

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

Loveland Products, Inc.
P.O. Box 1286 • Greeley, CO 80632-1286

24-Hour Emergency Phone: 1-800-424-9300
Medical Emergencies: 1-800-301-7976
U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: MSO® CONCENTRATE
CHEMICAL NAME: Modified vegetable oil and surfactant blend
CHEMICAL FAMILY: Surfactant
CALIF. REG. NO.: 34704-50029
WASH. REG. NO.: 34704-04009
MSDS Number: MSO-04-LPI **MSDS Revisions:** New

Date Of Issue: 07/12/04 **Supersedes:** New

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION
This product is a yellow liquid with mild characteristic fatty odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Methylated vegetable oil, Alcohol ethoxylate, and Tall oil fatty acid	100.00	Mixture 34398-01-1	none established

4. FIRST AID MEASURES

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
If swallowed: Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): >212°F/>100°C (T.C.C.)
FLAMMABLE LIMITS (LFL & UFL): Not established
EXTINGUISHING MEDIA: Dry chemical, carbon dioxide (CO₂), foam, water spray or fog.
HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to oxides of carbon and oxides of sulfur.
SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Burning material may float. Not considered explosive.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Collect as much liquid as possible in a clean container for reuse or absorb and sweep up immediately and transfer to suitable containers for disposal. Flush spill area with water after clean up. Check local, state and federal regulations for proper disposal.
CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Use with adequate ventilation.
STORAGE: Store in a cool, dry place. Store in original container. Keep container tightly closed. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Work in well-ventilated area, local exhaust may be required if working in confined space.
RESPIRATORY PROTECTION: Not normally required, if vapors or dusts exceed acceptable levels, wear a NIOSH/ MSHA approved pesticide respirator.
EYE PROTECTION: Chemical goggles or shielded safety glasses, if necessary.
SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes with socks.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
For product	not established	not established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Yellow liquid with mild characteristic fatty odor
SPECIFIC GRAVITY (Water = 1): 0.900 g/ml
VAPOR PRESSURE: Not established
PERCENT VOLATILE (by volume): Not established
BULK DENSITY: 7.51 lbs/gal.
BOILING POINT: >200°F/93.4°C
EVAPORATION RATE: Not established
SOLUBILITY: Emulsifies
pH: 6.9 (1% solution)

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable
INCOMPATIBILITY: Strong acids, bases, oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: None known.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Prolonged excessive heat.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 5000 mg/kg
Eye Irritation (rabbit): Minimal irritant
Inhalation LC₅₀ (rat): >0.05 mg/L
Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH
Acute Dermal LD₅₀ (rat): > 4000 mg/kg
Skin Irritation (rabbit): Minimal irritant
Skin Sensitization (guinea pig): Not a sensitizer

12. ECOLOGICAL INFORMATION

Not determined.

13. DISPOSAL CONSIDERATIONS

Do not reuse product containers. Triple rinse (or equivalent), adding rinse water to spray tank, then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED BY USDOT
U.S. Surface Freight Classification: ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS: 60)
Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS	
	1 Health	0 Least	1 Health	
	0 Flammability	1 Slight	0 Flammability	
	0 Instability	2 Moderate	0 Reactivity	
		3 High	H PPE	
		4 Severe		

SARA Hazard Notification/Reporting				
SARA Title III Hazard Category:	Immediate	<u>Y</u>	Fire	<u>N</u>
	Delayed	<u>N</u>	Reactive	<u>N</u>
			Sudden Release of Pressure	<u>N</u>

Reportable Quantity (RQ) under U.S. CERCLA: Not listed
SARA, Title III, Section 313: Not listed
RCRA Waste Code: Not listed
CA Proposition 65: WARNING: This product contains < 1 ppm Ethylene Oxide (CAS: 75-21-8), a chemical known to the State of California to cause cancer or birth defects or other reproductive harm.

16. OTHER INFORMATION

MSDS STATUS: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

®MISO is a registered trademark of Loveland Industries, Inc

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct, Loveland Products, Inc., the manufacturer or the seller makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use.

The product covered by this information sheet is furnished "as is" by Loveland Products, Inc., the manufacturer or the seller, and is subject only to the warranties, if any, that appear on the product's label or are otherwise expressly provided herein.

Except as expressly provided on the product's label or otherwise provided herein, no warranties, guarantees, or representations of any kind, either express or implied, or by usage of trade, statutory or otherwise, are made by Loveland Products, Inc., the manufacturer or the seller with regard to the product or use of the product, including, but not limited to, merchantability, fitness for a particular purpose, use or eligibility of the product for any particular trade usage.

Except as expressly stated herein, Loveland Products, Inc., the manufacturer or the seller makes no warranty of results to be obtained by use of the product covered by this information. Buyer's or user's exclusive remedy, and the total liability of Loveland Products, Inc., the manufacturer or the seller, shall be limited to damages not exceeding the cost of the product. No agent or employee of Loveland Products, Inc., the manufacturer or the seller is authorized to amend the terms of this warranty disclaimer or the product's label or to make a representation or recommendation different from or inconsistent with the label of this product.

IN NO EVENT SHALL LOVELAND PRODUCTS, INC., THE MANUFACTURER OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES AND THE BUYER AND USER WAIVE ANY RIGHT THEY MAY HAVE TO SUCH DAMAGES.