

Issue Date 02/09/2023

Revision Date 03/02/2023

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Perma-Gran

Other means of identification

Product Code 6625

Recommended use of the chemical and restrictions on use

Recommended use Herbicide
Uses Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet

Company Name Blue Cardinal Chemical, LLC
3670 Scarlet Oak Blvd.
St. Louis, MO 63122
800-325-3312

Emergency telephone number

Emergency Telephone CHEMTEL 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

GHS US labeling

Carcinogen

Category 1A H350

Label elements

Emergency Overview

DANGER

Hazard statements

May cause cancer.



Appearance: Grey granules

Physical state: Solid

Odor: Mild odor



Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear eye protection, protective clothing, protective gloves.

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to comply with local/regional/national/international regulations.

Hazards not otherwise classified (HNOC)**Other Information**

• N/A

Unknown Acute Toxicity

N/A

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	WEIGHT - %	GHS-US classification	TRADE SECRET
Bromacil	314-40-9	1.0 - 5.0	Eye Irrit. 2A, H319	*
Distillates (petroleum), hydrotreated middle; Gasoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C11 through C25 and boiling in the range of approximately; 205°C to 400°C (401 °F to 752 °F).]	64742-46-7	1.0 - 5.0	Asp. Tox. 1, H304	*
Crystalline Silica	14808-60-7	0.05 - 5.0	Carc. 1A, H350 STOT RE 1, H372	*

* All hazardous chemicals, as determined by 29 CFR 1910.1200 have been listed. A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation. The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures**Skin Contact**

Wash with plenty of water/.... Take off contaminated clothing and wash it before reuse.

Eye Contact

Direct contact with the eyes is likely to be irritating.

Inhalation

Get medical advice/attention. Remove person to fresh air and keep comfortable for breathing.

Ingestion

Rinse mouth with water. Do not induce vomiting.

Most important symptoms and effect, both acute and delayed**Symptoms**

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Slight irritation.

Symptoms/effects after eye contact : Direct contact with the eyes is likely to be irritating.

Symptoms/effects after ingestion : No data available.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

No additional information available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray. Carbon dioxide. Dry chemical powder.

Specific hazards arising from the chemical

Reactivity : On burning: release of toxic and corrosive gases/vapours (nitrous vapours, sulphur oxides, carbon monoxide - carbon dioxide). If the product is involved in a fire, it can release toxic chlorine gases. Reacts violently with (strong) oxidizers.

Protective equipment and precautions for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

General measures

Remove ignition sources. Use special care to avoid static electric charges.

Personal precautions, protective equipment and emergency procedures

Personal precautions

Protective goggles. Gloves. Protective clothing.

Emergency procedures

Evacuate unnecessary personnel.

For emergency responders

Personal precautions

Equip cleanup crew with proper protection.

Emergency procedures

Stop leak if safe to do so. Stop release. Ventilate area.

Environmental precautions

Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

Methods and material for containment and cleaning up

Methods for containment

Collect spillage.

Methods for cleaning up

This material and its container must be disposed of in a safe way, and as per local legislation. Take up liquid spill into inert absorbent material, e.g.: sand/earth. Clean contaminated surfaces with a soap solution..

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Do not breathe vapours. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Handle and open the container with care. Keep away from sources of ignition - No smoking. Take precautions against electrostatic charges. Obtain special instructions before use. Remove contaminated clothing immediately. Wash thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Comply with applicable regulations. Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away from: sparks, open flames, excessive heat. Store away from heat. Store in a cool area. Store in a dry area. Store in a well-ventilated place. Keep locked up. Keep only in original container. Meet the legal requirements.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Bromacil (314-40-9)		
ACGIH	ACGIH OEL TWA	10 mg/m ³

Distillates (petroleum), hydrotreated middle; Gasoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C11 through C25 and boiling in the range of approximately; 205°C to 400°C (401 °F to 752 °F).] (64742-46-7)
Not applicable

Crystalline Silica (14808-60-7)		
OSHA	OSHA PEL TWA [1]	0.1
OSHA	Remark (OSHA)	(3) See Table Z-3.

Individual protection measures, such as personal protective equipment

Personal protective equipment

Safety glasses. Gloves. Protective clothing. Use appropriate personal protective equipment when risk assessment indicates this is necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Solid
Appearance	Grey granules
Color	Grey
Odor	Mild odor
Odor Threshold	No data available

<u>Property</u>	<u>Values</u>
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	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
Solubility	Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available

10. STABILITY AND REACTIVITY**Reactivity**

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, sulphur oxides, carbon monoxide - carbon dioxide). If the product is involved in a fire, it can release toxic chlorine gases. Reacts violently with (strong) oxidizers.

Chemical Stability

Combustible liquid. Stable under normal conditions. Risk of explosion if heated under confinement. Heating may cause a fire or explosion.

Possibility Of Hazardous Reactions

Refer to section on Reactivity.

Conditions To Avoid

No additional information available

Incompatible Materials

Oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition produces: CO, CO₂, Oxides of nitrogen and other potentially toxic fumes.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified

Bromacil (314-40-9)	
LD50 oral rat	5200 mg/kg (Rat, Oral)
LD50 dermal rat	> 2500 mg/kg (Rat, Dermal)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 4.8 mg/l (4 h, Rat, Inhalation)
ATE CLP (oral)	5200 mg/kg bodyweight

Skin corrosion/irritation

Not classified

Serious eye damage/irritation

Not classified

Respiratory or skin sensitization

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

May cause cancer.

Crystalline Silica (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens

Reproductive toxicity

Not classified

Specific target organ toxicity (single exposure)

Not classified

Specific target organ toxicity (repeated exposure)

Not classified

Aspiration hazard

Not classified

Symptoms/injuries after inhalation

May cause respiratory irritation.

Symptoms/injuries after skin contact

Slight irritation.

Symptoms/injuries after eye contact

Direct contact with the eyes is likely to be irritating.

Symptoms/injuries after ingestion

No data available.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Bromacil (314-40-9)	
LC50 - Fish [1]	75 mg/l (48 h, Salmo gairdneri)

Persistence and Degradability

Bromacil (314-40-9)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.

Bioaccumulative potential

Bromacil (314-40-9)	
BCF - Fish [1]	2.8 – 26.5 (672 h, Leuciscus idus, Fresh weight)
BCF - Fish [2]	4.25 (388 h, Pimephales promelas, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	2.11
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Dispose of contents/container to comply with local/regional/national regulations.

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

Department of Transportation (DOT)**In accordance with DOT : Not regulated for transport****Additional information**

Other information: No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

15. REGULATORY INFORMATION**California Proposition 65**

WARNING: This product can expose you to Crystalline Silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

Caution: Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing of dust.

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

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET
Bromacil	314-40-9	1.0 - 5.0	*

U.S. EPA Label Information

EPA Pesticide Registration Number 10088-55-91641

16. OTHER INFORMATION

Training advice: Normal use of this product shall imply use in accordance with the instructions on the packaging.

NFPA	Health hazards	1	Flammability	0	Reactivity	0
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Revision Note

N/A = Not Applicable; N/D = Not Determined

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