

Revision date : 2013/12/27 Version: 3.0 Page: 1/9 (30579852/SDS_CPA_US/EN)

1. Product and Company Identification

<u>Company</u> 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: Synonyms: 000000553910 fipronil

2. Hazards Identification

Emergency overview

CAUTION: KEEP OUT OF REACH OF CHILDREN. May be harmful if inhaled. May be harmful if swallowed. May cause moderate but temporary irritation to the eyes. Avoid contact with the skin, eyes and clothing. Avoid inhalation of mists/vapours. Flammable Liquid Aerosol container contains flammable gas under pressure.

See Product Label for additional precautionary statements.

State of matter: liquid Colour: off-white Odour: odourless

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:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Irritation / corrosion:

Not irritating to the skin. Not irritating to the eyes.

Sensitization:

There is no evidence of a skin-sensitizing potential.

Revision date : 2013/12/27 Version: 3.0

Chronic toxicity:

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

Repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

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.

3. Composition / Information on Ingredients

CAS Number	Content (W/W)	Chemical name
120068-37-3	0.005 %	fipronil
68476-40-4	< 10.0 %	Hydrocarbons, C3-4
	> 90.0 %	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:

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

If on skin:

Wash thoroughly with soap and water.

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 symptomatically. Anticonvulsant therapy as routinely administered to humans. Based on animal studies diazepam and phenobarbital prevented convulsions. Due to the slow elimination of the active compound and its metabolites, the treatment must be continued for several days, gradually decreasing the dose of anticonvulsant based on the clinical response.

Revision date : 2013/12/27 Version: 3.0

5. Fire-Fighting Measures

Flash point:	approx104 °C	The statements are based on the properties of the individual components.
Autoignition:	approx. 287 °C	The product has not been tested. The statement has been derived from the
Lower explosion limit:		properties of the individual components. 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.
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 of Aerosol Products: NFPA 30B flammability:	0 in no flashback	
	Level 1 Aerosol	

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxides The substances/groups of substances mentioned can be released in case of fire. Aerosol container contains flammable gas under pressure.

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.

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.

Revision date : 2013/12/27 Version: 3.0

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. 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:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

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.

Storage incompatibility:

General advice: Segregate from foods and animal feeds.

Temperature tolerance

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.

Revision date : 2013/12/27 Version: 3.0 Page: 5/9 (30579852/SDS_CPA_US/EN)

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: Odour: Colour:	aerosol odourless off-white	(24 °C)
pH value: Melting point:	approx. 5 - 7	not applicable
Boiling point:	approx43 - 13 °C	The statements are based on the properties of the individual components.
Vapour pressure:	approx. 70 PSI	(21.4 °C) Information applies to the solvent.
Density:	approx. 1 g/cm3 8.35 lb/USg	(20 °C) (20 °C)
Vapour density: Partitioning coefficient n- octanol/water (log Pow):		not applicable not applicable
Viscosity, dynamic: Solubility in water:	27.83 cps	(24.9 °C) 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 acids, strong bases, strong oxidizing agents

Hazardous reactions:

The product is chemically stable.

Hazardous polymerization will not occur. 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. Possible thermal decomposition products: carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrocarbons Stable at ambient temperature. If product is heated above decomposition temperature, toxic vapours will be released.

Revision date : 2013/12/27 Version: 3.0 Page: 6/9 (30579852/SDS_CPA_US/EN)

Oxidizing properties: not fire-propagating

11. Toxicological information

Acute toxicity

Oral:

Type of value: LD50 Species: rat (female) Value: > 5,000 mg/kg

Inhalation:

Type of value: LC50 Species: rat (male/female) Value: > 5.09 mg/l Exposure time: 4 h An aerosol was tested.

Dermal:

Type of value: LD50 Species: rat (male/female) Value: > 5,000 mg/kg

Irritation / corrosion

Skin: Species: rabbit Result: non-irritant

Eye: Species: rabbit Result: non-irritant

Sensitization:

Buehler test Species: guinea pig Result: Skin sensitizing effects were not observed in animal studies.

Repeated dose toxicity

Information on: Fipronil Assessment of repeated dose toxicity: Causes mortality and signs of neurotoxicity through prolonged or repeated exposure.

Genetic toxicity

Information on: Fipronil Results from a number of mutagenicity 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 mutagenic.

Carcinogenicity

Information on: Fipronil

In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

Other Information:

Revision date : 2013/12/27 Version: 3.0 Page: 7/9 (30579852/SDS_CPA_US/EN)

Misuse can be harmful to health.

12. Ecological Information

Fish

Information on: Fipronil Acute: Lepomis macrochirus/LC50 (96 h): 0.0852 mg/l

Aquatic invertebrates

Information on: Fipronil Acute: Daphnia magna/EC50 (48 h): 0.19 mg/l Mysid shrimp/LC50 (96 h): 0.00014 mg/l

Aquatic plants

Information on: Fipronil Toxicity to aquatic plants: green algae/EC50 (96 h): 0.068 mg/l

Not readily biodegradable (by OECD criteria).

Bioaccumulation

Information on: Fipronil sunfish, bluegill Bioconcentration factor 321 Accumulation in organisms is not to be expected.

Environmental mobility:

Information on: Fipronil Assessment transport between environmental compartments: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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.

RCRA:

This product is not regulated by RCRA.

Revision date : 2013/12/27 Version: 3.0

14. Transport Information

Land transport

USDOT

Hazard class:	2.1
ID number:	UN 1950
Hazard label:	2.1, EHSM
Proper shipping name:	AEROSOLS (contains FIPRONIL, HYDROCARBON PROPELLENT)

Sea transport IMDG

Hazard class:	2.1
ID number:	UN 1950
Hazard label:	2.1, EHSM
Marine pollutant:	YES
Proper shipping name:	AFROSOLS (contains EIPRONIL, HYDROCARBON PROPELLENT)
Proper shipping name:	AEROSOLS (contains FIPRONIL, HYDROCARBON PROPELLENT)

Air transport IATA/ICAO

Hazard class:	2.1
ID number:	UN 1950
Hazard label:	2.1
Proper shipping name:	AEROSOLS, FLAMMABLE (contains FIPRONIL, HYDROCARBON PROPELLENT)

<u>Further information</u> DOT: This product may be classified as ORM-D (Consumer Commodity) or Limited Quantity. After 12/31/2020, ORM-D will not apply.

15. Regulatory Information

Federal Regulations

Registration status: Crop Protection	TSCA, US	released / exempt
Chemical	TSCA, US	blocked / not listed

EPCRA 311/312 (Hazard categories):

Not hazardous;

State regulations

CA Prop. 65: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

Revision date : 2013/12/27 Version: 3.0

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.

SDS Prepared by:

BASF NA Product Regulations msds@basf.com SDS Prepared on: 2013/12/27

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