Stearic acid produced no skin irritation in humans in closed-patch tests when applied as a 7% solution in petrolatum for 48 hours.  
: Of 52 human subjects exposed to a repeat insult patch test of a shave cream formulation containing 2.2% palmitic acid, none developed skin irritation.

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



Eye primary irritation

- : Of 16 human subjects exposed to 0.2 ml of a 50% solution of myristic acid in mineral oil for 5 days, the erythema score was 0.48 (maximum score of 5).
- : No ocular irritation occurred in 6 albino rabbits treated with commercial grade stearic acid.
- : Mild conjunctival erythema occurred in 3 of 6 albino rabbits treated with triple pressed stearic acid.
- : Cosmetic product formulations containing 2.2 and 4.4% palmitic acid produced no ocular irritation in 6 albino rabbits.
- : Slight conjunctival irritation was produced in rabbit eyes 24 hours after instillation of commercial grade myristic acid and 50% myristic acid in petrolatum.

### 11.5 Carcinogenicity

National Toxicology Program : Not listed.  
International Agency for : Not listed.  
Research on Cancer  
OSHA : Not listed.  
NIOSH : Not listed.

### 11.6 Other toxicological information

Reproductive toxicity : Not classified.  
Germ cell mutagenicity : Not classified.  
Respiratory or skin sensitization : Not classified.  
Specific target organ toxicity, : No data available.  
single exposure  
Specific target organ toxicity, : No data available.  
repeated exposure  
Aspiration hazard : No data available.

## SECTION 12: Ecological information

### 12.1.1 Ecotoxicity aquatic

Fish LC50 : 125 mg/l 96 hour red killifish (stearic acid sodium salt).  
: 118 mg/l 96 hour red killifish (myristic acid sodium salt).  
Daphnia EC50 : No data available.  
Rotifer EC50 : No data available.  
Algae EC50 : No data available.

### 12.1.2 Ecotoxicity terrestrial

Ecotoxicity terrestrial : No data available.

### 12.2 Persistence and degradability

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



Water	: 43.9% 5 day BOD activated sludge (stearic acid). : 37% 5 day BOD activated sludge (palmitic acid). : 2% 5 day BOD/COD (myristic acid). : Readily degradable.
Soil	: Koc = 710,000 (stearic acid). : Koc = 189,000 (palmitic acid). : Koc = 50,000 (myristic acid). : Immobile.
Air	: 17 hour half-life (stearic acid). : 20 hour half-life (palmitic acid). : 23 hour half-life (myristic acid).

### 12.3 Bio-accumulative potential

Log Kow	: 8.23 (stearic acid). : 7.17 (palmitic acid). : 6.10 (myristic acid). : This mixture has the potential to bio-concentrate.
---------	--

### 12.4 Mobility in soil

Surface tension	: No data available.
Soil mobility	: Koc = 710,000 (stearic acid). : Koc = 189,000 (palmitic acid). : Koc = 50,000 (myristic acid). : Immobile.

### 12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment	: No data available.
-------------------------	----------------------

### 12.6 Other adverse effects

Air	: Not dangerous to the ozone layer.
Water	: Mild pollutant to surface of water.

## SECTION 13: Disposal considerations

### 13.1 Description of waste residues

Storage tank residues	: Hot liquid residue from tank cleaning.
Empty package residues	: Solid residue remaining in emptied bag or drum container.
Transport trailer residues	: Hot liquid residue from transport trailer cleaning.
Absorbent material	: Solid absorbent containing mixture from a spill.

### 13.2 Safe handling of waste residues

Storage tank residues	: Refer to section 7 for safe handling.
Empty package residues	: Refer to section 7 for safe handling.



# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



Transport trailer residues : Refer to section 7 for safe handling.  
Absorbent material : Refer to section 7 for safe handling.

### 13.3 Methods of disposal

Storage tank residues : Dispose via an approved incineration facility.  
: Dispose via an approved land fill facility.

Empty package residues : Dispose only in accordance with local, state and federal regulations.  
: Remove package to an approved package cleaning and recycling facility.

Transport trailer residues : Dispose only in accordance with local, state and federal regulations.  
: Clean transport trailer at an approved cleaning facility.  
: Disposal of cleaning residues must be in accordance with local, state and federal regulations.

Absorbent material : Dispose via an approved incineration facility.  
: Dispose via an approved land fill facility.  
: Dispose only in accordance with local, state and federal regulations.

### 13.4 Hazardous waste classification (RCRA)

Classification	Regulation	Listed	Hazardous waste number
Ignitability	40CFR261.21	No	
Corrosivity	40CFR261.22	No	
Reactivity	40CFR261.23	No	
Toxicity	40CFR261.24	No	

## SECTION 14: Transport information

### 14.1 UN number

UN number : None.

### 14.2 UN proper shipping name

Proper shipping name : None.

### 14.3 Transport hazard class

Hazard class : None.  
Hazard label : None.  
Hazard pictogram : None.

### 14.4 Packing group

Packing group : None.

### 14.5 Environmental hazards

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



Marine pollutant : Not listed.

### 14.6 Transport in bulk

US DOT : Not regulated.  
IMDG : Not regulated.  
IATA : Not regulated.  
MARPOL 73/78 : Not regulated.  
IBC code : Not regulated.

### 14.7 Special precautions for user

Special precautions : No additional information available.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the substance or mixture

#### 15.1.1 US regulations

SARA 302 (40CFR355) : Not listed.  
SARA 311/312 (40CFR370.66) : Not listed.  
SARA 313 (40CFR372.65) : Not listed.  
CERCLA (40CFR302.4) : Not listed.  
California proposition 65 : Not listed.  
German WGK class : 0 (no hazard to waters).

#### 15.1.2 Chemical inventories

TSCA USA : Listed.  
AICS Australia : Listed.  
DSL Canada : Listed.  
EC Europe : Listed.  
ECL Korea : Listed.  
IECSC China : Listed.  
ENCS Japan : Listed.  
NzloC New Zealand : Listed.  
PICCS Philippines : Listed.  
SWISS Switzerland : Listed.

### 15.2 Chemical safety assessment

Safety assessment : No additional information available.

## SECTION 16: Other information

# CA1030 Triple Pressed Stearic Acid

## Safety Data Sheet



### 16.1 Hazard ratings

	Health	Flammability	Physical hazards	Instability
HMIS (USA)	1	1	0	
NFPA (USA)	1	1		0

### 16.2 Safety Data Sheet information

Revision date (MM/DD/YY) : 05/14/2014  
Supersede date (MM/DD/YY) : 11/28/2012

### 16.3 Notice to reader

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Chemical Associates – A Division of Univar USA Inc. bears responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.