

SAFETY DATA SHEET

Issue Date 04-Aug-2016 Revision Date 04-Aug-2016 Version 1

1. IDENTIFICATION

Product identifier

Product Name Sharda Mesotrione 40SC

Other means of identification

Product Code 83529-51

Synonyms Sharda Mesotrione 40SC Turf

Meso Star

Registration Number(s) 83529-51

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 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 Opaque Physical state liquid Odor Characteristic

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Very toxic to aquatic life with long lasting effects. Repeated or prolonged contact may cause allergic reactions in very susceptible persons.

ABN: Sharda Mesotrione 40SC Turf / ABN: Meso Star

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	40 - 70
Mesotrione	104206-82-8	40.0

^{*}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 contactWash 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 Repeated contact may cause allergic reactions in very susceptible persons.

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.

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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). 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 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.

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 handlingUse 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

ABN: Sharda Mesotrione 40SC Turf / ABN: Meso Star

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

clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateliquidAppearanceOpaqueOdorCharacteristic

Color beige Odor threshold No information available

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

pH 3.26 solution (1 %)

Melting point / freezing point No information available

Boiling point / boiling range No information available

Flash point > 100 °C / > 212 °F 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 ~17 mmHg

Vapor density No information available

Palative density No information available

Relative density 1.16
Water solubility dispersible

Solubility in other solvents
Partition coefficient
Autoignition temperature
No information available
No information available
No information available

Decomposition temperatureNo information availableKinematic viscosityNo information availableDynamic viscosityNo information available

Explosive propertiesNot an explosive
Not applicable

Other Information

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Softening point
Molecular weight
VOC Content (%)
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.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known or supplied information

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

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

Skin contact Repeated or prolonged contact may cause allergic reactions in very susceptible persons.

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)	-	-

Information on toxicological effects

Symptoms Redness.

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.

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Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

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Ecotoxicity

Very toxic to aquatic life with long lasting effects

60 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

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

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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. (Mesotrione), 9, III

<u>IMDG</u>

UN/ID no UN3082

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

Hazard Class9Packing GroupIIIEmS-NoF-A, S-FSpecial Provisions274, 335

DescriptionUN3082, Environmentally hazardous substance, liquid, n.o.s. (Mesotrione), 9, III; Marine

Pollutant

15. REGULATORY INFORMATION

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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 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

U.S. EPA Label Information

EPA Pesticide Registration Number 83529-51

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:

ABN: Sharda Mesotrione 40SC Turf / ABN: Meso Star

Difference between SDS and EPA Pesticide label

CAUTION: Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Avoid contact with skin, eyes, or clothing.

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

NFPA Health hazards 0 Flammability 0 Instability 0 Physical and Chemical Properties -

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

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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

10Aug2016