

**CA1331FK High Oleic Vegetable Oleic Acid, Food Grade,
Kosher
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 : CA1331 FK High Oleic Vegetable Oleic Acid, Food Grade, Kosher
Label name : CA1331 FK High Oleic Vegetable Oleic Acid, Food Grade, Kosher
Chemical name : Octadecenoic acid
CAS number : 112-80-1
EC number : 204-007-1

1.2 Recommended and restricted uses of the substance or mixture

Recommended uses : Industrial, cleaners, detergents, lubricants, agricultural additives, textile additives, coatings, inks, oil field 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.

Safety Data Sheet

Precautionary statements : None.
Hazard symbol (pictogram) : None.

2.3 Hazards not otherwise classified

Other hazards : No additional information available.

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 |
|----------------------|--------------------|-----------|------------|---------------|
| Octadecenoic acid | Oleic acid | 91 | 112-80-1 | None. |
| Octadecadienoic acid | Linoleic acid | 6 | 60-33-3 | None. |
| Hexadecanoic acid | Palmitic acid | 1 | 57-10-3 | None. |
| Octadecanoic Acid | Stearic Acid | 1 | 57-11-4 | None. |
| Fatty acids C14-18 | Fatty acids C14-18 | 1 | 67701-02-4 | None. |

SECTION 4: First-aid measures

4.1 Description of first-aid measures

Exposure route

Inhalation

First-aid measure

: Remove the victim into fresh air. Observe victim's breathing. If breathing is labored seek immediate medical attention.

Skin contact

: Wash immediately 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.
: Irritation of the nose and throat may occur.

Symptoms after skin contact

: Mild irritation of the skin may occur.

Symptoms after eye contact

: Irritation of the eye tissue may occur.

Safety Data Sheet

Symptoms after ingestion : May cause corneal inflammation.
: Mild tingling of the tongue and mouth may occur.
: 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 (184 C).
Explosive hazard : Exposure to temperature above the flash point (184 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 a hazardous material. If mixture is a mist or vapor, stay upwind.
Protective equipment : Wear rubber gloves, rubber boots, face shield and chemical hazard suit. If material is a mist or vapor wear dust mask or self contained breathing apparatus.
Emergency procedures : Mark the spill area with hazard tape or cones. Contain the spill area with suitable absorbent. Keep away from streams, rivers and lakes. If mixture is a mist or vapor, alert immediate neighborhood to close windows and doors. Contain and dissipate mist or vapor via spraying with water.

**CA1331FK High Oleic Vegetable Oleic Acid, Food Grade,
Kosher
Safety Data Sheet**



6.2 Environmental precautions

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 chemical absorbent onto 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 (16 C).

Handling equipment : Rubber hoses or steel 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 or stainless steel (grade 304), rubber lined or epoxy lined tanks or drums. Graphite or rubber gaskets.

Incompatibilities : Strong oxidizers and strong bases.

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 mist or vapors exist, 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 mist or vapors exist.

Safety Data Sheet

Personal protective equipment
pictograms :



SECTION 9: Physical and chemical properties

9.1 Physical and chemical properties

| | |
|--|---|
| Appearance | : Light yellow liquid. |
| Odor | : Mild vegetable oil. |
| Odor threshold | : No data available. |
| pH | : No data available. Mixture is not readily soluble in water. |
| Melting point | : 14 - 16 C. |
| Boiling point | : 286 C at 100 mm Hg (oleic acid). : 229 C at 16 mm Hg (linoleic acid). |
| Flash point | : 150 C Tag Closed Cup. |
| Evaporation rate | : No data available. |
| Flammability | : Not flammable. |
| Lower flammability limit | : No data available. |
| Upper flammability limit | : No data available. |
| Vapor pressure | : 5.46X10 ⁻⁷ mm Hg at 25 C (oleic acid). : 8.68X10 ⁻⁷ mm Hg at 25 C (linoleic acid). |
| Vapor density | : No data available. |
| Relative density | : 0.891 g/cm ³ at 20 C. |
| Solubility | : Complete in ethanol and acetone. : 1.15X10 ⁻² mg/l at 25 C in water (oleic acid). |
| Partition coefficient for n-octanol/water | : Log Kow = 7.64 (oleic acid). : Log Kow = 7.05 (linoleic acid). |
| Auto-ignition temperature | : 363 C (oleic acid). |
| Decomposition temperature | : No data available. |
| Viscosity | : 25.6 mPas (cps) at 30 C (oleic acid). |

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. |

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 mist, spray or vapors.
Skin exposure : From mist, spray or vapors.
Ingestion exposure : Not a likely route of exposure.
Eye contact : From mist, spray or vapors.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Labored breathing and 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 > 5000 mg/kg.
Skin LD50 : No data available.
Ingestion LD50 : No data available.
Inhalation LD50 : No data available.
Skin primary irritation : Human 14 slightly irritating (63 maximum score, oleic acid).
: Guinea pigs 24 hour no irritation (linoleic acid).
Eye primary irritation : Rabbit mild conjunctival erythema (linoleic acid).

11.5 Carcinogenicity

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

Safety Data Sheet

11.6 Other toxicological information

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

SECTION 12: Ecological information

12.1.1 Ecotoxicity aquatic

| | |
|--------------|---|
| Fish LC50 | : 389 mg/l 96 hour fathead minnow (oleic acid). |
| 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

| | |
|-------|--|
| Water | : 68% 5 day BOD (oleic acid). : 52% 5 day BOD (linoleic acid). : Readily degradable. |
| Soil | : Koc = 340,000 (oleic acid) : Koc = 163,000 (linoleic acid). : Immobile. |
| Air | : 5 hour half life (oleic acid). : 3 hour half life (linoleic acid). |

12.3 Bio-accumulative potential

| | |
|---------|---|
| Log Kow | : 7.64 (oleic acid). : 7.05 (linoleic acid). : This mixture has a potential to bio-concentrate. |
|---------|---|

12.4 Mobility in soil

| | |
|-----------------|---|
| Surface tension | : Air 32.8 dyne/cm at 20 C (oleic acid). |
| Soil mobility | : Koc = 340,000 (oleic acid) : Koc = 163,000 (linoleic acid). : Immobile. |

**CA1331FK High Oleic Vegetable Oleic Acid, Food Grade,
Kosher
Safety Data Sheet**



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 : Liquid residue from tank cleaning.
 Empty package residues : Liquid residue remaining in emptied package container.
 Transport trailer residues : 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.
 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 | |

Safety Data Sheet

| | | | |
|----------|-------------|----|--|
| 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

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

CA1331FK High Oleic Vegetable Oleic Acid, Food Grade, Kosher



Safety Data Sheet

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 : Unknown.
PICCS Philippines : Listed.
SWISS Switzerland : Unknown.

15.2 Chemical safety assessment

Safety assessment : No additional information available.

SECTION 16: Other information

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) : 03/25/2014
Supersede date (MM/DD/YY) : 10/17/2009

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.