

SAFETY DATA SHEET

Issue Date 05-Jul-2016 Revision Date 05-Jul-2016 Version 1

1. IDENTIFICATION

Product identifier

Product Name Sharda Chlorimuron + Metribuzin WDG

Other means of identification

Product Code83529-41SynonymsMetrixx PlusRegistration Number(s)83529-41

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

Emergency Telephone

Website: www.shardausa.com

Emergency telephone number

Company Phone Number 610-350-6930 (US)

+91 22 5678 2800 (India) 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)

Serious eye damage/eye irritation Category 2A

Label elements

Emergency Overview

Warning

Hazard statements

Causes serious eye irritation



Appearance dry, free flowing granules Physical state Solid Odor Slight Sulfurous

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

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

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Very toxic to aquatic life with long lasting effects. May be harmful if swallowed.

Unknown acute toxicity

25% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS No	Weight-%
Metribuzin	21087-64-9	64.3
Other inert ingredients *	Proprietary	10 - 30
Chlorimuron ethyl	90982-32-4	10.7
[ethyl-2-[[[(4-chloro-6-methoxypyrimidin-2-yl)		
-carbonyl]-amino]sulfonyl]benzoate]		
Kaolinite *	1335-30-4	5 - 10

^{*}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.

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control

center or doctor for treatment advice.

Wash off immediately with soap and plenty of water while removing all contaminated clothes Skin contact

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 redness and tearing of the eyes.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat 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. Nitrogen oxides (NOx). 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. Avoid creating dust.

For emergency respondersUse 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 dust cloud. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Avoid creating dust. Do not dry sweep dust. Wet dust with water before sweeping or use a

vacuum to collect dust. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

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	3		TWA: 5 mg/m ³	
Kaolinite 1335-30-4	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction (Kaolin)	TWA: 15 mg/m³ total dust: 5 mg/m³ respirable fraction (Kaolin)	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust (Kaolin)	

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 Solid

Appearancedry, free flowing granulesOdorSlight Sulfurous

Color Tan Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 6.0 solution (1 %)

Melting point / freezing point No information available

@ 25 °C

Boiling point / boiling range No information available

Flash point Not applicable

Evaporation rate No information available Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available

Vapor pressure 0 mmHa

Vapor density No information available

Relative density 0.66 Water solubility dispersible

Solubility in other solvents No information available Partition coefficient No information available **Autoignition temperature** No information available **Decomposition temperature** No information available Kinematic viscosity No information available **Dynamic viscosity** No information available **Explosive properties** Not an explosive **Oxidizing properties** Not applicable

Other Information

Softening point No information available Molecular weight No information available **VOC Content (%)** No information available No information available **Density Bulk density** 0.63 g/ml (loose)

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. Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Acute Oral LD50 (rat): >2000 mg/kg

Acute Dermal LD50 (rabbit): > 2000 mg/kg Eye Irritation (rabbit): Causes eye irritation. Skin Irritation (rabbit): Mildly irritating. Inhalation LC50 (rat): >2 mg/L (4 HR)

Skin Sensitization (guinea pig): Not a sensitizer.

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

Eve contact Irritating to eyes.

Skin contact 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	
Metribuzin	= 2020 mg/kg (Male Rat) = 1100	> 5000 mg/kg (Rat) > 20 g/kg (> 860 mg/m³ (Rat) 4 h	
21087-64-9	mg/kg (Female Rat)	Rabbit)		
Chlorimuron ethyl [ethyl-2-[[[(4-chloro-6-methoxypyrimi din-2-yl) -carbonyl]-amino]sulfonyl]benzoate] 90982-32-4	= 4102 mg/kg (Rat)	> 2 g/kg (Rabbit)	> 5 g/m³(Rat)4 h	

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes.

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

SensitizationBased on available data, the classification criteria are not met.Germ cell mutagenicityBased on available data, the classification criteria are not met.CarcinogenicityBased on available data, the classification criteria are not met.Reproductive toxicityBased on available data, the classification criteria are not met.STOT - single exposureBased on available data, the classification criteria are not met.STOT - repeated exposureBased on available data, the classification criteria are not met.Chronic toxicityAvoid repeated exposure. May cause adverse liver effects.

Target Organ Effects Central nervous system, liver, Thyroid.

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

 ATEmix (dermal)
 14,033.00 mg/kg mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

25 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea	
Metribuzin	Green algae 72-hr EC50 = 0.007	Fish (rainbow trout) 96-hr LC50 =	Daphnia magna 48-hr EC50 = 98.5	
21087-64-9	mg/L	74.6 mg/L	mg/L	
Chlorimuron ethyl	Green algae 96-hr EC50 = 0.756	Fish (rainbow trout) 96-hr LC50 >12	-	
[ethyl-2-[[[(4-chloro-6-methoxypyrimi	-	mg/L		
din-2-yl)				
-carbonyl]-amino]sulfonyl]benzoate]				
90982-32-4				

Persistence and degradability

Not readily biodegradable.

Bioaccumulation

Not likely to bioaccumulate.

Other adverse effects

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

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastesPesticide 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 UN3077

Proper shipping name Environmentally hazardous substance, solid, n.o.s.

Hazard Class 9
Packing Group III
ERG Code 9L

Special Provisions A97, A158, A179, A197

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Chlorimuron, Metribuzin), 9, III

IMDG

UN/ID no UN3077

Proper shipping name Environmentally hazardous substance, solid, n.o.s.

Hazard Class 9
Packing Group III
EmS-No F-A, S-F

Special Provisions 274, 335, 966, 967

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Chlorimuron, 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		
Chlorimuron ethyl [ethyl-2-[[[(4-chloro-6-methoxypyrimidin-2-yl)	1.0		
-carbonyl]-amino]sulfonyl]benzoate] - 90982-32-4			

SARA 311/312 Hazard Categories

Acute health hazard	Yes
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
Metribuzin	X	X	X
21087-64-9			
Chlorimuron ethyl	X	-	-
[ethyl-2-[[[(4-chloro-6-methoxypyrimi			
din-2-yl)			
-carbonyl]-amino]sulfonyl]benzoate]			
90982-32-4			

U.S. EPA Label Information

EPA Pesticide Registration Number 83529-41

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. Causes moderate eye irritation.. Avoid breathing dust, vapor or spray mist. Avoid contact with eyes, skin and clothing.

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

NFPA	Health hazards 2	Flammability	1	Instability 0		Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 2	Flammability	1	Physical hazards	0	Personal protection X
Issue Date	05-Jul-2016					

Revision Date Revision Note 05-Jul-2016

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

05Jul2016