

Issue Date 29-Jul-2016

Revision Date 29-Jul-2016

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** Sharda Metribuzin 4SC

### Other means of identification

**Product Code** 83529-46  
**Synonyms** Metrixx SC  
**Registration Number(s)** 83529-46

### 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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Label elements

#### **Emergency Overview**

**Not classified**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Appearance** aqueous solution

**Physical state** liquid

**Odor** Strong Sulfurous

#### **Precautionary Statements - Prevention**

Not applicable

#### **Precautionary Statements - Response**

Not applicable

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Very toxic to aquatic life with long lasting effects. May be harmful in contact with skin.

**Unknown acute toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable

**Mixture**

Chemical Name	CAS No	Weight-%
Other ingredients *	Proprietary	30 - 60
Metribuzin	21087-64-9	42.7
Glycerin *	56-81-5	1 - 5

\*The exact percentage (concentration) of composition has been withheld as a trade secret. 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**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician if irritation persists. 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. Administer oxygen if breathing is difficult. Call a physician 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**

None known.

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

**Note to physicians** Treat symptomatically. The compound does not cause any definite symptoms that would be diagnostic. Poisoning is accompanied by breathing difficulties and sedation.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Dry chemical, CO<sub>2</sub>, 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** Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products** Carbon oxides. Nitrogen oxides (NO<sub>x</sub>). Oxides of sulfur.

**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** Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

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

**Environmental precautions**

**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** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

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

**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**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Metribuzin 21087-64-9	TWA: 5 mg/m <sup>3</sup>	-	TWA: 5 mg/m <sup>3</sup>
Glycerin 56-81-5	-	TWA: 15 mg/m <sup>3</sup> mist, total particulate TWA: 5 mg/m <sup>3</sup> mist, respirable fraction	-

NIOSH IDLH Immediately Dangerous to Life or Health

**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). Tight sealing safety 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**

**Physical state**

liquid

**Appearance**

aqueous solution

**Color**

White

**Odor**

Strong Sulfurous

**Odor threshold**

No information available

**Property**

**Values**

**Remarks • Method**

**pH**

6.21

solution (1 %)

**Melting point / freezing point**

No information available

**Boiling point / boiling range**

No information available

**Flash point**

Not applicable

**Evaporation rate**

No information available

<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	~17 mmHg @ 25 °C
<b>Vapor density</b>	No information available
<b>Relative density</b>	1.124
<b>Water solubility</b>	dispersible
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	Not an explosive
<b>Oxidizing properties</b>	Not applicable

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	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. Nitrogen oxides (NOx). Carbon oxides.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Product Information</b>	Acute Oral LD50 (rat): >5000 mg/kg Acute Dermal LD50 (rabbit): > 2000 mg/kg Eye Irritation (rabbit): Not an eye irritant. Skin Irritation (rabbit): Not a skin irritant. Inhalation LC50 (rat): >4.7 mg/L (4 HR) Skin Sensitization (guinea pig): Not a sensitizer
<b>Inhalation</b>	Based on available data, the classification criteria are not met.
<b>Eye contact</b>	Based on available data, the classification criteria are not met.
<b>Skin contact</b>	Based on available data, the classification criteria are not met.

**Ingestion**

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

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Other ingredients	> 90 mL/kg ( Rat )	-	-
Metribuzin 21087-64-9	= 2020 mg/kg (Male Rat ) = 1100 mg/kg (Female Rat )	> 5000 mg/kg ( Rat ) > 20 g/kg ( Rabbit )	> 860 mg/m <sup>3</sup> ( Rat ) 4 h
Glycerin 56-81-5	= 12600 mg/kg ( Rat )	> 10 g/kg ( Rabbit )	> 570 mg/m <sup>3</sup> ( Rat ) 1 h

**Information on toxicological effects**

**Symptoms**

No information available.

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

**Sensitization**

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

**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**

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

**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) >2000.00 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Very toxic to aquatic life with long lasting effects

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Metribuzin 21087-64-9	Green algae 72-hr EC50 = 0.007 mg/L	Fish (rainbow trout) 96-hr LC50 = 74.6 mg/L	Daphnia magna 48-hr EC50 = 98.5 mg/L
Glycerin 56-81-5	-	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	500: 24 h Daphnia magna mg/L EC50

**Persistence and degradability**

Not readily biodegradable.

**Bioaccumulation**

Not likely to bioaccumulate.

Chemical Name	Partition coefficient
Glycerin 56-81-5	-1.76

**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**

**UN/ID no** UN3082  
**Proper shipping name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard Class** 9  
**Packing Group** III  
**ERG Code** 9L  
**Special Provisions** A97, A158, A197  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Metribuzin), 9, III

**IMDG**

**UN/ID no** UN3082  
**Proper shipping name** Environmentally hazardous substance, liquid, n.o.s.  
**Hazard Class** 9  
**Packing Group** III  
**EmS-No** F-A, S-F  
**Special Provisions** 274, 335  
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Metribuzin), 9, III, Marine pollutant

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies  
**EINECS/ELINCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Metribuzin - 21087-64-9	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Other ingredients	-	-	X
Metribuzin 21087-64-9	X	X	X
Glycerin 56-81-5	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number 83529-46

**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: Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse..

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

<b>NFPA</b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X
Issue Date	29-Jul-2016			
Revision Date	29-Jul-2016			



**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**

05Aug16