



SAFETY DATA SHEET

LOVERT

SDS DATE: *revised 10/16/2015*

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER: Lovert

PRODUCT USE: Agriculture, forestry, rights-of-way, roadside
Adjuvants, Surface active agents

SUPPLIER DETAILS: Name: Brewer International, Incorporated
Address: PO Box 690037
Vero Beach, FL 32969
Phone: (800) 228-1833
Fax: (772) 778-2490

EMERGENCY PHONE: Chem Tel (800) 255-3924 available 24 hours

SECTION 2: HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: Eye Damage, category 1
Skin Corrosion, category 1
Skin Allergy, category 1

LABEL ELEMENTS:



EMERGENCY OVERVIEW

ROUTES OF ENTRY: Eye Contact, Skin Contact, Inhalation, Ingestion

HEALTH EFFECTS:

Eyes: **DANGER** causes severe Eye damage

Skin: **DANGER** causes severe Skin irritation. **WARNING** may cause an allergic skin reaction.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Blend of Limonenens, Hydrocarbons, Nonionic Surfactant, and selected emusifiers

<u>CAS #</u>	<u>WT%</u>
N/A	100

SECTION 4: FIRST AID MEASURES

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice.



SAFETY DATA SHEET

LOVERT

SDS DATE: *revised 10/16/2015*

IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse with water/shower. Wash with plenty of soap and water. If skin irritation or rash occurs, get medical attention. Take off contaminated clothing and wash it before reuse.

IF SWALLOWED: Rinse mouth. Call a doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT:

F: >200°

C: >93°

SUITABLE EXTINGUISHING MEDIA: Dry chemicals, alcohol-resistant foam, carbon dioxide, or water fog.

UNSUITABLE EXTINGUISHING MEDIA: Direct water stream may spread fire.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Incomplete combustion may produce carbon monoxide or carbon dioxide. Burning may produce noxious and toxic fumes.

SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS: Evacuate the area promptly. Do not scatter spilled material with high pressure water streams. Use water spray to cool unopened containers. Wear self-contained breathing apparatus and full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Keep unnecessary personnel away. **DO NOT** touch damaged containers or spilled material unless wearing appropriate protective gear. Keep people away from and upwind of spill/leak. Keep out of low areas. Ensure adequate ventilation. Ventilate closed spaces before entering them. Material can create slippery conditions.

ENVIRONMENTAL PRECAUTIONS: Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers ditches and waterways.

METHODS FOR CONTAINMENT: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in the immediate area). Stop the flow of the material and dike spill area when possible without exposure to unnecessary risk.

METHODS FOR CLEANING UP: DO NOT release this product into the environment. Use equipment rated for use around combustible materials. For large spills, absorb spilled liquid with suitable non-combustible absorbent material such as dirt or sand. For small spills, wipe up with suitable absorbent material such as cloth. Clean exposed surfaces thoroughly to remove any residual contamination. Never return spills in original containers for re-use. Dispose any contaminated absorbents appropriately. For waste disposal, see section 13 of this SDS.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Keep material away from heat, sparks, hot surfaces and open flames. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash hands and exposed skin thoroughly after handling. **DO NOT** breathe vapors, spray, or mist. Use only out doors or in a well-ventilated area. Wear protective gloves and eye protection. Use appropriate personal



SAFETY DATA SHEET

LOVERT

SDS DATE: *revised 10/16/2015*

protective equipment. **DO NOT** get in eyes, on skin or on clothing. Avoid prolonged and repeated contact. **DO NOT** swallow. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Contaminated work clothing must not be allowed out of the workplace. The container is hazardous when emptied and should be disposed of appropriately.

STORAGE: Store in a well-ventilated place with proper sprinkler/fire deterrent system. Keep cool. Avoid extreme temperatures. Keep container tightly closed. **DO NOT** cut, drill, grind or weld on or near this container. Keep out of the reach of children. Store locked up.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT(S)	EXPOSURE LIMITS
Nonionic Surfactant	OSHA PEL: Not Established ACGIH TWA: Not Established ACGIH STEL: Not Established
Blend of Limonenes	OSHA PEL: Not Established ACGIH TWA: Not Established ACGIH STEL: Not Established

PEL= Permissible Exposure Limits
TWA= Time Weighted Average
STEL= Short term Exposure Limit

ACGIH= American Conference of Governmental Industrial Hygienists
OSHA= Occupational Safety and Health Administration

ENGINEERING CONTROLS: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Maintain air concentrations below occupational exposure limits. Use local exhaust when misting occurs. Natural ventilation is adequate in absence of mists. Keep away from sparks and flames.

RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required. An approved respirator must be worn if airborne concentrations are above any recommended exposure limits. In misty atmospheres, use an approved respirator.

EYE PROTECTION: If material could be misted or splashed into eyes, wear safety glasses with side shields (or goggles). Eye wash fountain should be available.

SKIN PROTECTION: Impervious gloves are recommended. Boots, apron, bodysuit, or other suitable protective clothing should be worn as necessary.

WORK HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Do not get in eyes. Do not get this material in contact with skin. Wash hands and face before breaks and immediately after handling the product. Launder contaminated clothing before reuse. Have eye wash and emergency shower facilities immediately available. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Amber

ODOR: Slight chemical odor

ODOR THRESHOLD: No data available

PHYSICAL STATE: Liquid

pH: No data available



SAFETY DATA SHEET

LOVERT

SDS DATE: *revised* 10/16/2015

FREEZING POINT: No data available

BOILING POINT: 328°F (170.0°C)

FLASH POINT: >200°F (93.3°C)

EVAPORATION RATE (N-Butyl Acetate = 1): <0.04

FLAMMABILITY (SOLID, GAS): No data available

UPPER/LOWER FLAMMABILITY: No data available

VAPOR PRESSURE (mmHg): <2
@ 68°F (20.0°C)

VAPOR DENSITY (AIR = 1): No data available

SPECIFIC GRAVITY (H₂O = 1): 0.863
@ 68°F (20.0°C)

SOLUBILITY IN WATER: Soluble

PARTITION COEFFICIENT (N-Octanol/Water): No data available

AUTO-IGNITION TEMPERATURE: No data available

DECOMPOSITION TEMPERATURE: No data available

VISCOSITY: No data available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY/POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization does not occur. Prevent oxidation by avoiding long-term exposure to air.

CHEMICAL STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Keep away from heat, sparks, static discharge, flame, and exposure to elevated temperatures.

INCOMPATIBLE MATERIALS: Strong acids and bases, including acidic clays; alkali metals; halogens; peroxides; vinyl chloride; and iodine pentafluoride.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon monoxide, carbon dioxide, oxides of limonene and other organic compounds which may be toxic.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Oral, ATE_{mix} = LD₅₀ 4,000 mg/kg for rats
Dermal, no data available
Inhalation, ATE_{mix} = LC₅₀ 6.2 mg/l for rats

SKIN CORROSION/IRRITATION: Causes severe skin damage and irritation.

EYE DAMAGE/IRRITATION: Causes serious eye damage and irritation.

RESPIRATORY OR SKIN SENSITIZATION: May cause an allergic skin reaction.

GERM CELL MUTAGENICITY: No data available



SAFETY DATA SHEET

LOVERT

SDS DATE: *revised 10/16/2015*

CARCINOGENICITY: No components present in excess of 0.1% by weight listed as carcinogens by OSHA, NTP, IARC or ACGIH.

REPRODUCTIVE TOXICITY: No data available

SPECIFIC TARGET ORGAN TOXICITY

SINGLE EXPOSURE: Not expected

REPEATED EXPOSURE: Not expected

ASPIRATION HAZARD: May be harmful if swallowed and enters airways.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY

Fish: ATE_{mix} = LC₅₀ 3.06 mg/L, Bluegill/96 hr

Daphnia: ATE_{mix} = EC₅₀ 37.3 mg/L, Daphnia magna/48 hr

PERSISTENCE AND DEGRADABILITY: No data available

BIOACCUMULATIVE POTENTIAL: No data available

MOBILITY IN SOIL: No data available

OTHER ADVERSE EFFECTS: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Incinerate or dispose of in accordance with Local, State, and Federal Regulations. Commercially clean containers prior to disposal. Oil soaked rags should be disposed of properly to prevent spontaneous combustion. Do not allow this material to drain into sewers/water supplies. For the safety of persons conducting disposal, please refer to the information in section 8.

SECTION 14: TRANSPORT INFORMATION

DOT

Not regulated

IATA

Not regulated

IMDG

Not regulated

TDG

Not regulated

ENVIRONMENTAL HAZARDS: The product is not a marine pollutant as defined by 49 CFR part 171.8 or TDG regulations.



SAFETY DATA SHEET

LOVERT

SDS DATE: revised 10/16/2015

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: This product is a Hazardous Chemical as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List or exempt under 40 CFR 720.30.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT) reportable substances:

not regulated

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

HAZARD CATEGORIES

IMMEDIATE HAZARD: Yes

DELAYED HAZARD: No

FIRE HAZARD: No

PRESSURE HAZARD: No

REACTIVE HAZARD: No

313 REPORTABLE INGREDIENTS: No

302 EXTREMELY HAZARDOUS SUBSTANCE: No

CALIFORNIA PROPOSITION 65: *The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986.* This product may contain trace amounts of chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm: Ethylene Oxide.

SECTION 16: OTHER INFORMATION

NFPA RATINGS

HEALTH: 2

FIRE: 1

REACTIVITY: 0

DISCLAIMER: THE INFORMATION CONTAINED HEREIN IS BASED ON CURRENTLY AVAILABLE KNOWLEDGE AND EXPERIENCE AND IS BEING FURNISHED FOR INFORMATIONAL PURPOSES ONLY, UPON THE EXPRESS CONDITION THAT EACH USER SHALL MAKE ITS OWN ASSESSMENT OF APPROPRIATE USE AND APPROPRIATE SHIPPING, TRANSFER AND STORAGE OF THE MATERIAL. NO RESPONSIBILITY IS ACCEPTED THAT THE INFORMATION IN THIS SDS IS SUFFICIENT OR CORRECT IN ALL CASES. USERS SHOULD CONSIDER THIS DATA ONLY AS A SUPPLEMENT TO OTHER INFORMATION OBTAINED BY THE USER. USERS SHOULD MAKE INDEPENDENT DETERMINATIONS OF SUITABILITY AND COMPLETENESS OF INFORMATION FROM ALL SOURCES TO ASSURE PROPER USE AND DISPOSAL OF THE MATERIAL, THE SAFETY AND HEALTH OF EMPLOYEES AND CUSTOMERS, AND THE PROTECTION OF THE ENVIRONMENT. THIS SDS IS TO BE USED AS A GUIDELINE FOR SAFE WORK PRACTICES AND EMERGENCY RESPONSE. BREWER INTERNATIONAL, INCORPORATED MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING THE VALIDITY OF THIS INFORMATION, THE INFORMATION SOURCES UPON WHICH THE SAME ARE BASED, OR THE RESULTS TO BE OBTAINED, AND EXPRESSLY DISCLAIMS LIABILITIES FOR DAMAGES OR INJURIES RESULTING FROM THE USE THEREOF.