

**SAFETY DATA SHEET**

SDS NUMBER: 100001730-14-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 07/10/14

**ACTIVATOR 90**

SUPERSEDES: 07/07/10

**FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300****1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER****1.1 PRODUCT IDENTIFIER:****TRADE NAME:** ACTIVATOR 90**1.2 RECOMMENDED USE:** NON-IONIC SURFACTANT - PENETRANT – ANTIFOAMING AGENT**1.3 SUPPLIER DETAILS:**

LOVELAND PRODUCTS, INC.

P.O. Box 1286 • Greeley, CO 80632-1286

**1.4 24 Hour Emergency Phone:** 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565**U.S. Coast Guard National Response Center:** 1-800-424-8802**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to 29 CFR 1910.1200**

Acute Toxicity (Dermal)	Category 4	H312
Acute Toxicity (Inhalation)	Category 5	H332
Acute Toxicity (Ingestion)	Category 5	H302

**2.2 Label elements**

None

**Signal word:** WARNING

**Hazard Statements:** H312 – Harmful in contact with skin.  
 H332 – Harmful if inhaled.  
 H319 – Causes serious eye irritation  
 H302 – Harmful if swallowed

**Precautionary Statement:**

P261 – Avoid breathing dust / fume / gas / mist / vapors / spray  
 P273 - Avoid release to the environment  
 P280 - Wear protective gloves and eye / face protection

**(Prevention):****Precautionary Statement:**

P305 and P351 and P338 – IF IN EYES: Rinse with water for 15 to 20 minutes. Remove contact lenses, if present, and continue rinsing eyes.

**(Response):**

P302 and P352 – IF ON SKIN: Wash with plenty of water for 15 to 20 minutes

**Precautionary Statement:****(General):**

P101 and P102 and P103 – If medical advice is needed, have product container or label available. Keep out of reach of children. Read label before use

**2.3 Other hazards**

None known

**KEEP OUT OF REACH OF CHILDREN –**

Appearance and odor: Golden yellow liquid with mild, fatty odor.

**WARNING – CATEGORY 5 HARMFUL IN CONTACT WITH SKIN – HARMFUL IF INHALED – HARMFUL IF SWALLOWED****Potential Health effects****Routes of exposure** Eye contact, skin contact, inhalation. Avoid breathing spray mist.**Eyes** Irritates eyes.**Skin** Harmful if in contact with skin.**Inhalation** May be irritating to respiratory system.**Ingestion** Harmful if swallowed.**Target organs** Skin. Eyes. Inhalation.**Signs and symptoms** Harmful if in contact with skin.**Potential environmental effects** This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.**3. COMPOSITION, INFORMATION ON INGREDIENTS****3.1 Substances**

--

**SAFETY DATA SHEET**

SDS NUMBER: 1000001730-14-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 07/10/14

**ACTIVATOR 90**

SUPERSEDES: 07/07/10

**3.2 Mixtures****Classification according to 29 CFR 1910.1200**

Chemical Name:	CAS No.	Classification	Concentration [%]
Alcohol ethoxylate	34398-01-1	H319, H315	
Nonylphenol polyethylene glycol ether	127087-87-0	H319	
Tall oil fatty acids	61790-12-3	H320	
Diethylene glycol	111-46-6	H312	
Water	7732-18-5		90.00 10.00

**4. FIRST AID MEASURES****4.1 Description of First Aid Measures**

General Advice: Get medical attention if symptoms occur.

- Eye contact:** 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. Call a poison control center or doctor for treatment advice.
- Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have 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.
- Inhalation:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

**4.2 Most Important Symptoms and Effects, Acute and Delayed**

Symptoms: Harmful if swallowed.

**4.3 Immediate Medical Attention and Special Treatment**

Treatment: Treat symptomatically. Symptoms may be delayed.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565**

Take container, label or product name with you when seeking medical attention.

**NOTES TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

**5. FIRE FIGHTING MEASURES****5.1 EXTINGUISHING MEDIA:**Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO<sub>2</sub>), alcohol foam, foam, water spray or fog. Do not use water jet as this will spread the fire.**5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:**

Specific Hazards During Firefighting: During a fire, hazardous by-products can be released.

**5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS**

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

**SAFETY DATA SHEET**

SDS NUMBER: 1000001730-14-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 07/10/14

**ACTIVATOR 90**

SUPERSEDES: 07/07/10

**6. ACCIDENTAL RELEASE MEASURES****6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Personal Precautions: Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

**6.2 ENVIRONMENTAL PRECAUTIONS**

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers, or watercourses.

**6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP**

Methods for Clean-Up: Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water.  
Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to Remove residual contamination.  
Never return spills to original containers for re-use.

**7. HANDLING AND STORAGE****7.1 PRECAUTIONS FOR SAFE HANDLING:**

Advice on Safe Handling: Avoid inhalation of mists, vapors / spray and contact with eyes, skin and clothing. Do not breathe mists or vapor. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in handling/storage. Wash before eating, drinking and/or smoking.

**7.2 CONDITIONS FOR SAFE STORAGE:**

Requirements for Storage Areas and Containers: Store in cool, dry place. Store in original container. Keep tightly closed. Do not reuse empty container. Product will become thicker at cold temperatures but effectiveness will not be affected. Warm product before use. Do not contaminate water, food or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****8.1 CONTROL PARAMETERS:****OCCUPATIONAL EXPOSURE LIMITS****U.S. Workplace Exposure Level (ACGIH) Guides**

Components	Type	Value
No listings	TWA	

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Specimen
No listings		

**8.2 EXPOSURE CONTROLS:****Engineering Measures**

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

**Individual Protection Measures:**

Eye / Face Protection: Goggles or shielded safety glasses are recommended.

Skin Protection: Coveralls worn over long-sleeved shirt and long pants. Chemical-resistant gloves. Chemical-resistant footwear plus socks.

Respiratory Protection: In case of inadequate ventilation or risk of inhalation of mists or vapors, use suitable respiratory equipment such as MSHA/NIOSH TC-21C or NIOSH approved respirator with N, R, P or HE filter. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

# SAFETY DATA SHEET

SDS NUMBER: 100001730-14-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 07/10/14

**ACTIVATOR 90**

SUPERSEDES: 07/07/10

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

9.1 APPEARANCE :	Liquid
ODOR:	Mild, fatty.
ODOR THRESHOLD:	No data available.
COLOR:	Golden yellow.
pH:	6.3 (1% solution)
MELTING POINT / FREEZING POINT:	No data available
BOILING POINT:	215°F (101.2°C)
FLASH POINT:	>212°F (100°C) / TCC
FLAMMABILITY (solid, gas):	No data available.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	No data available.
VAPOR PRESSURE:	No data available.
SOLUBILITY:	Soluble
PERCENT VOLATILE (by volume):	±10.0%
PARTITION CO-EFFICIENT, n-OCTANOL / WATER:	No data available.
AUTO-IGNITION TEMPERATURE:	No data available.
DECOMPOSITION TEMPERATURE:	No data available
VISCOSITY, dynamic:	No data available
SPECIFIC GRAVITY (Water = 1):	1.007 g/ml
BULK DENSITY:	8.40 lbs./gal / 1.01 kg/L

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

---

### 10.1 REACTIVITY

Stable

### 10.2 CHEMICAL STABILITY

Stable under normal temperature conditions

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No reactions known under normal use conditions. Will not polymerize.

### 10.4 CONDITIONS TO AVOID

None known.

### 10.5 INCOMPATIBLE MATERIALS

Strong oxidizers, strong acids and bases at high temperatures.

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide from burning.

---

## 11. TOXICOLOGICAL INFORMATION

---

### 11.1 LIKELY ROUTES OF EXPOSURE

Skin contact.

**LC<sub>50</sub> (rat):** 1.42 mg/L (4 HR)

**LD<sub>50</sub> Oral (male rat):** 3,870 – 5,000 mg/kg

**LD<sub>50</sub> Dermal (rabbit):** >2,000 mg/kg

**Acute Toxicity Estimates:** No data available

**Skin Irritation (rabbit):** Minor irritant.

**Eye Irritation (rabbit):** Moderate irritant

**Specific Target Organ Toxicity:** Single exposure: No data available.

**Aspiration:** No data available

**Skin Sensitization (guinea pig):** Not a sensitizer

**Carcinogenicity:** No data available

**Germ Cell Mutagenicity:** No data available

**Interactive Effects:** None known

**SAFETY DATA SHEET**

SDS NUMBER: 1000001730-14-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 07/10/14

**ACTIVATOR 90**

SUPERSEDES: 07/07/10

**12. ECOLOGICAL INFORMATION****12.1 ECOTOXICITY**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. This product is not intended for use in aquatic settings.

**Ecotoxicological Data**

	Species	Test Results
Product		
96-hour LC <sub>50</sub>	Poecilia reticulata	12.7 mg/L
96-hr NOEC	Poecilia reticulata	5.8 mg/L
24-hour EC <sub>50</sub>	Daphnia Magna	5.2 mg/L
24-hour NOEC	Daphnia Magna	1.0 mg/L

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

**12.2 PERSISTENCE AND DEGRADABILITY**

Biodegradability: No data available

**12.3 BIOACCUMULATIVE POTENTIAL**

Bioaccumulation: No data available.

**12.4 MOBILITY IN SOIL**

No data available.

**12.5 OTHER ADVERSE EFFECTS**

Assessment: No data available.

**13. DISPOSAL CONSIDERATIONS****13.1 WASTE TREATMENT METHODS**

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

**14. TRANSPORT INFORMATION****14.1 LAND TRANSPORT**

DOT Shipping Description: NOT REGULATED.

U.S. Surface Freight Classification: ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS 60)

**15. REGULATORY INFORMATION****15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS****NFPA & HMIS Hazard Ratings:****NFPA**

1 Health  
0 Flammability  
0 Instability  
0 Least  
1 Slight  
2 Moderate  
3 High  
4 Severe

**HMIS**

1 Health  
0 Flammability  
0 Reactivity  
B PPE

**SARA Hazard Notification/Reporting****SARA Title III Hazard Category:**

Immediate Y  
Delayed N

Fire N  
Reactive N

Sudden Release of Pressure N

Reportable Quantity (RQ) under U.S. CERCLA: Not listed

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not applicable

# SAFETY DATA SHEET

SDS NUMBER: 1000001730-14-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 07/10/14

**ACTIVATOR 90**

SUPERSEDES: 07/07/10

---

## 16. OTHER INFORMATION

---

**SDS STATUS:** Format revised; all sections reviewed.

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

**CA REG. NO.:** 34704-50034

**WA REG. NO.:** 34704-04001

**Disclaimer and Limitation of Liability:** This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.