1. IDENTIFICATION

Product identifier
Product Name
Sharda Acetochlor 41.67% + Clopyralid 4.27% + Flumetsulam 1.3% SE

Other means of identification
Product Code 83529-105
Synonyms Definite
Registration Number(s) 83529-105

Recommended use of the chemical and restrictions on use
Recommended Use Herbicide
Uses advised against No information available

Details of the supplier of the safety data sheet
Manufacturer Address
Sharda USA LLC
P.O. Box 640
Hockessin, DE 19707
Website: www.shardausa.com

Emergency telephone number
Company Phone Number 610-350-6930 (US)
+91 22 5678 2800 (India)
Emergency Telephone CHEMTREC: 800-424-9300
CHEMTREC: 703-527-3887
POISON CONTROL CENTER: 800-222-1222

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral Category 4
Acute toxicity - Inhalation (Dusts/Mists) Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2B
Skin sensitization Category 1
Specific target organ toxicity (single exposure) Category 3

Label elements

Warning

Hazard statements
Harmful if swallowed
Harmful if inhaled
Causes skin irritation
Causes eye irritation
May cause an allergic skin reaction
May cause respiratory irritation

Emergency Overview
**Appearance** Liquid  
**Physical state** liquid  
**Odor** Slight

### Precautionary Statements - Prevention
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Wear protective gloves/protective clothing/eye protection/face protection
- Contaminated work clothing should not be allowed out of the workplace

### Precautionary Statements - Response
- 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/attention
- IF ON SKIN: Wash with plenty of soap and water
- Take off contaminated clothing and wash before reuse
- If skin irritation or rash occurs: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth

### Precautionary Statements - Storage
- Store in a well-ventilated place. Keep container tightly closed
- Store locked up

### Precautionary Statements - Disposal
- Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)
- Not applicable

### Other Information
- Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

### Unknown acute toxicity
- 0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other ingredients</td>
<td>Proprietary</td>
<td>52.76</td>
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<tr>
<td>Acetochlor</td>
<td>34256-82-1</td>
<td>41.67</td>
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<tr>
<td>Clopyralid monoethanolamine salt</td>
<td>57754-85-5</td>
<td>4.27</td>
</tr>
<tr>
<td>Flumetsulam</td>
<td>98967-40-9</td>
<td>1.3</td>
</tr>
</tbody>
</table>

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.
### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**
Call a poison control center or doctor for treatment advice. Have the product containers or label with you when calling a poison control center or doctor, or going for treatment.

**Eye contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.

**Skin contact**
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. Call a poison control center or doctor for treatment advice.

**Inhalation**
Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician or poison control center immediately. Call a poison control center or doctor for treatment advice.

**Ingestion**
Call a physician or poison control center immediately. Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

**Self-protection of the first aider**
Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
May cause skin irritation. May cause redness and tearing of the eyes. Coughing and/or wheezing. May cause allergic skin reaction.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Dry chemical, CO2, water spray or regular foam. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal. Water spray, fog or regular foam.

**Unsuitable extinguishing media**
None.

**Specific hazards arising from the chemical**
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products**
Carbon oxides. Hydrogen chloride.

**Explosion data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray.

### 6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective equipment and emergency procedures

Personal precautions
Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

For emergency responders
Use personal protection recommended in Section 8. Ventilate the area.

Environmental precautions
Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Cover liquid spill with sand, earth or other non-combustible absorbent material. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Keep in properly labeled containers.

Packaging materials
Do not reuse container.

Incompatible materials
Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas. And. Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear suitable protective clothing. Wear protective butyl rubber gloves. Protective shoes or boots.

Respiratory protection
Ensure adequate ventilation, especially in confined areas. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations
When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
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</tr>
<tr>
<td>Appearance</td>
<td>Liquid</td>
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</tr>
<tr>
<td>Color</td>
<td>beige</td>
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</tr>
<tr>
<td>Odor threshold</td>
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</tr>
<tr>
<td>pH</td>
<td>4.5</td>
<td>solution (1 %)</td>
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</tr>
<tr>
<td>Melting point / freezing point</td>
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<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
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<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>$&gt; 100 , ^\circ C / &gt; 212 , ^\circ F$</td>
<td>Seta Closed Cup</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
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<td></td>
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</tr>
<tr>
<td>Lower flammability limit</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>$\sim 0.5 , \text{mmHg}$</td>
<td>@ $25 , ^\circ C$</td>
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</tr>
<tr>
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<td>Water solubility</td>
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<td>Solubility in other solvents</td>
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<td>Partition coefficient</td>
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</tr>
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<td>Autoignition temperature</td>
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<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Kinematic viscosity</td>
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<td>Dynamic viscosity</td>
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<tr>
<td>Explosive properties</td>
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<tr>
<td>Oxidizing properties</td>
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<td></td>
</tr>
</tbody>
</table>

Other Information

- Softening point: No information available
- Molecular weight: No information available
- VOC Content (%): No information available
- Density: No information available
- Bulk density: No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Elevated Temperature. Storage near to reactive materials.

Incompatible materials
Strong oxidizing agents.

Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon oxides. Hydrogen chloride.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

**Inhalation**
May cause irritation of respiratory tract. Harmful by inhalation.

**Eye contact**
Moderately irritating to the eyes.

**Skin contact**
May cause irritation. May cause sensitization by skin contact.

**Ingestion**
Harmful if swallowed.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other ingredients</td>
<td>&gt; 90 mL/kg ( Rat )</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Acetochlor 34256-82-1</td>
<td>= 763 mg/kg ( Rat )</td>
<td>= 3667 mg/kg ( Rabbit )</td>
<td>-</td>
</tr>
<tr>
<td>Clopyralid monoethanolamine salt 57754-85-5</td>
<td>= 2675 mg/kg ( Rat )</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Flumetsulam 98967-40-9</td>
<td>&gt; 5 g/kg ( Rat )</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on toxicological effects

**Symptoms**
May cause skin irritation. May cause redness and tearing of the eyes. Coughing and/or wheezing. May cause an allergic skin reaction.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization**
May cause sensitization by skin contact.

**Germ cell mutagenicity**
Based on available data, the classification criteria are not met.

**Carcinogenicity**
Based on available data, the classification criteria are not met.

**Reproductive toxicity**
Based on available data, the classification criteria are not met.

**STOT - single exposure**
May cause disorder and damage to the Respiratory system.

**STOT - repeated exposure**
Based on available data, the classification criteria are not met.

**Aspiration hazard**
Based on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

- ATEmix (oral) 1,771.00 mg/kg
- ATEmix (dermal) 8,800.00 mg/kg
- ATEmix (inhalation-dust/mist) 3.60 mg/l

12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Very toxic to aquatic life with long lasting effects

This product is toxic to fish. Drift or runoff from treated areas may be hazardous to aquatic organisms and non-target plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

58.33% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability
Not readily biodegradable.

**Bioaccumulation**
Bioaccumulative potential.

**Other adverse effects**
This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes**
Pesticide wastes may be acutely hazardous. Improper disposal is a violation of federal law. Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance on proper disposal of waste product.

**Contaminated packaging**
Disposal should be in accordance with applicable regional, national and local laws and regulations. Consult product label for additional information. Do not reuse container.

### 14. TRANSPORT INFORMATION

**DOT**
Not regulated

**TDG**
Not regulated

**IATA**

<table>
<thead>
<tr>
<th>UN/ID no</th>
<th>UN3082</th>
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</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>Environmentally hazardous substance, liquid, n.o.s.</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>9</td>
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<tr>
<td>Packing Group</td>
<td>III</td>
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<tr>
<td>ERG Code</td>
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<tr>
<td>Special Provisions</td>
<td>A97, A158, A197</td>
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<td>Description</td>
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**IMDG**

<table>
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<tr>
<td>Proper shipping name</td>
<td>Environmentally hazardous substance, liquid, n.o.s.</td>
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<tr>
<td>Hazard Class</td>
<td>9</td>
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<tr>
<td>Packing Group</td>
<td>III</td>
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<tr>
<td>EmS-No</td>
<td>F-A, S-F</td>
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<td>Special Provisions</td>
<td>274, 335</td>
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<td>Description</td>
<td>UN3082, Environmentally hazardous substance, liquid, n.o.s. (Acetochlor), 9, III</td>
</tr>
</tbody>
</table>

### 15. REGULATORY INFORMATION

**International Inventories**

| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |
US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
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</tr>
<tr>
<td>Fire hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetochlor - 34256-82-1</td>
<td>Carcinogen</td>
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</tbody>
</table>

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
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</thead>
<tbody>
<tr>
<td>Other ingredients</td>
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<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information

EPA Pesticide Registration Number 83529-105

EPA Statement
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling 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:

Difference between SDS and EPA Pesticide label
CAUTION: Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reaction in some
individuals. Avoid contact with eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
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</thead>
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<td></td>
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<td>0</td>
<td>0</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>0</td>
<td>0</td>
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</tr>
</tbody>
</table>

Chronic Hazard Star Legend

* = Chronic Health Hazard

Issue Date: 01-NOV-2018
Revision Date: 01-NOV-2018
Revision Note: No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

02Nov2018