# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US - OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Issuing Date** 31-Jan-2023 **Revision Date** 31-Jan-2023 **Revision Number** 1

## 1. Identification

**Product identifier**

**Product Name** GCS Metola Plus 8EC

**Other means of identification**

**Product Code(s)** 94730-1B

**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 2A |
| Carcinogenicity | Category 1B |
| Reproductive toxicity | Category 2 |

**Hazards not otherwise classified (HNOC)**
Not applicable.

**Label elements**

**Danger**

**Hazard statements**
Harmful if inhaled.

Causes serious eye irritation.
May cause cancer.
Suspected of damaging fertility or the unborn child.

**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.
Avoid breathing vapors or mists.
Use only outdoors or in a well-ventilated area.
Wash face, hands and any exposed skin thoroughly after handling.

**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. Causes mild skin irritation. Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

**Unknown acute toxicity**
6.5803 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

| Chemical name | CAS No | Weight-% | Trade secret |
|---|---|---|---|
| Metolachlor | 51218-45-2 | 80 - 90 | * |
| Tristyrylphenol ethoxylates | 99734-09-5 | 5 - 10 | * |
| Benoxacor | 98730-04-2 | 1 - 5 | * |
| Solvent Naphtha (Petroleum), Heavy Aromatic | 64742-94-5 | 1 - 5 | * |
| Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium salts | 90194-26-6 | 1 - < 3 | * |
| Naphthalene | 91-20-3 | 0.1 - 0.5 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

**Description of first aid measures**

| | |
|---|---|
| **General advice** | IF exposed or concerned: Get medical advice/attention. 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. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| **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** | Avoid contact with skin, eyes or clothing. 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** | May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation. 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** | Dry chemical, CO2, water spray or regular foam. |
| **Unsuitable extinguishing media** | None known based on information supplied. |
| **Specific hazards arising from the chemical** | Thermal decomposition can lead to release of irritating 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. |
| **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** | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapors or mists. |

**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** Cover liquid spill with sand, earth or other noncombustible absorbent material. Sweep up and shovel into suitable containers for disposal.

## 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. Avoid breathing vapors or mists. Ensure adequate ventilation. 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. 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 | NIOSH |
|---|---|---|---|
| Naphthalene<br>91-20-3 | TWA: 10 ppm<br>S* | TWA: 10 ppm<br>TWA: 50 mg/m$^3$<br>(vacated) TWA: 10 ppm<br>(vacated) TWA: 50 mg/m$^3$<br>(vacated) STEL: 15 ppm<br>(vacated) STEL: 75 mg/m$^3$ | IDLH: 250 ppm<br>TWA: 10 ppm<br>TWA: 50 mg/m$^3$<br>STEL: 15 ppm<br>STEL: 75 mg/m$^3$ |

**Biological occupational exposure limits**

| Chemical name | ACGIH |
|---|---|
| Naphthalene<br>91-20-3 | - (1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis) - end of shift |

**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** | Avoid release to the environment. |
| **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. Wear suitable gloves and eye/face protection. |

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Appearance** | |
| **Physical state** | Liquid |
| **Color** | Amber |
| **Odor** | No data available |
| **Odor threshold** | No data available |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **pH** | 5 - 7 | |
| **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** | | No data 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** | 1.1 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** Incompatible materials.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** Thermal decomposition can lead to release of irritating and toxic gases and vapors, Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride.

## 11. Toxicological information

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

**Skin contact** Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. Causes mild skin irritation.

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation. Coughing and/ or wheezing.

**Acute toxicity**

**Numerical measures of toxicity**

**The following values are calculated based on chapter 3.1 of the GHS document:**
**ATEmix (inhalation-dust/mist)** 3.47 mg/l

**Unknown acute toxicity**
6.5803 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Metolachlor<br>51218-45-2 | > 2000 mg/kg ( Rat ) | = 12700 mg/kg ( Rabbit ) | > 3.20 mg/L ( Rat ) 4 h |
| Benoxacor<br>98730-04-2 | > 5 g/kg ( Rat ) | > 2010 mg/kg ( Rabbit ) | > 2 g/m$^3$ ( Rat ) 4 h |
| Solvent Naphtha (Petroleum), Heavy Aromatic<br>64742-94-5 | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | > 4688 mg/m$^3$ (Vapor) 4h |
| Benzenesulfonic acid, 4-C10-14-alkyl derivs., calcium | = 4445 mg/kg ( Rat ) | = 2005 mg/kg ( Rat ) | - |

| | | | |
|---|---|---|---|
| salts<br>90194-26-6 | | | |
| Naphthalene<br>91-20-3 | = 1110 mg/kg ( Rat ) | = 1120 mg/kg ( Rabbit ) | > 0.4 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes mild skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

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

| Chemical name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Naphthalene<br>91-20-3 | A3 | Group 2B | Reasonably Anticipated | X |

**Legend**

**ACGIH (American Conference of Governmental Industrial Hygienists)**
A3 - Animal Carcinogen
**IARC (International Agency for Research on Cancer)**
Group 2B - Possibly Carcinogenic to Humans
**NTP (National Toxicology Program)**
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**
X - Present

**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** No information available.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Metolachlor<br>51218-45-2 | EC50: =57.1mg/L (72h, Desmodesmus subspicatus)<br>EC50: 0.0448 - 0.0568mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 8.6 - 12mg/L (96h, Lepomis macrochirus)<br>LC50: 3.3 - 4.6mg/L (96h, Oncorhynchus mykiss)<br>LC50: 5.4 - 12mg/L | - | LC50: =25.1mg/L (48h, Daphnia magna)<br>EC50: =4.25mg/L (48h, Daphnia magna)<br>EC50: 13 - 18.4mg/L (48h, Daphnia magna) |

| | | | | |
|---|---|---|---|---|
| | | (96h, Pimephales promelas)<br>LC50: 7.4 - 10.5mg/L (96h, Poecilia reticulata) | | |
| Solvent Naphtha (Petroleum), Heavy Aromatic<br>64742-94-5 | - | LC50: =19mg/L (96h, Pimephales promelas)<br>LC50: =2.34mg/L (96h, Oncorhynchus mykiss)<br>LC50: =1740mg/L (96h, Lepomis macrochirus)<br>LC50: =45mg/L (96h, Pimephales promelas)<br>LC50: =41mg/L (96h, Pimephales promelas) | - | EC50: =0.95mg/L (48h, Daphnia magna) |
| Naphthalene<br>91-20-3 | - | LC50: 5.74 - 6.44mg/L (96h, Pimephales promelas)<br>LC50: =1.6mg/L (96h, Oncorhynchus mykiss)<br>LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss)<br>LC50: =1.99mg/L (96h, Pimephales promelas)<br>LC50: =31.0265mg/L (96h, Lepomis macrochirus) | - | LC50: =2.16mg/L (48h, Daphnia magna)<br>EC50: =1.96mg/L (48h, Daphnia magna)<br>EC50: 1.09 - 3.4mg/L (48h, Daphnia magna) |

**Persistence and degradability** No information available.

**Bioaccumulation**

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Metolachlor<br>51218-45-2 | 2.9 |
| Benoxacor<br>98730-04-2 | 2.6 |
| Solvent Naphtha (Petroleum), Heavy Aromatic<br>64742-94-5 | 6.5 |
| Naphthalene<br>91-20-3 | 3.4 |

**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.

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

## 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 |
| **Special Provisions** | A97, A158, A197 |
| **Description** | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Metolachlor), 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 |
| **Special Provisions** | 274, 335, 969 |
| **Description** | UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metolachlor), 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 % |
|---|---|
| Naphthalene - 91-20-3 | 0.1 |

**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 contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| Naphthalene 91-20-3 | 100 lb | X | X | X |

**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).

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | Reportable Quantity (RQ) |
|---|---|---|---|
| Naphthalene<br>91-20-3 | 100 lb | - | RQ 100 lb final RQ<br>RQ 45.4 kg final RQ |

**US State Regulations**

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

| Chemical name | California Proposition 65 |
|---|---|
| Naphthalene - 91-20-3 | Carcinogen |

**U.S. State Right-to-Know Regulations**

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Metolachlor<br>51218-45-2 | X | - | - |
| 2-ethylhexanol<br>104-76-7 | - | X | X |
| 2-Methylnaphthalene<br>91-57-6 | X | - | - |
| Naphthalene<br>91-20-3 | X | X | X |
| 1-Methylnaphthalene<br>90-12-0 | X | X | X |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** 94730-1

## 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
*Chronic Hazard Star Legend* * = *Chronic Health Hazard*

**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

| | |
|---|---|
| **Issuing Date** | 31-Jan-2023 |
| **Revision Date** | 31-Jan-2023 |
| **Revision Note** | Initial Release. |

**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**