

CASORON® 4G

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 07/16/2018 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : CASORON® 4G
Other means of identification : EPA Reg. No. 400-168

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Herbicide
Restrictions on use : Agriculture, For professional users only

1.3. Details of the supplier of the safety data sheet

MacDermid Agricultural Solutions, Inc.
245 Freight Street
Waterbury, CT 06702-1818 - USA
T 1-866-761-9397

1.4. Emergency telephone number

Emergency number : Exposure calls (PROPHARMA): 1-866-303-6952 or +1-651-603-3432 (international)
Spill calls (CHEMTREC) (Contract # CCN1779): +1-800-424-9300 or +1-703-527-3887 (international)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Comb. Dust

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

GHS-US labelling

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : May form combustible dust concentrations in air

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

79.94% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
79.94% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
79.94% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% (w/w)	GHS-US classification
dichlobenil (ISO); 2,6-dichlorobenzonitrile (Active)	(CAS-No.) 1194-65-6	4	Acute Tox. 4 (Dermal), H312 Aquatic Chronic 2, H411 Comb. Dust

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse.

CASORON® 4G

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects after eye contact : May cause slight irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry chemical. alcohol resistant foam. Water fog.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible Dust. Burning produces irritating, toxic and noxious fumes.
- Explosion hazard : Dust may form explosive mixture in air.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Firefighting instructions : Cool adjacent structures and containers with water spray to protect and prevent ignition. Do not allow run-off from fire fighting to enter drains or water courses.
- Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid contact with skin, eyes and clothing. Do not breathe dust. Use personal protective equipment as required.

6.1.1. For non-emergency personnel

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not breathe vapours. Avoid contact with skin, eyes and clothing. Ensure good ventilation of the work station. Use personal protective equipment as required. Do not breathe dust.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Smoking, eating and drinking should be prohibited in areas of storage and use. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use.
- Incompatible products : Strong acids. Strong oxidizers. Strong bases.
- Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

No additional information available

CASORON® 4G

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

CASORON® 4G	
ACGIH	Not applicable
OSHA	Not applicable
dichlobenil (ISO); 2,6-dichlorobenzonitrile (1194-65-6)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Appropriate engineering controls

- Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station. Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air).
- Environmental exposure controls : Prevent leakage or spillage.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear suitable gloves resistant to chemical penetration

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Impervious clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Dust mask

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: granules.
Colour	: Gray
Odour	: aromatic
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available

CASORON® 4G

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Density	: No data available
Solubility	: Dispersible.
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: > 400 °C
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Strong acids. Strong oxidizers.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	: Inhalation; Skin and eye contact
Acute toxicity	: Not classified

CASORON® 4G	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
dichlobenil (ISO); 2,6-dichlorobenzonitrile (1194-65-6)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	1350 mg/kg
ATE US (dermal)	1350 mg/kg bodyweight

Skin corrosion/irritation	: Not classified (Not irritating to rabbits on cutaneous application)
Serious eye damage/irritation	: Not classified (Slightly irritant but not relevant for classification)
Respiratory or skin sensitisation	: Not classified (No sensitizing reaction was observed for guinea pigs)
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

CASORON® 4G

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/effects after eye contact : May cause slight irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.

CASORON® 4G	
LC50 fish 1	317 mg/l 96 h
EC50 Daphnia 1	155 mg/l 48 h
dichlobenil (ISO); 2,6-dichlorobenzonitrile (1194-65-6)	
LC50 fish 1	7.2 mg/l 96 h Oncorhynchus mykiss
EC50 Daphnia 1	1.92 mg/l 48 h
NOEC (acute)	2.6 mg/l 96 h Oncorhynchus mykiss

12.2. Persistence and degradability

CASORON® 4G	
Persistence and degradability	May cause long-term adverse effects in the environment.
dichlobenil (ISO); 2,6-dichlorobenzonitrile (1194-65-6)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

CASORON® 4G	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

CASORON® 4G	
Ecology - soil	Not established.

12.5. Other adverse effects

Other information : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated.

Transport by sea

IMDG

Transport hazard class(es) (IMDG) : Not applicable
Marine pollutant : No

Air transport

IATA

Transport hazard class(es) (IATA) : Not applicable
Marine pollutant : No

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

CASORON® 4G

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

dichlobenil (ISO); 2,6-dichlorobenzonitrile (1194-65-6)	
Not subject to reporting requirements of the United States SARA Section 313	
EPA TSCA Regulatory Flag	Exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.
CERCLA RQ	100 lb


FIFRA Labelling	
EPA Registration Number	400-168
This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use..	
FIFRA Signal Word	Caution
FIFRA Human Health Hazards	Causes moderate eye irritation. Harmful if swallowed.
FIFRA First Aid	Avoid contact with skin, eyes or clothing. Avoid breathing dust.
FIFRA Environmental Hazards	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 disposing of equipment washwater or rinsate. This chemical has properties and characteristics associated with chemicals detected in ground-water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

15.2. International regulations

CANADA

dichlobenil (ISO); 2,6-dichlorobenzonitrile (1194-65-6)	
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)	

15.3. US State regulations

 **WARNING** This product can expose you to Silicon dioxide (cristobalite), which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

dichlobenil (ISO); 2,6-dichlorobenzonitrile (1194-65-6)	
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances	
U.S. - Pennsylvania - RTK (Right to Know) List	

SECTION 16: Other information

Data sources : ACGIH (American Conference of Government Industrial Hygienists). European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. OSHA 29CFR 1910.1200 Hazard Communication Standard. TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

Other information : None.

Full text of H-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Comb. Dust	Combustible Dust
H312	Harmful in contact with skin.
H411	Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

CASORON® 4G

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	STEL: Short Term Exposure Limits
	TSCA: Toxic Substances Control Act
	TWA: Time Weighted Average

NFPA health hazard

: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product