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Version: 3.0 (30590678/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)

Substance number: 000000574155 Synonyms: Saflufenacil

# 2. Hazards Identification

# **Emergency overview**

CAUTION:

HARMFUL IF SWALLOWED.

HARMFUL IF ABSORBED THROUGH SKIN.

May cause moderate but temporary irritation to the eyes.

KEÉP OUT OF REACH OF CHILDREN.

KEEP OUT OF REACH OF DOMESTIC ANIMALS.

Avoid contact with the skin, eyes and clothing.

Avoid inhalation of mists/vapours. Wash thoroughly after handling.

See Product Label for additional precautionary statements.

State of matter: liquid Colour: white

Odour: faint odour, fruity

# 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:

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

# Sensitization:

Skin sensitizing effects were not observed in animal studies.

# Chronic toxicity:

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

#### Signs and symptoms of overexposure:

No significant reaction of the human body to the product known.

#### Potential environmental effects

### Aquatic toxicity:

There is a high probability that the product is not acutely harmful to fish. There is a high probability that the product is not acutely harmful to aquatic invertebrates. Very toxic (acute effect) to aquatic plants.

#### Terrestrial toxicity:

With high probability not acutely harmful to terrestrial organisms.

# 3. Composition / Information on Ingredients

 CAS Number
 Content (W/W)
 Chemical name

 372137-35-4
 29.74 %
 Saflufenacil

 57-55-6
 >= 5.0 - <= 10.0 %</td>
 Propylene glycol

 >= 60.0 - <= 70.0 %</td>
 Proprietary ingredients

# 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:

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

## If on skin:

Wash thoroughly with soap and water.

#### If in eyes

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

## If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

#### Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known

specific antidote.

# 5. Fire-Fighting Measures

Flash point:

Autoignition: 443 °C

Lower explosion limit:

No flash point - Measurement made up to the boiling point.

(Directive 92/69/EEC, A.15)

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

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Upper explosion limit:

As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

Flammability: not applicable

#### Suitable extinguishing media:

foam, dry powder, carbon dioxide, water spray

#### Hazards during fire-fighting:

carbon monoxide, carbon dioxide, Hydrocarbons, sulfur oxides, nitrogen oxides, halogenated compounds 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:

Wear self-contained breathing apparatus and chemical-protective clothing.

## 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.

#### Cleanup:

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. 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 for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. 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. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. 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:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

# **Storage**

#### General advice:

Keep away from heat. Protect from direct sunlight.

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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.

#### Storage incompatibility:

General advice: Segregate from foods and animal feeds.

#### Temperature tolerance

Protect from temperatures below: -5 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

# 8. Exposure Controls and Personal Protection

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

# 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.

### **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:

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: liquid

Odour: faint odour, fruity

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Colour: white

pH value: approx. 4 - 6 (approx. 20 °C) (as aqueous suspension) 100 °C

boiling temperature:

Vapour pressure: approx. 23 hPa (20 °C) Information applies to the solvent.

(68°F) Density: 9.6 Lb/USg

not applicable Vapour density:

(20°C) Viscosity, dynamic: 33 mPa.s Solubility in water: dispersible

# 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 bases, strong acids, strong oxidizing agents

#### Hazardous reactions:

No hazardous reactions if stored and handled as prescribed/indicated.

# **Decomposition products:**

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

# Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

# **Oxidizing properties:**

not fire-propagating (Directive 2004/73/EC, A.21)

# 11. Toxicological information

# **Acute toxicity**

#### Oral:

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg No mortality was observed.

# Inhalation:

Type of value: LC50 Species: rat Value: > 5.5 mg/lExposure time: 4 h An aerosol was tested. No mortality was observed.

#### Dermal:

Type of value: LD50 Species: rat

Value: > 5,000 mg/kg No mortality was observed.

# Sensitization:

modified Buehler test Species: guinea pig

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

# **Genetic toxicity**

Information on: Saflufenacil

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

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## Carcinogenicity

Information on: Saflufenacil Not carcinogenic.

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# Reproductive toxicity

Information on: Saflufenacil

The results of animal studies gave no indication of a fertility impairing effect.

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# **Development:**

Information on: Saflufenacil

Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

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#### Other Information:

Misuse can be harmful to health.

# 12. Ecological Information

# Fish

Information on: saflufenacil

Acute:

OECD Guideline 203 static

Pimephales promelas/LC50 (96 h): > 96.8 mg/l

OECD Guideline 203 static

Pimephales promelas/NOEC (33 d): >= 9.7 mg/l

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# **Aquatic invertebrates**

Information on: saflufenacil

Acute: static

Daphnia magna/EC50 (96 h): 8.0 mg/l

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# **Aquatic plants**

Information on: saflufenacil Toxicity to aquatic plants: OECD Guideline 201 static

green algae/EC50 (96 h): 0.113 mg/l

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Not readily biodegradable (by OECD criteria).

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#### **Environmental mobility:**

Information on: saflufenacil

Assessment transport between environmental compartments:

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to

deeper soil areas with larger water loads.

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# 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:

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.

#### RCRA

This product is not regulated by RCRA.

# 14. Transport Information

# Land transport

USDOT

Not classified as a dangerous good under transport regulations

#### Sea transport

**IMDG** 

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHSM

Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(contains SAFLUFENACIL)

#### Air transport

IATA/ICAO

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(contains SAFLUFENACIL)

# 15. Regulatory Information

# **Federal Regulations**

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Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

**OSHA hazard category:** Chronic target organ effects reported;

EPCRA 311/312 (Hazard categories): Chronic;

State regulations

State RTKCAS NumberChemical namePA57-55-6Propylene glycol

#### CA Prop. 65:

Risk assessment indicates No Significant Risk Levels for Carcinogens and No Maximum Allowable Dose Levels for Chemicals Causing Reproductive Toxicity are expected when using this product as labeled for agricultural or residential use.

### 16. Other Information

# Refer to product label for EPA registration number.

Recommended use: herbicide

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.

# SDS Prepared by:

BASF NA Product Regulations msds@basf.com SDS Prepared on: 2013/07/03

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