



SAFETY DATA SHEET

FOR EMERGENCY CALL: 1 800-424-9300 (CHEMTREC)

COMPANY PHONE NUMBER: 703-527-3887

1. IDENTIFICATION

PRODUCT NAME: Crop Protect Direct Meso 4SC

DESCRIPTION: Herbicide

EPA REG. NO.: 101458-3

MANUFACTURER

ADDRESS: JABCO, LLC
550 W. Pioneer Blvd. Suite 140
Mesquite, NV 89027

2. HAZARD IDENTIFICATION

WARNING

Harmful if inhaled.

Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.



HAZARD CLASSIFICATION

OSHA Regulatory Status

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

ACUTE TOXICITY - Inhalation (Dusts/Mists) Category 4

REPRODUCTIVE TOXICITY Category 2

SPECIFIC TARGET ORGAN TOXICITY (repeated exposure) Category 2

PRECAUTIONARY STATEMENTS GENERAL

Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

PRECAUTIONARY STATEMENTS PREVENTION

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/clothing and eye/face protection.

Use only outdoors or in a well-ventilated area.

Do not breathe vapor or mist.

PRECAUTIONARY STATEMENTS RESPONSE

IF exposed or concerned: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

PRECAUTIONARY STATEMENTS - STORAGE

Store locked up.

PRECAUTIONARY STATEMENTS - DISPOSAL

Dispose of contents/container to an approved waste disposal plant.

OTHER INFORMATION

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

UNKNOWN ACUTE TOXICITY

44.66 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE

Not applicable.

MIXTURE

Chemical Name	CAS No	Weight-%
Mesotrione	104206-82-8	40-50
Ethylene glycol	107-21-1	10-20
*The exact percentage (concentration) of composition has been withheld as a trade secret..		

4. FIRST AID MEASURES

Description of first aid measures

General advice: Show this safety data sheet to the doctor in attendance.

Inhalation: Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Eye contact: Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur.

Skin contact: Wash skin with soap and water. Get medical attention if symptoms occur.

Ingestion: Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.

Self-protection of the first aider: Ensure that medical personnel are aware of the material(s) involved, take precautions to protect



Manufactured for:
JABCO, LLC
550 W. Pioneer Blvd. Suite 140
Mesquite, NV 89027

Crop Protect Direct Meso 4SC

themselves and prevent spread of contamination. Avoid breathing vapors or mists.

Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms: Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: None known based on information supplied.

Specific hazards arising from the chemical: None known based on information supplied.

Explosion data

Sensitivity to mechanical impact: None.

Sensitivity to static discharge: None.

Special protective equipment and precautions for fire-fighters:

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Do not breathe vapor or mist.

Other information: Refer to protective measures listed in Sections 7 and 8.

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. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Ensure adequate ventilation. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

Store in accordance with local regulations. Store in accordance with the particular national regulations. Keep in properly labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits: The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical Name	ACGIH TLV	OSHA PEL
Ethylene glycol 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³

Appropriate engineering controls

Engineering controls Showers, Eyewash stations, Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Prevent product from entering drains. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Color	Cream
Odor	Slight sour
Odor threshold	No information available
Property	
pH	3.05
Melting point / freezing point	No information available
Boiling point / boiling range	No information available
Flash point	No information available
Evaporation rate	No information available



Manufactured for:
JABCO, LLC
550 W. Pioneer Blvd. Suite 140
Mesquite, NV 89027

Crop Protect Direct Meso 4SC

Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	1.20 g/cm ³
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic Viscosity	Non-Newtonian
Dynamic Viscosity	No information available

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	1.190 g/cm ³
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity: None under normal use conditions.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: None under normal processing.

Conditions to avoid: None known based on information supplied.

Incompatible materials: None known based on information supplied.

Hazardous decomposition products: None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation: Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).

Eye contact: Specific test data for the substance or mixture is not available. Contact with eyes may cause irritation.

Skin contact: Specific test data for the substance or mixture is not available. May be harmful in contact with skin.

Ingestion: Specific test data for the substance or mixture is not available. May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms: Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

ATEmix (inhalation-dust/mist): 4.0693 mg/l

Unknown acute toxicity

44.66 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist) **Information on toxicological effects**

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Mesotrione 104206-82-8	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/ kg (Rat)	> 2.5 mg/L (Rat) 6 h

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

Skin corrosion/irritation: No information available.

Serious eye damage/eye irritation: No information available.

Respiratory or skin sensitization: No information available.

Germ cell mutagenicity: No information available.

Carcinogenicity: No information available.

Reproductive toxicity: Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.

STOT - single exposure: No information available.

STOT - repeated exposure: May cause damage to organs through prolonged or repeated exposure.

Target organ effects: Respiratory system. Eyes. Skin. Central nervous system.

Aspiration hazard: No information available.

Other adverse effects: No information available.

Interactive effects: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ethylene glycol 107-21-1	EC50: 6500 - 13000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =41000mg/L (96h, Oncorhynchus mykiss) LC50: 14 - 18mL/L (96h, Oncorhynchus mykiss) LC50: =27540mg/L (96h, Lepomis macrochirus) LC50: =40761mg/L (96h, Oncorhynchus mykiss) LC50: 40000 - 60000mg/L (96h, Pimephales promelas) LC50: =16000mg/L (96h, Poecilia reticulata)	EC50: =46300mg/L (48h, Daphnia magna)



Manufactured for:
JABCO, LLC
550 W. Pioneer Blvd. Suite 140
Mesquite, NV 89027

Crop Protect Direct Meso 4SC

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical Name	Partition coefficient
Ethylene glycol 107-21-1	-1.36

Other adverse effects: No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products: Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging: Do not reuse empty containers.

14. TRANSPORT INFORMATION

US-DOT:

Not regulated

IMDG (shipped by vessel):

UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Mesotrione), 9, PG III, Marine Pollutant

IATA (shipped by air):

UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Mesotrione), 9, PG III, Marine Pollutant

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

International Inventories

Contact supplier for inventory compliance status

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 %
Ethylene glycol - 107-21-1	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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).

SARA 313

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Ethylene glycol 107-21-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65: This product contains the following Proposition 65 chemicals:

Chemical Name	California Proposition 65
Ethylene glycol - 107-21-1	Developmental

US State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene glycol - 107-21-1	X	X	X
Sodium hydroxide 1310-73-2	X	X	X
Glycerin 56-81-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

16. OTHER INFORMATION

NFPA	Health hazards 2	Flammability 0
NFPA	Instability 0	Special hazards -
HMIS	Health hazards 2 *	Flammability 0
HMIS	Physical hazards 0	Personal protection X

*Chronic Hazard Star Legend * = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet



Manufactured for:
JABCO, LLC
550 W. Pioneer Blvd. Suite 140
Mesquite, NV 89027

Crop Protect Direct Meso 4SC

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA-TWA (time-weighted average)-STEL-STEL (Short Term Exposure Limit)
Ceiling-Maximum limit value-* -Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Issuing Date 14-Oct-2022

Disclaimer

The information provided in this 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



Manufactured for:
JABCO, LLC
550 W. Pioneer Blvd. Suite 140
Mesquite, NV 89027

Crop Protect Direct Meso 4SC