



Safety Data Sheet

Report Date 19-Apr-16

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1. Identification

Product Name : ASULAM 4F (EPA REG. NO. 70506-139-5905)
Synonyms : None
Product Use : Postemergent Herbicide
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Danger
Skin Irritation : Causes skin irritation
Eye Irritation : Causes serious eye damage
Acute Toxicity Oral : Not classified as hazardous under 29 CFR 1910.1200 (2012)
Acute Toxicity Dermal : LD50 >2,000 mg/kg (rabbit)

Hazard Categories : Dermal/Inhalation Toxicity-4/3; Eye/Skin Irritation-1/2; Skin Sensitization-1

Hazard Statement : Harmful in contact with skin
Causes serious eye damage
Causes skin irritation
Toxic if inhaled
May cause an allergic skin reaction

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Asulam technical	2302-17-2	35-37
Proprietary formulation aids	Proprietary	63-65

4. First Aid Measures

Eye : Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin : Remove and wash contaminated clothing before reuse. Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.

Inhalation : Call a physician or poison control center immediately. Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Ingestion : Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Indication of Immediate Medical Attention and Special Treatment Needed : Treat symptomatically.



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5. Fire Fighting Measures

- Extinguishing Media** : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide, dry chemical, foam or water extinguishing agents are preferred.
- Specific Hazards Arising from the Chemical** : May produce carbon oxides, oxides of nitrogen and sulfur oxides under fire conditions.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

- Personal Precautions** : Avoid contact with the skin and the eyes. Provide adequate ventilation. Use personal protective equipment.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. For emergencies, use an approved full face positive-pressure, self-contained breathing apparatus. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Dike spilled product to prevent spreading. Keep spilled product out of lakes, streams, ponds or drains.
- Methods and Materials for Containment and Cleanup** : Absorb with an inert material, such as clay, sand or soil. Collect absorbents and place in suitable containers for proper disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children. Wear personal protective equipment. Avoid breathing vapors or mists. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before reuse.
- Conditions for Safe Storage** : Keep in a dry, cool and well-ventilated place. Do not transport or store at temperatures below -6 Degrees C. Keep containers tightly closed in a cool, well-ventilated place. Avoid contact with acids.

8. Exposure Controls / Personal Protection

- TLV/PEL** : Does not contain any hazardous materials with occupational exposure limits.
- Appropriate Engineering Controls** : Local mechanical exhaust ventilation is preferred.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Use NIOSH-approved respirator where airborne exposure is likely. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

- Odor/Appearance** : Brown liquid; odorless.
- Flash Point, °F** : Not flammable
- Boiling Point, °F** : 104 Degrees C.
- Melting Point(Freezing point), °C** : 8.5 Degrees C.
- Vapor Pressure, mm Hg @ 20 °C** : Not available
- Vapor Density** : Not available
- Solubility in Water** : Soluble
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.18



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Evaporation Rate(Butyl Acetate = 1) : Not available
Octanol/Water Partition Coefficient : Not available
pH : 7.5 (approximate)
Flammable Limits (approximate volume % in air) : No information found
Auto-ignition Temperature : No information available
Decomposition temperature : Not available

10. Stability and Reactivity

Reactivity : No data available
Chemical Stability : Stable
Hazardous Decomposition Products : Carbon oxides, Nitrogen oxides, Sulfur oxides
Hazardous Polymerization : Will not occur
Conditions to Avoid : Freezing temperatures
Incompatible Materials : Acids

11. Toxicological Information

Acute Toxicity (Oral LD50) : >5,000 mg/kg (rat). Not classified as hazardous under 29 CFR 1910.1200 (2012).
Acute Toxicity (Dermal LD50) : >2,000 mg/kg (rabbit). Harmful in contact with skin.
Acute Toxicity Inhalation LC50 : >5 mg/L/4-hour (rat)(vapors). Toxic if inhaled.
Likely Routes of Exposure : Inhalation, Skin, Eyes
Skin Irritation : Causes skin irritation.
Eye Irritation : Causes serious eye damage.
Skin Sensitization : May cause an allergic skin reaction.
Carcinogenic : EPA has classified asulam as a Group C-possible human carcinogen. Not listed by NTP, IARC or OSHA.
Chronic Effects : None currently known.
Other Hazards : None currently known.

12. Ecological Information

Ecotoxicity : Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.
Persistence and Degradability : No information found
Bioaccumulative Potential : No information found
Mobility in Soil : No information found
Other Adverse Effects : Do not clean equipment or dispose of equipment washwater in a manner that will contaminate water resources or arable land. Do not apply when weather conditions favor drift from treated areas.

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.



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14. Transport Information

UN Proper Shipping Name : Not regulated by DOT, IATA or IMDG.
Transport Hazard Class : None
UN Identification Number : None
Packaging Group : None
Environmental Hazards : No information found
Transport in Bulk : No information found
Special Precautions for Transportation : No information found
Freight Classification : Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :
Health: 2 Fire: 0 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No) :
Immediate(Acute) Health: Y
Delayed (Chronic) Health: N
Sudden Release of Pressure: N
Fire: N
Reactive: N

FIFRA Information : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Registration Number : 70506-139-5905
FIFRA Signal Word : Caution
FIFRA Label Statement : Keep out of reach of children.
FIFRA Label Statement : Harmful if absorbed through skin.
FIFRA Label Statement : Avoid contact with skin, eyes or clothing.
FIFRA Label Statement : Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.
FIFRA Label Statement : Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
FIFRA Label Statement : No additional label statements.
FIFRA Label Statement : No additional label statements.

16. Other Information

Data of Preparation/Revision : 19-April-2016