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Revision Number 2

1. Identification

Product identifier

Product Name Willowood Clomazone 5G

Other means of identification

EPA Reg. No. 87290-46**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

Supplier Address

Generic Crop Science, LLC
1887 Whitney Mesa Drive #9740
Henderson, NV 89014-2069
1-844-200-FARM (3276)

E-mail

regulatory@farmersbusinessnetwork.com

Emergency telephone numbers

For Emergency Medical Assistance (Human or Animal) contact Rocky Mountain
Poison Control at 866-767-5040.For Chemical Emergency Assistance (Spill, Leak, Fire or Accident) contact
CHEMTREC at 800-424-9300 (North America) or 703-527-3887 (International).

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards not otherwise classified (HNOC)

Not applicable.

Label elements

Hazard statements

Not classified.

Other information

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

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Bentonite	1302-78-9	70 - 80	*
Clomazone	81777-89-1	5 - 10	*
.gamma.-Butyrolactone	96-48-0	1 - 5	*
Solvent naphtha (petroleum), light arom.	64742-95-6	1 - 5	*
Sodium nitrate	7631-99-4	0.5 - < 1	*
Hexamethylenediamine	124-09-4	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

Inhalation	Remove to fresh air.
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	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Large Fire	Dry chemical, CO ₂ , water spray or regular foam. Water spray, fog or regular foam.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	None known based on information supplied.
Hazardous combustion products	Carbon monoxide, Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Halogenated compounds, Metal oxides.
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. Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid generation of dust. Avoid breathing dust. Do not touch or walk through spilled material. Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk.

Methods for cleaning up Avoid generation of dust. Cover powder spill with plastic sheet or tarp to minimize spreading. Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Avoid generation of dust. Avoid breathing dust. Avoid contact with skin, eyes or clothing. Wear personal protective equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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
Bentonite 1302-78-9	TWA: 1 mg/m ³ respirable particulate matter	-	-
Hexamethylenediamine 124-09-4	TWA: 0.5 ppm	-	-

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 Handle in accordance with good industrial hygiene and safety practice. 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

Appearance Light brown granules
Physical state Solid
Color Light brown
Odor Mildly sweet
Odor threshold No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	5.89	solution (1 %)
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 No information available

Bulk density 0.897 g/cm³

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. Dust formation.

Incompatible materials Strong oxidizing agents.

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. Inhalation of dust in high concentration may cause irritation of respiratory system.

Eye contact Specific test data for the substance or mixture is not available. Dust contact with the eyes can lead to mechanical irritation.

Skin contact Specific test data for the substance or mixture is not available. Causes mild skin irritation.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Bentonite 1302-78-9	> 5000 mg/kg (Rat)	-	-
Clomazone 81777-89-1	= 1369 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 4800 mg/m ³ (Rat) 4 h
.gamma.-Butyrolactone 96-48-0	= 1540 mg/kg (Rat)	> 5640 mg/kg (Rabbit)	> 5100 mg/m ³ (Rat) 4 h
Solvent naphtha (petroleum), light arom. 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Sodium nitrate 7631-99-4	= 1267 mg/kg (Rat)	-	-

Hexamethylenediamine 124-09-4	= 750 mg/kg (Rat)	= 1110 mg/kg (Rabbit)	-
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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	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	IARC has classified ingested nitrate and nitrite ions as Group 2A carcinogens, for which food and water are the major pathways of human exposure. Individual nitrate and nitrite compounds were not evaluated individually. Based on available data, the classification criteria are not met.

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

Chemical name	ACGIH	IARC	NTP	OSHA
.gamma.-Butyrolactone 96-48-0	-	Group 3	-	-
Sodium nitrate 7631-99-4	-	Group 2A	-	X

Legend

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity	No information available.
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. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Bentonite 1302-78-9	-	LC50: =19000mg/L (96h, Oncorhynchus mykiss)	-	-
.gamma.-Butyrolactone 96-48-0	EC50: =360mg/L (72h, Desmodesmus subspicatus) EC50: =79mg/L (96h, Desmodesmus subspicatus)	LC50: =56mg/L (96h, Lepomis macrochirus)	-	EC50: >500mg/L (48h, Daphnia magna Straus)
Solvent naphtha (petroleum),	-	LC50: =9.22mg/L (96h,	-	EC50: =6.14mg/L (48h,

light arom. 64742-95-6		Oncorhynchus mykiss)		Daphnia magna)
Sodium nitrate 7631-99-4	-	LC50: =2000mg/L (96h, Lepomis macrochirus) LC50: 994.4 - 1107mg/L (96h, Oncorhynchus mykiss)	-	-
Hexamethylenediamine 124-09-4	EC50: =15mg/L (72h, Pseudokirchneriella subcapitata) EC50: =14.8mg/L (96h, Pseudokirchneriella subcapitata)	LC50: >56mg/L (96h, Lepomis macrochirus) LC50: =1825mg/L (96h, Pimephales promelas)	-	EC50: =23.4mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
.gamma.-Butyrolactone 96-48-0	-0.566
Sodium nitrate 7631-99-4	-3.8
Hexamethylenediamine 124-09-4	0.02

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. 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 classified as a hazardous material / dangerous good under the hazardous material regulations.

IATA

ID number Not regulated in quantities not to exceed 5 kilograms per individual container.
UN3077
Proper shipping name Environmentally hazardous substance, solid, n.o.s. (Clomazone)
Hazard Class(es) 9
Packing group III
Hazard Label Class 9, Environmentally Hazardous

IMDG

Not regulated in quantities not to exceed 5 kilograms per individual container.

ID number	UN3077
Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Clomazone)
Hazard Class(es)	9
Packing group	III
Hazard Label	Class 9, Environmentally Hazardous
Marine Pollutant/ Environmentally Hazardous Substance	YES

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 %
Sodium nitrate - 7631-99-4	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 does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium nitrate 7631-99-4	X	X	X
Soybean oil 8001-22-7	-	-	X
Hexamethylenediamine	X	X	-

124-09-4			
Sodium hydroxide 1310-73-2	X	X	X
Glycerin 56-81-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number 87290-46

16. Other information

NFPA	Health hazards 1	Flammability 0	Instability 0	Special hazards -
HMIS	Health hazards 1	Flammability 0	Physical hazards 0	Personal protection X

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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Revision Note Revise emergency phone number.

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