THRUST® SDS NUMBER: 1000016126, 27-14-LPI **DATE OF ISSUE: 06/19/14** SDS REVISIONS: FORMAT **SUPERSEDES: 07/21/10**

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

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT IDENTIFIER:

TRADE NAME: **THRUST®**

1.2 RECOMMENDED USE: DRIFT REDUCTION/DEPOSITION AID - ANTI-FOAM AGENT - DRY ADJUVANT

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

HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification

Not classified

2.2 Label elements



Further information:

The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Other hazards

None known

KEEP OUT OF REACH OF CHILDREN -

Appearance and odor: White granules with slight chemical odor.

WARNING - CATEGORY 2A EYE IRRITANT - POSSIBLE SKIN IRRITATION, CLASS 3 - POSSIBLE MUCOUS MEMBRANE IRRITATION

Potential Health effects

Routes of exposure Eye contact, skin contact, inhalation. Avoid breathing spray mist.

Eyes Causes serious eye irritation. Can cause mild skin irritation. Skin

Inhalation May be irritating to respiratory system.

May be irritating to mouth, throat, and stomach. Ingestion

Target organs Eyes. Skin. Inhalation.

Harmful if swallowed, absorbed through skin or inhaled. Signs and symptoms

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.

COMPOSITION, INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name: CAS No. Classification Concentration

[%]

Milled ammonium sulfate, with 7783-20-2

Drift reduction / deposition polymers and antifoam agents 100.00

FIRST AID MEASURES

4.1 Description of First Aid Measures

Get medical attention if symptoms occur. General Advice:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 Eye contact:

minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to Ingestion:

swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth

to an unconscious person.

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.

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.

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4.2 Most Important Symptoms and Effects, Acute and Delayed

Risk of damage to eyes. Skin irritation. Mucous membrane irritation. Symptoms:

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: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the

patient.

FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Water fog, water spray, carbon dioxide (CO₂), foam. Do not use water jet as this will spread the fire.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: During a fire, irritating, corrosive and/or toxic gases may be produced.

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.

ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors, dusts 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.

HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Avoid inhalation of dusts, vapors / spray and contact with eyes, skin and clothing. Do not breathe Advice on Safe Handling:

dusts, mist 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 a cool, dry place away from ignition sources. Store in original container. Keep

tightly closed. Do not reuse empty container. Do not contaminate water, food or feed by

storage or disposal.

THRUST® **SUPERSEDES: 07/21/10** SDS NUMBER: 1000016126, 27-14-LPI **SDS REVISIONS: FORMAT DATE OF ISSUE: 06/19/14**

EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) Guides

Components Type Value

15 mg/m3 Total dust

*Particulates not otherwise classified/regulated

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:

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

Skin Protection: Chemical resistant clothing is recommended. Routinely wash work clothing and protective equipment to remove

contaminants. The use of chemical-resistant gloves is recommended when handling undiluted product. Be aware

that the liquid may penetrate the gloves. Frequent change is advisable.

In case of inadequate ventilation or risk of inhalation of dusts or vapors, use suitable respiratory equipment. Wear Respiratory Protection:

respiratory protection during operations where spraying or misting occurs. In the U.S.A., 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.

PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE: Free flowing granule ODOR: Slight chemical.

ODOR THRESHOLD: 0.1 ppm. COLOR: White.

No data available pH:

MELTING POINT / FREEZING POINT: No data available

BOILING POINT: Not applicable FLASH POINT: Does not flash

FLAMMABILILITY (solid, gas): Does not support combustion.

UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: Not applicable.

VAPOR PRESSURE: No data available.

SOLUBILITY: Soluble

PARTITION CO-EFFICIENT. n-OCTANOL / WATER: No data available.

AUTO-IGNITION TEMPERATURE: No data available. DECOMPOSITION TEMPERATURE: Not determined VISCOSITY: Not determined SPECIFIC GRAVITY (Water = 1): 0.8329 - 0.913 g/ml

52 - 57 lbs/ft³ / 832.9 - 913 kg/m³ BULK DENSITY:

These physical data are typical values based on material tested but may vary from sample to sample. Note:

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

THRUST® SDS NUMBER: 1000016126, 27-14-LPI **SDS REVISIONS: FORMAT DATE OF ISSUE: 06/19/14 SUPERSEDES: 07/21/10**

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

Heat, open flames, sparks.

10.5 INCOMPATIBILE MATERIALS

Strong oxidizers, bases, chlorates, and nitrates.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

May release of oxides of carbon, hydrogen chloride, ammonia, and sulfur trioxide in a high temperature or fire situation.

11. TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Skin contact, eye contact.

LC₅₀ (rat, guinea pig, rabbit, mouse) No data available.

LD₅₀ Oral (rat): 2,840 mg/kg (Ammonium Sulfate, CAS: 7783-20-2)

LD₅₀ Dermal (rat): No data available Acute Toxicity Estimates: No data available Skin Irritation (rabbit): Moderate irritant Eye Irritation (rabbit): Substantial 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

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

Components **Species Test Results**

No data available

96-hour LC₅₀ No data available

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: The product is not readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

12.4 MOBILITY IN SOIL

This product is water soluble and may disperse in soil.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Check local, state and federal regulations prior to disposal. Do not reuse empty bag. Completely empty bag into mix tank or application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Do not contaminate water, food, or feed by storage or disposal.

SAFETY DATA SHEET

 THRUST® SUPERSEDES: 07/21/10

14.	TRA	ANS	POR'	T INF	ORM	ATION
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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 HMIS

Health Least Health 0 Flammability Sliaht Flammability 1 0 Instability 2 Moderate 0 Reactivity 3 High Χ PPE

4 Severe

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N

Delayed N Reactive 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: WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive

harm.

16. OTHER INFORMATION

SDS STATUS: Format revised; all sections reviewed. **PREPARED BY:** Registrations and Regulatory Affairs

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REVIEWED BY: Environmental Health and Safety

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