



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

MATERIAL SAFETY DATA SHEET

EMERGENCY PHONE: 800-347-2891
MSDS REFERENCE: CA1335

CHEMTREC: 800-424-9300

SECTION I - IDENTIFICATION

PRODUCT: CA1335 HIGH TITER, HIGH IV OLEIC ACID
SYNONYMS: VEGETABLE FATTY ACID
CHEMICAL: UNSATURATED ALIPHATIC CARBOXYLIC ACID
CAS NO: 67701-08-0
SARA HAZARD: NONE NOTED (SECTION 311/312);
TITLE III SECTION 313 NOT LISTED

SECTION II - INGREDIENTS AND HAZARD CLASSIFICATION

COMPOSITION	TYPICAL %	PEL/TLV	HAZARD
LINOLEIC ACID (60-33-3)	22	NONE/NONE	NONE NOTED
OLEIC ACID (112-80-1)	59	NONE/NONE	NONE NOTED
PALMITIC ACID (57-10-3)	5	NONE/NONE	NONE NOTED
LINOLENIC ACID (463-40-1)	10	NONE/NONE	NONE NOTED

SECTION III - HEALTH INFORMATION

INHALATION: UNKNOWN

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

EYE CONTACT: MAY CAUSE MILD TEMPORARY IRRITATION.

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

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 WATER OR MILK. DO NOT INDUCE VOMITING. CALL A PHYSICIAN OR POISON CONTROL CENTER FOR ADVICE.
- INHALATION:** IMMEDIATELY REMOVE VICTIM TO FRESH AIR. IF VICTIM HAS STOPPED BREATHING GIVE ARTIFICIAL RESPIRATION, PREFERABLY BY MOUTH TO MOUTH. GET MEDICAL ATTENTION IMMEDIATELY.
- EYE CONTACT:** IMMEDIATELY FLUSH EYES WITH PLENTY OF COOL WATER FOR AT LEAST 15 MINUTES. DO NOT LET VICTIM RUB EYES. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS AFTER FLUSHING.
- SKIN CONTACT:** WASH AFFECTED AREA WITH WARM WATER AND SOAP. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. SEEK MEDICAL ATTENTION IF A RASH OR IRRITATION DEVELOPS.

SECTION VI - PHYSICAL DATA

- BOILING POINT:** > 600°F
MELTING POINT: 10 DEG C (APPROX.)
VAPOR PRESSURE: 10 MM HG PRESSURE AT 224 DEG C
SPECIFIC GRAVITY: 0.89 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:** 375°F C.O.C.
AUTO-IGNITION TEMPERATURE: 685 DEG F (363 DEG C)
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) (FOR OLEIC ACID)
HMIS RATING: HEALTH: (1) FIRE: (1) REACTIVITY: (0)

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS:

INDIVIDUALS SHOULD PERFORM ONLY THOSE FIRE FIGHTING 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 AND 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.
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 ACGIH-TLV) HAVE NOT BEEN ESTABLISHED FOR THIS MATERIAL. A QUALIFIED HEALTH SPECIALIST SHOULD DETERMINE WHETHER THERE IS A NEED FOR RESPIRATORY PROTECTION UNDER THE CONDITIONS OF HANDLING THIS MATERIAL.

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 THE MATERIAL, THE USER SHOULD DETERMINE IF THE RELEASE IS REPORTABLE UNDER APPLICABLE LAWS AND REGULATIONS.

WASTE DISPOSAL:

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:

USA TSCA COMPLIANT
CANADIAN DSL COMPLIANT
CANADIAN WHMIS, NOT CONTROLLED
EU EINC COMPLIANT
AUSTRALIA AICS COMPLIANT
JAPAN ENCS COMPLIANT
CHINA IECS COMPLIANT
KOREA ECL COMPLIANT
PHILIPPINES PICCS COMPLIANT

CERCLA HAZARDOUS MATERIALS:

NONE NOTED

CALIFORNIA PROPOSITION 65 COMPONENTS

NONE

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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DATE: 05/20/08
SUPERSEDES: 10/17/06