



CHEMICAL ASSOCIATES
1270 South Cleveland-Massillon Road
Building B
Copley, OH 44321-1683

MATERIAL SAFETY DATA SHEET

EMERGENCY PHONE: 800-347-2891
MSDS REFERENCE: CA0400

CHEMTREC: 800-424-9300

SECTION I - IDENTIFICATION

PRODUCT: CA0400 FATTY ACID
SYNONYMS: TALL OIL TYPE FATTY ACID, OLEIC ACID
CHEMICAL: UNSATURATED ALIPHATIC CARBOXYLIC ACID
CAS NO: 112-80-1
SARA HAZARD: NONE NOTED (SECTION 311 / 312)
TITLE III SECTION 313 NOT LISTED

SECTION II - INGREDIENTS AND HAZARD CLASSIFICATION

COMPOSITION	TYPICAL %	PEL/TLV	HAZARD
OLEIC ACID (112-80-1)	52	NONE / NONE	NONE NOTED
LINOLEIC ACID (60-33-3)	40	NONE / NONE	NONE NOTED
PALMITIC ACID (57-10-3)	3	NONE / NONE	NONE NOTED
LINOLENIC (463-40-1)	2	NONE / NONE	NONE NOTED
STEARIC ACID (57-11-4)	2	NONE / NONE	NONE NOTED

SECTION III - HEALTH INFORMATION

INHALATION: NO SPECIAL VAPOROUS HAZARDS NOTED UNDER NORMAL CONDITIONS OF USE.

INGESTION: NO TOXIC DATA REPORTED. MAY CAUSE MILD GASTRO-INTESTINAL DISCOMFORT IF CONSUMED IN LARGE QUANTITIES.

EYE CONTACT: MAY CAUSE MILD, TEMPORARY IRRITATION.

SKIN CONTACT: MAY CAUSE MILD, TEMPORARY IRRITATION IN SENSITIVE INDIVIDUALS, OR WITH REPEATED OR PROLONGED EXPOSURE.

SECTION IV - OCCUPATIONAL EXPOSURE LIMITS

PEL: NO OSHA PEL
TLV: NO ACGIH TLV

SECTION V - EMERGENCY FIRST AID PROCEDURE

- INGESTION:** IF DISCOMFORT IS EXPERIENCED, DILUTE BY DRINKING A LARGE QUANTITY OF MILK OR WATER AND SEEK MEDICAL ATTENTION. DO NOT INDUCE VOMITING UNLESS ADVISED TO DO SO BY A PHYSICIAN OR POISON CONTROL CENTER.
- INHALATION:** IMMEDIATELY REMOVE VICTIM TO FRESH AIR. IF VICTIM HAS STOPPED BREATHING GIVE ARTIFICIAL RESPIRATION, PREFERABLY BY MOUTH TO MOUTH. GET MEDICAL ATTENTION IMMEDIATELY. ALSO SEEK MEDICAL ATTENTION IF A COUGH OR OTHER SYMPTOMS DEVELOP AFTER EXPOSURE.
- EYE CONTACT:** IMMEDIATELY FLUSH EYES WITH PLENTY OF COOL WATER FOR AT LEAST 15 MINUTES. DO NOT LET VICTIM RUB EYES. GET MEDICAL ATTENTION IMMEDIATELY.
- SKIN CONTACT:** WASH AFFECTED AREA WITH SOAP AND WATER. LAUNDRER CLOTHING BEFORE REUSE. SEEK MEDICAL ATTENTION IF A RASH OR IRRITATION PERSISTS.

SECTION VI - PHYSICAL DATA

- BOILING POINT:** 547 DEG F (286 DEG C) AT 100 MM HG PRESSURE (APPROX.)
- MELTING POINT:** 5 DEG C (APPROX.)
- VAPOR PRESSURE:** 10 MM HG PRESSURE AT 224 DEG C
- SPECIFIC GRAVITY:** 0.891 AT 25 / 20 DEG C
- SOLUBILITY IN WATER:** INSOLUBLE
- APPEARANCE AND COLOR:** YELLOW - BROWN LIQUID WITH A FATTY ACID ODOR

SECTION VII - FIRE AND EXPLOSION HAZARDS

- FLASH POINT AND METHOD USED:** 364 - 372 DEG F (184-189 DEG C)
CLOSED CUP
- FLAMMABLE LIMITS IN AIR, % BY VOL. LOWER:** NOT ESTABLISHED
- FLAMMABLE LIMITS IN AIR, % BY VOL. UPPER:** NOT ESTABLISHED
- NFPA RATING: HEALTH: (0) FIRE: (1) REACTIVITY: (0)**
- HMIS RATING: HEALTH: (1) FIRE: (1) REACTIVITY: (0)**

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS:

INDIVIDUALS SHOULD PERFORM ONLY THOSE FIRE PROCEDURES FOR WHICH THEY HAVE BEEN TRAINED. WATER OR FOAM MAY CAUSE FROTHING WHEN APPLIED TO FLAMMABLE LIQUIDS HAVING FLASH POINTS ABOVE 212 DEG F (100 DEG C). THE REMARK IS INCLUDED ONLY AS A PRECAUTION AND DOES NOT MEAN THAT WATER OR FOAM SHOULD NOT OR COULD NOT BE USED IN FIGHTING FIRES IN SUCH LIQUIDS. THE FROTHING MAY BE QUITE VIOLENT AND COULD ENDANGER THE LIFE OF THE FIREFIGHTER PARTICULARLY WHEN SOLID STREAMS ARE DIRECTED INTO THE HOT BURNING LIQUID. ON THE OTHER HAND, WATER SPRAY CAREFULLY APPLIED HAS FREQUENTLY BEEN USED WITH SUCCESS IN EXTINGUISHING SUCH FIRES BY CAUSING THE FROTHING TO OCCUR ONLY ON THE SURFACE AND THIS FOAMING ACTION BLANKETS THE EXTINGUISHES THE FIRE. (NFPA 325M-1984)

UNUSUAL FIRE AND EXPLOSION HAZARDS:

FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS IN THE

POSITIVE-PRESSURE MODE WITH A FULL FACEPIECE WHEN THERE IS A POSSIBILITY OF EXPOSURE TO SMOKE, FUMES OR HAZARDOUS DECOMPOSITION PRODUCTS.

SECTION VIII - REACTIVITY

STABILITY:	GENERALLY STABLE
HAZARDOUS POLYMERIZATION:	NONE LIKELY
CONDITIONS AND MATERIALS TO AVOID:	AVOID CONTACT WITH STRONG OXIDIZING AGENTS AND STRONG ALKALIES. (ALSO SEE WASTE DISPOSAL, SECTION X.)
HAZARDOUS DECOMPOSITION PRODUCTS:	DECOMPOSITION MAY PRODUCE CARBON MONOXIDE AND CARBON DIOXIDE.

SECTION IX - EMPLOYEE PROTECTION

CONTROL MEASURES:
HANDLE IN THE PRESENCE OF ADEQUATE VENTILATION.

RESPIRATORY PROTECTION:
RECOMMENDED EXPOSURE LIMITS (I.E., OSHA - PEL AND AOGIH - TLV) HAVE NOT BEEN ESTABLISHED FOR THIS MATERIAL. WHETHER THERE IS A NEED FOR RESPIRATORY PROTECTION UNDER YOUR CONDITIONS OF HANDLING OF THIS MATERIAL SHOULD BE EVALUATED BY A QUALIFIED HEALTH SPECIALIST.

PROTECTIVE CLOTHING:
WEAR GLOVES AND PROTECTIVE CLOTHING WHICH ARE IMPERVIOUS TO THE PRODUCT FOR THE DURATION OF ANTICIPATED EXPOSURE IF THERE IS POTENTIAL FOR PROLONGED OR REPEATED SKIN CONTACT.

EYE PROTECTION:
WEAR SAFETY GLASSES MEETING THE SPECIFICATIONS OF ANSI STANDARD Z87.1 WHERE NO CONTACT WITH THE EYE IS ANTICIPATED. CHEMICAL SAFETY GOGGLES MEETING THE SPECIFICATIONS OF ANSI STANDARD Z87.1 SHOULD BE WORN WHENEVER THERE IS THE POSSIBILITY OF SPLASHING OR OTHER CONTACT WITH THE EYES.

SECTION X - ENVIRONMENTAL PROTECTION

ENVIRONMENTAL PRECAUTIONS:
AVOID UNCONTROLLED RELEASES OF THIS MATERIAL. WHERE SPILLS ARE POSSIBLE, A COMPREHENSIVE SPILL RESPONSE PLAN SHOULD BE DEVELOPED AND IMPLEMENTED.

SPILL OR LEAK PRECAUTIONS:
WEAR APPROPRIATE RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING AS DESCRIBED IN SECTION IX. CONTAIN SPILLED MATERIAL. TRANSFER TO SECURE CONTAINERS. WHERE NECESSARY, COLLECT USING ABSORBENT MEDIA. IN THE EVENT OF AN UNCONTROLLED RELEASE OF THIS MATERIAL, THE USER SHOULD DETERMINE IF THE RELEASE IS REPORTABLE UNDER APPLICABLE

LAWS AND REGULATIONS.

WASTE DISPOSAL:

NOTE. UNSATURATED FATTY ACIDS ARE SUBJECT TO RELATIVELY FAST OXIDATION. MATERIALS WHICH INCREASE THE SURFACE AREA OF AIR EXPOSURE, SUCH AS CLOTH (RAGS), PAPER, SAWDUST, AND ABSORBANT CLAYS, MAY SPONTANEOUSLY COMBUST WHEN WETTED WITH SUCH ACIDS. ARTICLES USED TO CLEAN UP SPILLS SHOULD BE DISPOSED OF WITH THIS IN MIND. ALL RECOVERED MATERIAL SHOULD BE PACKAGED, LABELED, TRANSPORTED, AND DISPOSED OR RECLAIMED IN CONFORMANCE WITH APPLICABLE LAWS AND REGULATIONS AND IN CONFORMANCE WITH GOOD ENGINEERING PRACTICES. AVOID LANDFILLING OF LIQUIDS. RECLAIM WHERE POSSIBLE.

SECTION XI - REGULATORY CONTROLS

DEPARTMENT OF TRANSPORTATION:

DOT CLASSIFICATION: NOT REGULATED
DOT PROPER SHIPPING NAME:
OTHER DOT INFORMATION:

OTHER REGULATORY REQUIREMENTS:

LISTED IN TSCA INVENTORY
LISTED IN CANADIAN DSL
LISTED IN EUROPEAN EINECS
LISTED IN AUSTRALIAN AICS
LISTED IN JAPANESE MITI
LISTED IN KOREAN ECL
LISTED IN PHILLIPINES PICCS

CERCLA HAZARDOUS MATERIALS:

NONE NOTED

SECTION XII - PRECAUTIONS: HANDLING, STORAGE AND USAGE

NO SPECIAL PRECAUTIONS NECESSARY.

KEEP IN CLOSED OR COVERED CONTAINERS AND DO NOT STORE NEAR HEAT OR OPEN FLAMES TO PRESERVE THE COLOR AND ODOR CHARACTERISTICS OF THE PRODUCT.

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 bears responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

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SUPERSEDES: 06/02/08