

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 1/10  
(30504382/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:  
St. Louis, MO 63122  
3568 Tree Court Industrial Blvd.  
Whitmire Micro-Gen Research Laboratories, Inc.

Substance number: 000000395311  
Synonyms: Pyrethrins + piperonyl butoxide

### 2. Hazards Identification

#### Emergency overview

CAUTION:  
KEEP OUT OF REACH OF CHILDREN.  
KEEP OUT OF REACH OF DOMESTIC ANIMALS.  
HARMFUL IF SWALLOWED.  
Moderately irritating to the eyes.  
Repeated or prolonged skin contact may cause allergic skin reactions in sensitive individuals.  
Avoid contact with the skin, eyes and clothing.  
Wash thoroughly after handling.

See Product Label for additional precautionary statements.

State of matter: liquid  
Colour: amber  
Odour: aromatic

#### 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:**

The product has not been tested. The statement has been derived from the properties of the individual components. Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 2/10  
(30504382/SDS\_CPA\_US/EN)

### **Irritation / corrosion:**

The product has not been tested. The statement has been derived from the properties of the individual components. Not irritating to the skin. Not irritating to the eyes.

### **Sensitization:**

The product has not been tested. The statement has been derived from the properties of the individual components. There is no evidence of a skin-sensitizing potential.

### **Chronic toxicity:**

**Carcinogenicity:** The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

**Repeated dose toxicity:** The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organotoxicity was observed after repeated administration to animals.

**Reproductive toxicity:** The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

**Teratogenicity:** The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

**Genotoxicity:** The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

### **Signs and symptoms of overexposure:**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

### **Potential environmental effects**

#### **Aquatic toxicity:**

Acutely toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment.

#### **Degradation / environmental fate:**

The product has not been tested. The statement has been derived from the properties of the individual components.

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### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
8003-34-7	6.0 %	Pyrethrins
51-03-6	60.0 %	Piperonylbutoxide
64742-47-8	> 10.0 %	Distillates (petroleum), hydrotreated light
91-20-3	< 1.0 %	naphthalene
	<= 24.0 %	Proprietary ingredients

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### 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.

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 3/10  
(30504382/SDS\_CPA\_US/EN)

**If inhaled:**

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

Keep patient calm, remove to fresh air, seek medical attention.

**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:

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.

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## 5. Fire-Fighting Measures

Flash point:	75.8 °C	
Lower explosion limit:		not determined
Upper explosion limit:		not determined
Flammability:	not determined	

**Suitable extinguishing media:**

dry powder, carbon dioxide, foam

**Hazards during fire-fighting:**

carbon monoxide, carbon dioxide,

If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

**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.

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## 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').

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 4/10  
(30504382/SDS\_CPA\_US/EN)

### **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.

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## 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:**

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.

**Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.**

### Storage

#### **General advice:**

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed. Keep away from heat. Protect from direct sunlight.

#### **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.

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## 8. Exposure Controls and Personal Protection

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

### Components with occupational exposure limits

Pyrethrins	OSHA	PEL 5 mg/m <sup>3</sup> ;
	ACGIH	TWA value 5 mg/m <sup>3</sup> ;
Distillates (petroleum),		

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 5/10  
(30504382/SDS\_CPA\_US/EN)

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 vapor); The substance can be absorbed through the skin.
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### 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.

Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

##### Hand protection:

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

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

##### Eye protection:

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

##### 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. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	aromatic	
Colour:	amber	
pH value:	approx. 3.0 - 5.0	( 10 %(m), 20 °C)
Melting temperature:		not determined
Density:	approx. 0.97 g/cm3	( 25 °C)
Vapour density:		not determined

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 6/10  
(30504382/SDS\_CPA\_US/EN)

*Information on: Piperonyl butoxide*

Partitioning coefficient n-octanol/water (log Pow): 4.62

Viscosity, dynamic:

not determined

Solubility in water:

slightly soluble, Information based on the main components.

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

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## 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:

strong oxidizing agents, strong acids, strong bases

### 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

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:

No corrosive effect on metal.

### Oxidizing properties:

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

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## 11. Toxicological information

### Acute toxicity

#### Oral:

Type of value: LD50

Species: rat (male/female)

Value: 3,288 mg/kg

#### Inhalation:

Type of value: LC50

Species: rat

Value: > 5.3 mg/l

Exposure time: 4 h

#### Dermal:

Type of value: LD50

Species: rabbit (male/female)

Value: 7,331 mg/kg

### Irritation / corrosion

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 7/10  
(30504382/SDS\_CPA\_US/EN)

### **Skin:**

Species: rabbit  
Result: Slightly irritating.

### **Eye:**

Species: rabbit  
Result: Slightly irritating.

### **Sensitization:**

Buehler test  
Species: guinea pig  
Result: Potential sensitizer.

*Information on: pyrethrum*

*Skin sensitizing effects were not observed in animal studies.*  
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### **Carcinogenicity**

*Information on: pyrethrum*

*Not Likely to Be Carcinogenic to Humans.*

*Information on: Piperonyl butoxide*

*In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. The US EPA has classified this substance with the rating of 'C', possible human carcinogen.*  
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### **Reproductive toxicity**

*Information on: pyrethrum*

*No reproductive toxic effects reported.*

*Information on: Piperonyl butoxide*

*No reproductive toxic effects reported.*

*The results of animal studies gave no indication of a fertility impairing effect.*  
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### **Development:**

*Information on: pyrethrum*

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

*Information on: Piperonyl butoxide*

*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.*  
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### **Other Information:**

Misuse can be harmful to health.

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## 12. Ecological Information

### **Fish**

*Information on: pyrethrum*

*Acute:*

*static*

*Lepomis macrochirus/LC50 (96 h): 0.014 mg/l*

*Information on: Piperonyl butoxide*

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 8/10  
(30504382/SDS\_CPA\_US/EN)

*Acute:*  
*other Oncorhynchus mykiss/LC50 (96 h): 6.12 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): 0.013 mg/l*

*Information on: Piperonyl butoxide*

*Acute:*

*other Daphnia magna/EC50 (48 h): 0.51 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.*

### **Aquatic plants**

*Information on: Distillates (petroleum), hydrotreated light*

*Toxicity to aquatic plants:*

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

*Literature data.*

*Biodegradable.*

### **Other adverse effects:**

Do not discharge product into the environment without control.

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## **13. Disposal considerations**

### **Waste disposal of substance:**

Pesticide wastes are regulated. 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:**

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

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## **14. Transport Information**

**Land transport**  
USDOT



# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21  
Version: 3.0

Page: 9/10  
(30504382/SDS\_CPA\_US/EN)

Classified as combustible liquid in containers greater than 119 gallons.

### Sea transport IMDG

Not classified as a dangerous good under transport regulations

### Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

### Further information

DOT: Combustible liquid, only regulated in receptacles exceeding 119 gallons; not shipped as dangerous goods in receptacles less than 120 gallons.

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## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

**EPCRA 311/312 (Hazard categories):** Acute; Fire

#### EPCRA 313:

<u>CAS Number</u>	<u>Chemical name</u>
51-03-6	Piperonylbutoxide

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
1 LBS	8003-34-7	Pyrethrins

### State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
MA, NJ, PA	8003-34-7	Pyrethrins
MA, NJ, PA	64742-47-8	Distillates (petroleum), hydrotreated light
MA, NJ, PA	91-20-3	naphthalene

#### CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

<u>CAS Number</u>	<u>Chemical name</u>
91-20-3	naphthalene

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## 16. Other Information

Refer to product label for EPA registration number.

Recommended use: insecticide

# Safety Data Sheet

## PYRETH-IT FORMULA 2

Revision date : 2013/01/21

Version: 3.0

Page: 10/10

(30504382/SDS\_CPA\_US/EN)

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**NFPA Hazard codes:**

Health : 2      Fire: 2      Reactivity: 1      Special:

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.

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**MSDS Prepared by:**

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MSDS Prepared on: 2013/01/21

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