

Issuing Date 20-Feb-2023

Revision Date 20-Feb-2023

Revision Number 1

1. Identification

Product identifier

Product Name GCS MesoXtra Herbicide

Other means of identification

Product Code(s) 94730-36

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Herbicide

Restrictions on use Use only as directed on product label

Details of the supplier of the safety data sheet

Manufacturer Address

Generic Crop Science, LLC
1887 Whitney Mesa Drive #9740
Henderson, NV 89014-2069
1-844-200-FARM (3276)E-mail regulatory@genericcropscience.com

Emergency telephone number

Emergency telephone CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)
24/7 Health Emergencies: Call 800-858-7378 (National Pesticide Information Center)

2. Hazard(s) identification

Classification

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

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2B
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable.

Label elements

Warning

Hazard statements

Harmful if inhaled.

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



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.
 Wash face, hands and any exposed skin thoroughly after handling.
 Do not breathe vapor or mist.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.
 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.
 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.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Metolachlor	51218-45-2	10 - 20	*
Atrazine	1912-24-9	10 - 20	*
Mesotrione	104206-82-8	1 - 5	*

*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 immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention if irritation develops and persists. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin contact	Wash skin with soap and water. Get medical attention if symptoms occur.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect 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. Fire-fighting 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.
Hazardous combustion products	Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.
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. Avoid contact with skin, eyes or clothing. 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.

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	NIOSH
Atrazine 1912-24-9	TWA: 2 mg/m ³ inhalable particulate matter	(vacated) TWA: 5 mg/m ³	TWA: 5 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.

General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Off-white liquid

Physical state

Liquid

Color	Off-white
Odor	Characteristic
Odor threshold	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4.5	
pH (as aqueous solution)		No data available
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flash point		No data available
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure		No data available
Vapor density		No data available
Relative density		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity	119.9 cP	@ 20 °C
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	1.092 g/mL	
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	Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Harmful by inhalation.
Eye contact	Causes eye irritation. May cause redness, itching, and pain.

Skin contact May be harmful in contact with skin.

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

Oral LD50 > 2,000 mg/kg (rat) OECD 423
Dermal LD50 > 2,000 mg/kg (rat) OECD 402
Inhalation LC50 > 4.11 mg/l (rat, 4 hr) (dust/mist) OECD 403

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Metolachlor 51218-45-2	> 2000 mg/kg (Rat)	= 12700 mg/kg (Rabbit)	> 3.20 mg/L (Rat) 4 h
Atrazine 1912-24-9	= 672 mg/kg (Rat)	> 5000 mg/kg (Rat)	= 5200 mg/m ³ (Rat) 4 h
Mesotrione 104206-82-8	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

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

Skin corrosion/irritation On basis of test data: Non-irritant.

Serious eye damage/eye irritation On basis of test data: Causes eye irritation.

Respiratory or skin sensitization On basis of test data: Did not cause allergic skin reactions when tested in guinea pigs.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Atrazine 1912-24-9	A3	Group 3	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

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 Liver. 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	Toxicity to microorganisms	Crustacea
Metolachlor 51218-45-2	EC50: =57.1mg/L (72h, <i>Desmodesmus subspicatus</i>) EC50: 0.0448 - 0.0568mg/L (96h, <i>Pseudokirchneriella subcapitata</i>)	LC50: 8.6 - 12mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 3.3 - 4.6mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 5.4 - 12mg/L (96h, <i>Pimephales promelas</i>) LC50: 7.4 - 10.5mg/L (96h, <i>Poecilia reticulata</i>)	-	LC50: =25.1mg/L (48h, <i>Daphnia magna</i>) EC50: =4.25mg/L (48h, <i>Daphnia magna</i>) EC50: 13 - 18.4mg/L (48h, <i>Daphnia magna</i>)
Atrazine 1912-24-9	EC50: =0.03mg/L (72h, <i>Desmodesmus subspicatus</i>) EC50: 0.014 - 0.027mg/L (96h, <i>Desmodesmus subspicatus</i>) EC50: =0.072mg/L (72h, <i>Desmodesmus subspicatus</i>) EC50: =0.13mg/L (96h, <i>Pseudokirchneriella subcapitata</i>) EC50: =0.2mg/L (72h, <i>Pseudokirchneriella subcapitata</i>) EC50: =0.004mg/L (96h, <i>Pseudokirchneriella subcapitata</i>) EC50: 0.0096 - 0.07mg/L (72h, <i>Pseudokirchneriella subcapitata</i>) EC50: =0.0929mg/L (72h, <i>Pseudokirchneriella subcapitata</i>)	LC50: 4.5 - 11mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 3 - 6.75mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =16mg/L (96h, <i>Lepomis macrochirus</i>) LC50: >8mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =23.999mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =19mg/L (96h, <i>Cyprinus carpio</i>) LC50: 15.7 - 20.2mg/L (96h, <i>Cyprinus carpio</i>) LC50: 5.4 - 8.4mg/L (96h, <i>Lepomis macrochirus</i>) LC50: >4.1mg/L (96h, <i>Pimephales promelas</i>) LC50: =4.3mg/L (96h, <i>Poecilia reticulata</i>)	-	EC50: 5.2 - 8.1mg/L (48h, <i>Daphnia magna</i>)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Metolachlor 51218-45-2	2.9
Atrazine 1912-24-9	2.59

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

DOT Not regulated

IATA Not regulated in quantities less than 5 liter per individual container. See IATA SP A197

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9

Packing group III

IATA Technical Name Metolachlor, Atrazine

Special Provisions A97, A158, A197

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

ERG Code 9L

IMDG Not regulated in quantities less than 5 liter per individual container. See IMDG 2.10.2.7

UN number or ID number UN3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es) 9

Packing group III

EmS-No F-A, S-F

Marine pollutant P

Marine pollutant Metolachlor, Atrazine

Special Provisions 274, 335, 969

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metolachlor, Atrazine), 9, III, Marine pollutant

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 %
Atrazine - 1912-24-9	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, 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 contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Atrazine - 1912-24-9	Developmental Female Reproductive

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Metolachlor 51218-45-2	X	-	-
Atrazine 1912-24-9	X	X	X
Glycerin 56-81-5	X	X	X
Sodium hydroxide 1310-73-2	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number 94730-36

16. Other information

NFPA	Health hazards 2	Flammability 0	Instability 0	Special hazards -
HMIS	Health hazards 2 *	Flammability 0	Physical hazards 0	Personal protection X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

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

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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