

Revision date: 2012/07/02 Page: 1/9
Version: 1.0 (30572505/SDS CPA US/EN)

1. Product and Company Identification

Company
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Registrant:

Whitmire Micro-Gen Research Laboratories, Inc. 3568 Tree Court Industrial Blvd. St. Louis, MO 63122

Substance number: 000000550555

2. Hazards Identification

Emergency overview

CAUTION:

EXTREMELY FLAMMABLE.

KEEP OUT OF REACH OF CHILDREN.

KEEP OUT OF REACH OF DOMESTIC ANIMALS.

HARMFUL IF SWALLOWED.

HARMFUL IF INHALED.

HARMFUL IF ABSORBED THROUGH SKIN.

Do not breathe vapours/mists.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

Aerosol container contains flammable gas under pressure.

See Product Label for additional precautionary statements.

State of matter: liquid

Colour: white

Odour: characteristic, solvent-like

Potential health effects

Primary routes of exposure:

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Relatively nontoxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

Revision date : 2012/07/02 Page: 2/9
Version: 1.0 (30572505/SDS_CPA_US/EN)

Irritation / corrosion:

Causes substantial but temporary eye injury. May cause slight irritation to the skin.

Sensitization:

Skin sensitizing effects were not observed in animal studies.

Signs and symptoms of overexposure:

Vomiting may cause aspiration pneumonia due to the ingredients.

Potential environmental effects

Aquatic toxicity:

Acutely toxic for fish.

Terrestrial toxicity:

Acutely toxic to birds.

3. Composition / Information on Ingredients

Content (W/W)	Chemical name
0.1 %	Pyriproxyfen
0.05 %	Pyrethrins
0.4 %	n-Octyl bicycloheptene dicarboximide
0.4 %	Permethrin
< 10.0 %	Distillates (petroleum), hydrotreated light
<= 30.0 %	Hydrocarbons, C3-4
>= 80.0 %	Proprietary ingredients
	0.1 % 0.05 % 0.4 % 0.4 % < 10.0 % <= 30.0 %

4. First-Aid Measures

General advice:

First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If inhaled:

Remove the affected individual into fresh air and keep the person calm.

If on skin:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote. Aspiration of this product during induced emesis can result in lung injury. If evacuation of stomach contents is considered necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation.

Revision date: 2012/07/02 Page: 3/9
Version: 1.0 (30572505/SDS_CPA_US/EN)

5. Fire-Fighting Measures

NFPA 30B flammability:

Level 1 Aerosol

Flammability of Aerosol 0 in

Products: no flashback

Suitable extinguishing media:

foam, dry powder, carbon dioxide

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, halogenated compounds

The substances/groups of substances mentioned can be released in case of fire. Aerosol container contains flammable gas under pressure. Risk of explosion at excessive temperatures.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

Personal precautions:

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water. A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities. This product is regulated by CERCLA ('Superfund').

Cleanup

Dike spillage. Pick up with suitable absorbent material. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Handling

General advice:

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect against heat. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

Aerosol container contains flammable gas under pressure. The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Revision date : 2012/07/02 Page: 4/9
Version: 1.0 (30572505/SDS_CPA_US/EN)

Storage

General advice:

Protect containers from physical damage. Store in a cool, dry, well-ventilated area. Avoid all sources of ignition: heat, sparks, open flame.

Storage incompatibility:

General advice: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Storage stability:

May be kept indefinitely if stored properly. If an expiry date is mentioned on the packaging/label this takes priority over the statements on storage duration in this safety data sheet.

Temperature tolerance

Protect from temperatures above: 130 °F Explosive at or above indicated temperature.

8. Exposure Controls and Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with workplace control parameters

Pyrethrins OSHA PEL 5 mg/m3 ;

ACGIH TWA value 5 mg/m3 ;

Distillates (petroleum),

hydrotreated light ACGIH TWA value 200 mg/m3 Non-aerosol (total

hydrocarbon vapor);

Application restricted to conditions in which there are

negligible aerosol exposures.

Skin Designation Non-aerosol (total hydrocarbon

/apor);

The substance can be absorbed through the skin.

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Revision date: 2012/07/02 Page: 5/9 Version: 1.0 (30572505/SDS_CPA_US/EN)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:

Odour: characteristic, solvent-like

Colour: white

pH value: (24°C) 6.8 Density: 0.97 g/cm3 (approx. 20 °C) dispersible

Solubility in water:

10. Stability and Reactivity

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.

Substances to avoid:

No substances known that should be avoided.

Hazardous reactions:

The product is chemically stable.

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.. Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, Hydrocarbons, nitrogen dioxide, nitrogen oxide, Hydrogen chloride, halogenated hydrocarbons

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

11. Toxicological information

Acute toxicity

Oral:

Type of value: LD50

Species: rat

Revision date : 2012/07/02 Page: 6/9 Version: 1.0 (30572505/SDS_CPA_US/EN)

Value: > 5,000 mg/kg

Inhalation:

Type of value: LC50

Species: rat

Value: > 5.12 mg/l

Dermal:

Type of value: LD50 Species: rabbit Value: > 2,000 mg/kg

Irritation / corrosion

Skin:

Species: rabbit

Result: moderately irritating

Prolonged contact with the product can result in skin irritation.

Eye:

Species: rabbit

Result: Moderately to severely irritating.

Sensitization: Buehler test

Species: guinea pig

Result: Skin sensitizing effects were not observed in animal studies.

Genetic toxicity

Information on: Pyriproxyfen No mutagenic effects reported.

Information on: pyrethrum No mutagenic effects reported.

Information on: n-Octyl bicycloheptene dicarboximide

Results from a number of mutagenicity studies with microorganisms and mammalian cell culture are available. Taking into account all of the information, there is no indication that the substance is mutagenic.

Information on: Distillates (petroleum), hydrotreated light

The substance was not mutagenic in bacteria. The substance was not genotoxic in mammalian cell culture. The substance was not mutagenic in mammalian cell culture. The substance was not genotoxic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Information on: Pyriproxyfen

In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Information on: pyrethrum

Not Likely to Be Carcinogenic to Humans.

Reproductive toxicity

Information on: Pyriproxyfen

No reproductive toxic effects reported.

Information on: pyrethrum

No reproductive toxic effects reported.

Information on: n-Octyl bicycloheptene dicarboximide

No reproductive toxic effects reported.

Revision date: 2012/07/02 Page: 7/9
Version: 1.0 (30572505/SDS_CPA_US/EN)

Development:

Information on: Pyriproxyfen

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Information on: pyrethrum

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Information on: n-Octyl bicycloheptene dicarboximide

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Information on: Distillates (petroleum), hydrotreated light

No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

12. Ecological Information

Fish

Information on: Pyriproxyfen

Acute: Flow through.

Oncorhynchus mykiss/LC50 (96 h): > 0.325 mg/l

Information on: pyrethrum

Acute:

Oncorhynchus mykiss/LC50 (96 h): 0.0051 mg/l

Information on: n-Octyl bicycloheptene dicarboximide

Acute:

Oncorhynchus mykiss/LC50 (96 h): 1.4 mg/l

Information on: permethrin

Acute:

Oncorhynchus mykiss/LC50 (96 h): 0.006 - 0.028 mg/l

Brachydanio rerio/LC50 (96 h): 0.022 mg/l

Information on: Distillates (petroleum), hydrotreated light

Acute:

Brachydanio rerio/LC50 (96 h): 7.3 mg/l

The product has not been tested. The statement has been derived from substances/products of a similar

structure or composition. Literature data.

Aquatic invertebrates

Information on: pyrethrum

Acute:

Daphnia magna/EC50 (48 h): 0.0116 mg/l

Information on: n-Octyl bicycloheptene dicarboximide

Acute:

Daphnia magna/LC50 (48 h): 2.3 mg/l

Information on: Permethrin

Acute:

Daphnia magna/LC50 (24 h): 0.024 mg/l

Information on: Distillates (petroleum), hydrotreated light

Acute:

Daphnia magna/EL50 (48 h): 1.4 - 21 mg/l

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Literature data.

Revision date: 2012/07/02 Page: 8/9
Version: 1.0 (30572505/SDS_CPA_US/EN)

Aquatic plants

Information on: Distillates (petroleum), hydrotreated light Toxicity to aquatic plants:

algae/EC50 (72 h): 3.7 - 8.3 mg/l

Literature data.

13. Disposal considerations

Waste disposal of substance:

Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:

Do not cut, puncture, crush, or incinerate empty aerosol containers. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Empty aerosol cans may meet the definition of RCRA D003. Consult local and/or regional EPA for further guidance.

14. Transport Information

Reference Bill of Lading

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

OSHA hazard category: Chronic target organ effects reported; ACGIH TLV established

EPCRA 311/312 (Hazard categories): Acute; Chronic

CERCLA RQCAS NumberChemical name1 LBS8003-34-7Pyrethrins

State regulations

State RTK	CAS Number	Chemical name
MA, NJ, PA	8003-34-7	Pyrethrins
MA	52645-53-1	Permethrin

MA, NJ, PA 64742-47-8 Distillates (petroleum), hydrotreated light

Revision date: 2012/07/02 Page: 9/9
Version: 1.0 (30572505/SDS_CPA_US/EN)

16. Other Information

Refer to product label for EPA registration number.

Recommended use: insecticide

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:

BASF NA Product Regulations msds@basf.com MSDS Prepared on: 2012/07/02

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK. **END OF DATA SHEET**