

SAFETY DATA SHEET

Issue Date 31-Jul-2016 Revision Date 31-Jul-2016 Version 1

1. IDENTIFICATION

Product identifier

Product Name Sharda Metolachlor 84.4EC-D

Other means of identification

Product Code 83529-57
Synonyms Meto-S; Metalica
Registration Number(s) 83529-57

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

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

Label elements

Emergency Overview

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

Appearance viscous clear liquid Physical state liquid Odor Slight sweet

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful if swallowed. May be harmful in contact with skin. Toxic to aquatic life with long lasting effects. Repeated or prolonged contact may cause allergic reactions in very susceptible persons. Mild eye irritation.

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-%
Metolachlor	51218-45-2	84.4
Other ingredients *	Proprietary	10 - 30

^{*}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 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 allergic skin reaction. May cause redness and tearing of the eyes.

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. 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. Keep people away from and upwind

of spill/leak.

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 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

> > @ 20 °C

@ 20 °C

clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance viscous clear liquid Odor Slight sweet

Color amber **Odor threshold** No information available

Property Values Remarks • Method

5.14 solution (1 %)

Melting point / freezing point No information available

Boiling point / boiling range > 300 °C / 572 °F (with

decomposition)

110 °C / > 230 °F Flash point Seta Closed Cup **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 1.52 mPa

Vapor density No information available

Relative density 1.11 Water solubility **Emulsifies**

Solubility in other solvents No information available

Partition coefficient

Autoignition temperature No information available **Decomposition temperature** No information available

Kinematic viscosity No information available **Dvnamic viscosity** No information available **Explosive properties** Not an explosive

Oxidizing properties Not applicable

Other Information

No information available Softening point 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. 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): Moderate irritant. Skin Irritation (rabbit): Not an irritant. Inhalation LC50 (rat): >3.20 mg/L (4 HR) Skin Sensitization (guinea pig): Not a sensitizer

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

Eye contact Based on available data, the classification criteria are not met. May cause slight irritation.

Skin contact May be harmful in contact with skin. Repeated or prolonged contact may cause allergic

reactions in very susceptible persons.

Ingestion May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Metolachlor 51218-45-2	>2000 mg/kg (rat)	>2000 mg/kg (rabbit)	>3.20 mg/L (rat)

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

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

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

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Metolachlor	Green algae 96-hr EC50 = 0.4 mg/L	Bluegill 96-hr EC50 = 10 mg/L	-
51218-45-2			

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 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

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

Hazard Class 9 **Packing Group** Ш **ERG Code** 9L

Special Provisions A97, A158, A197

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Metolachlor), 9, III

IMDG

UN/ID no UN3082

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

Hazard Class Packing Group Ш **EmS-No** F-A, S-F **Special Provisions** 274, 335

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Metolachlor), 9, III; Marine

Pollutant

,

Revision Date 31-Jul-2016

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 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

Acute health hazardNoChronic Health HazardNoFire hazardNoSudden release of pressure hazardNoReactive HazardNo

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

U.S. EPA Label Information

EPA Pesticide Registration Number 83529-57

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, inhaled, or absorbed through skin. Causes eye irritation. Avoid breathing vapor or spray mist.

Avoid contact with skin, eyes or clothing. This product may cause skin sensitization reactions in some people.

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

NFPA Health hazards 0 Flammability 1 Instability 0 **Physical and Chemical**

Properties -

Health hazards 0 Flammability 1 Physical hazards 0 Personal protection X **HMIS**

Issue Date 31-Jul-2016 **Revision Date** 31-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

09Aug2016