

SAFETY DATA SHEET

This Safety Data Sheet (SDS) complies with the requirements of the U.S. Federal Occupational Safety and Health Administration Hazard Communication 29 CFR 1910.1200 (g)(2).

MORALE Plus WDG

Version Revision Date:
2.0 07/09/2026

1. IDENTIFICATION OF THE PRODUCT & COMPANY

Product Name: MORALE Plus WDG

Product Code: EPA Reg. No. 103087-18

Intended Use: Herbicide

Company Identification:

Longwind Cropsience USA LLC.
8 THE GREEN, STE A, DOVER, KENT,
DE, 19901, UNITED STATES

Emergency Information: In the event of a leak, fire or medical emergency involving a human or animal please call INFOTRAC: 1-800-535-5053 or Outside the USA and Canada at 1-352-323-3500, 24/7/365.

2. HAZARD IDENTIFICATION

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA-required classifications on the product label. Certain sections of this SDS are superseded by federal law under EPA FIFRA for a registered pesticide. Please see Section 15, REGULATORY INFORMATION for an explanation.

Classification

Carcinogenicity	Category 2
STOT	Category 2

Required Label Elements

EMERGENCY OVERVIEW:

WARNING

**Hazard Statements:**

H303 May be harmful if swallowed

H313 May be harmful in contact with skin

H333 May be harmful if inhaled

H351 Suspected of causing cancer (state route of exposure if conclusively proven that no other route applies)

H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

Precautionary Statements:**Prevention:**

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

P308 + P313: IF exposed or concerned: Get medical advice/attention.

P314: Get medical advice/attention if you feel unwell.

P391: Collect spillage.

Storage

P405: Store locked up.

Disposal

P501: Dispose of contents/container to the place complying with local regulations.

3. **COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS Number	Composition
Bromacil	314-40-9	40%
Diuron	330-54-1	40%

4. **FIRST AID MEASURES**

If Swallowed: Immediately call a poison center or doctor/physician. DO NOT induce vomiting. If conscious, drink 8-10 oz. of water promptly. Never give anything by mouth to an unconscious person. Obtain medical attention. Do not induce vomiting unless directed by medical personnel.

If in Eyes: 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. Seek immediate medical attention/advice.

If on Skin or Clothing: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Seek

immediate medical attention/advice.

If Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Seek medical advice.

Advice to physician: There is no specific antidote. Treat symptomatically and supportively as and when required.

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO₂).

Hazardous thermal composition products: Not determined.

Fire fighting instructions: Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

Fire fighting equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment: Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up: Pick up material with non-sparking shovel or explosion proof vacuum cleaner. Never return spills in the original containers for re-use. Pick up and transfer to properly labeled containers. If spill area is on ground near valuable plants or trees, remove top 2 inches of soil after initial clean up.

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. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Store away from incompatible materials. Protect from excessive heat. Store locked up. Keep/store only in original container. Store at ambient conditions.

Incompatible Materials
Potassium permanganate.

8. **EXPOSURE CONTROL/PERSONAL PROTECTION**

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Bromacil 314-40-9	TWA: 10 mg/m ³	(vacated) TWA: 1 ppm (vacated) TWA: 10 mg/m ³	TWA: 1 ppm TWA: 10 mg/m ³
Diuron 330-54-1	TWA: 10 mg/m ³	(vacated) TWA: 10 mg/m ³	TWA: 10 mg/m ³

Appropriate engineering controls

Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment:

Eye protection: Use splash goggles or face shield when contact may occur.

Skin protection: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long sleeve shirt, trousers, and safety shoes

Respirator: Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.

Use safety recommendations: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Columnar solid
pH:	4-7
Suspensibility:	Bromacil ≥ 90% Diuron ≥ 90%
Dispersibility:	≥ 90%
Wettability:	≤ 60s
Wet sieve test (75µm) :	≥ 98%
Persistence foaming:	≤ 60 ml

10. **STABILITY AND REACTIVITY**

Product reactivity: Not reactive under normal conditions.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: None under normal processing.

Conditions to Avoid: Extreme heat and open flames.

Incompatible materials: Potassium permanganate.

Hazardous Decomposition Products: May include but are not limited to: oxides of carbon, oxides of phosphorous. Hydrogen chloride.

11. **TOXICOLOGICAL INFORMATION**

Acute oral toxicity	2,000mg/kg <LD ₅₀ (Rats) ≤ 5,000 mg/kg
Acute inhalation toxicity	LC ₅₀ (Rats) > 5.05 mg/l (4h)
Acute dermal toxicity	2,000mg/kg <LD ₅₀ (Rabbits) ≤ 5,000 mg/kg
Skin corrosion/irritation	non-irritation
Serious eye damage/eye irritation	non-irritation
Respiratory or skin sensitisation	non-sensitizer

12. **ECOLOGICAL INFORMATION**

Environmental summary: Very toxic to aquatic life with long lasting effects. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Bromacil is known to leach through soil and has been found in ground water as a result of normal field use. Users are advised not to apply in areas where soils are permeable, particularly where ground water is used for drinking water. Consult with the pesticide state lead agency for information regarding soil permeability and aquifer vulnerability in your area.

Bromacil:

Fish: 180 - 192: 96 h Pimephales promelas mg/L LC50 flowthrough
32: 96 h Lepomis macrochirus mg/L LC50 static
30 - 40: 96 h Oncorhynchus mykiss mg/L LC50 static

Diuron:

Algae: 0.022: 96 h Desmodesmus subspicatus mg/L EC50
0.036: 72 h Desmodesmus subspicatus mg/L EC50 static
0.1: 72 h Pseudokirchneriella subcapitata mg/L EC50 static
0.0007: 96 h Pseudokirchneriella subcapitata mg/L EC50 static
Fish: 13.4 - 15: 96 h Pimephales promelas mg/L LC50 flowthrough
13.4 - 15: 96 h Pimephales promelas mg/L LC50 static
2.3 - 3.3: 96 h Lepomis macrochirus mg/L LC50 static
4: 96 h Lepomis macrochirus mg/L LC50
1.5 -2.54: 96 h Oncorhynchus mykiss mg/L LC50 static
14.7: 96 h Oncorhynchus mykiss mg/L LC50
2.9: 96 h Cyprinus carpio mg/L LC50

Microorganisms: EC50 = 16.38 mg/L 5 min

Crustacea: 1.4: 48 h Daphnia magna mg/L EC50
6.3 - 13: 48 h Daphnia magna mg/L EC50 Static

13. **DISPOSAL CONSIDERATIONS**

Waste Treatment Methods

Pesticide disposal: END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS. Pesticide wastes are acutely hazardous. Improper disposal of

excess pesticide, spray mixture, or rinse is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency. Never place any unused product down an indoor or outdoor drain. Do not contaminate water, food or feed by disposal.

Container disposal:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORTATION INFORMATION

UN Number:	UN3077
Proper Shipping Name:	Environmentally hazardous substance, solid, N.O.S. (contains Bromacil, Diuron)
Transport Hazard Class:	9
Packing Group:	III
Marine Pollutant:	Yes ¹
Hazardous Substance RQ:	Diuron (CAS No. 330-54-1) (40%): RQ 100 lbs. (250 lbs. product)
Labels / Placards:	US-DOT: Class 9 Environmentally Hazardous Substance ² IMDG, IATA: Class 9 Environmentally Hazardous Substance ³

¹ **Marine Pollutant Note:** Ground-only shipments are excluded from Marine Pollutant labeling requires as per 49CFR172.101 Appendix B (4). For any shipments involving all or part of the transport by vessel, the shipment must be classified as a Marine Pollutant unless a limited quantity exemption applies (see note 3 below).

² **US-DOT Note:** Not regulated for "ground only" shipments in containers < 250 lbs.

³ **IMDG / IATA Note:** Not regulated when shipped in single or inner packaging ≤ 11 lbs. (5 kg).

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

EPA-FIFRA LABEL INFORMATION THAT DIFFERS FROM OSHA-GHS REQUIREMENTS:

Pesticide products in the U.S. are registered by the EPA under FIFRA and are subject to certain labeling requirements under federal pesticide law. These requirements may differ from the classification criteria and hazard information required by OSHA GHS for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the FIFRA pesticide label:

CAUTION. Harmful if swallowed, absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Wear (specify appropriate protective clothing, if applicable)

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of

the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

Immediate, Delayed

SARA Title III – Section 313 Reportable Ingredients

Bromacil (CAS No. 314-40-9) (40%)

Diuron (CAS No. 330-54-1) (40%)

CERCLA –

Diuron (CAS No. 330-54-1) (40%): RQ 100 lbs. (250 lbs. of this product)

CALIFORNIA PROP 65 STATUS –

WARNING: This product can expose you to chemicals including diuron, which is known to the state of California to cause cancer.

CANADA –

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

This SDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.