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: 000000062084
Synonyms: alpha-Cypermethrin

2. Hazards Identification

Emergency overview

DANGER:
KEEP OUT OF REACH OF CHILDREN.
KEEP OUT OF REACH OF DOMESTIC ANIMALS.
Corrosive.
CAUSES IRREVERSIBLE EYE DAMAGE.
May be fatal if swallowed.
Causes skin irritation.
Do not get in eyes, on skin, or on clothing.
Wash thoroughly after handling.

See Product Label for additional precautionary statements.

State of matter: liquid
Colour: beige, clear
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:

Irritation / corrosion:
May cause moderate irritation to the skin. Corrosive to eyes.

Sensitization:
Skin sensitizing effects were not observed in animal studies.
Chronic toxicity:

**Signs and symptoms of overexposure:**
Vomiting may cause aspiration pneumonia due to the ingredients.

**Potential environmental effects**

**Aquatic toxicity:**
Very toxic (acute effect) to fish. Very toxic (acute effect) to aquatic invertebrates. Acutely harmful for aquatic plants.

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### 3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>67375-30-8</td>
<td>10.9 %</td>
<td>alpha-Cypermethrin</td>
</tr>
<tr>
<td>526-73-8</td>
<td>&lt;= 7.8 %</td>
<td>Benzene, 1,2,3-trimethyl-</td>
</tr>
<tr>
<td>98-82-8</td>
<td>&lt;= 1.6 %</td>
<td>cumene</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>&lt;= 1.56 %</td>
<td>Xylene</td>
</tr>
<tr>
<td></td>
<td>83.62 %</td>
<td>Proprietary ingredients</td>
</tr>
</tbody>
</table>

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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.

**If inhaled:**
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary.

**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:**
Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

**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

<table>
<thead>
<tr>
<th>Flash point:</th>
<th>approx. 44 °C</th>
<th>approx. 111 °F</th>
<th>(ASTM D93)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition:</td>
<td>447 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit:</td>
<td>1.9 %(V)</td>
<td>(77 °F)</td>
<td>Information applies to the solvent.</td>
</tr>
<tr>
<td>Upper explosion limit:</td>
<td>12.6 %(V)</td>
<td>(77 °F)</td>
<td>Information applies to the solvent.</td>
</tr>
</tbody>
</table>
Suitable extinguishing media:
water spray, carbon dioxide, foam, dry powder

Hazards during fire-fighting:
carbon monoxide, Hydrogen chloride, hydrogen cyanide, carbon dioxide, organochloric compounds
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. If exposed to fire, keep containers cool by spraying with water. Vapours are heavier than air and may accumulate in low areas and travel a considerable distance up to the source of ignition. Ignition and/or flash back possible.

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. Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect against heat. Handle and open container with care. Ground and/or bond all equipment to prevent electrostatic charges. Avoid aerosol formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. To avoid risk of injury, do not cut, puncture or weld on or near this container. 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. Avoid all sources of ignition: heat, sparks, open flame. Avoid direct sunlight. Store protected against freezing. If solids are observed, warm to above 4.4 °C (40 °F) and roll or shake containers to redissolve. 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: -6 °C
The product can crystallize below the limit temperature.
Protect from temperatures above: 30 °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.

Components with occupational exposure limits

<table>
<thead>
<tr>
<th>Chemical</th>
<th>OSHA</th>
<th>PEL</th>
<th>435 mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>PEL</td>
<td>100 ppm</td>
<td>435 mg/m3</td>
</tr>
<tr>
<td>Benzene, 1,2,3-trimethyl-cumene</td>
<td>ACGIH</td>
<td>TWA value</td>
<td>100 ppm ; STEL value 150 ppm ;</td>
</tr>
</tbody>
</table>

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

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>aromatic</td>
</tr>
<tr>
<td>Colour</td>
<td>beige, clear</td>
</tr>
<tr>
<td>pH value</td>
<td>approx. 4 - 6</td>
</tr>
<tr>
<td>Boiling range</td>
<td>approx. 150 - 185 °C</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>approx. 0.2 kPa (20 °C)</td>
</tr>
<tr>
<td>Density</td>
<td>approx. 0.91 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>2 mm²/s (40 °C)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>emulsifiable</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Conditions to avoid:

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:
not determined

Oxidizing properties:
not fire-propagating

11. Toxicological information

Acute toxicity

Oral:
Type of value: LD50
Species: rat
Value: > 210 - < 1,050 mg/kg

Inhalation:
Type of value: LC50
Species: rat
Value: > 6.6 mg/l
Exposure time: 4 h

Dermal:
Type of value: LD50
Species: rat
Value: > 5,000 mg/kg
Irritation / corrosion

Skin:
Species: rabbit
Result: Irritant.

Eye:
Species: rabbit
Result: Risk of serious damage to eyes.

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

Repeated dose toxicity

Information on: Solvent naphtha (petroleum), light arom.
Assessment of repeated dose toxicity:
Effects on the kidney of male rats were detected after repeated exposure. These effects are specific for the male rat and are known to be of no relevance to humans. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: alpha-cypermethrin
Assessment of repeated dose toxicity:
Repeated oral exposure may affect certain organs. Damages the peripheral nerve system.

Genetic toxicity

Information on: alpha-Cypermethrin
The substance was not mutagenic in bacteria.

Information on: aromatic hydrocarbon solvent
No mutagenic effects reported.

Carcinogenicity

Information on: alpha-Cypermethrin
In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.
Information on: aromatic hydrocarbon solvent
Indication of possible carcinogenic effect in animal tests.

Reproductive toxicity

Information on: alpha-Cypermethrin
The results of animal studies gave no indication of a fertility impairing effect.
Information on: aromatic hydrocarbon solvent
The results of animal studies gave no indication of a fertility impairing effect.

Development:

Information on: alpha-Cypermethrin
No indications of a developmental toxic / teratogenic effect were seen in animal studies.
Information on: aromatic hydrocarbon solvent
Causes developmental effects in animals at high, maternally toxic doses.

Other Information:
May cause paraesthesia. Misuse can be harmful to health.

12. Ecological Information

Fish

Acute:
Oncorhynchus mykiss/LC50 (96 h): 0.025 mg/l

Aquatic invertebrates

Acute:
Daphnia magna/EC50 (48 h): 0.00061 mg/l

Aquatic plants

Toxicity to aquatic plants:
green algae/EC50 (72 h): > 85.4 mg/l

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 PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION: THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

PLASTIC CONTAINERS:
If containers are not empty, they must be disposed of in a RCRA-licensed facility. 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.

METAL CONTAINERS:
Empty and return uncleaned.

RCRA:
Ignitability
This product is regulated by RCRA.

14. Transport Information

Land transport

USDOT

Hazard class: 3
Packing group: III
ID number: UN 1992
Hazard label: 3, 6.1, EHSM
Proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (contains SOLVENT NAPHTHA, ALPHA-CYPERMETHRIN)

Sea transport

IMDG
Safety Data Sheet
FASTAC 10 EC

Hazard class: 3
Packing group: III
ID number: UN 1992
Hazard label: 3, 6.1, EHSM
Marine pollutant: YES
Proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (contains SOLVENT NAPHTHA, ALPHA-CYPERMETHRIN)

Air transport
IATA/ICAO
Hazard class: 3
Packing group: III
ID number: UN 1992
Hazard label: 3, 6.1
Proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (contains SOLVENT NAPHTHA, ALPHA-CYPERMETHRIN)

15. Regulatory Information

Federal Regulations
Registration status:
Chemical TSCA, US blocked / not listed
Crop Protection TSCA, US blocked / not listed
OSHA hazard category: Chronic target organ effects reported; ACGIH TLV established; Combustible Liquid

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

EPCRA 313:
<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-82-8</td>
<td>cumene</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylene</td>
</tr>
<tr>
<td>95-63-6</td>
<td>1,2,4-trimethylbenzene</td>
</tr>
</tbody>
</table>

State regulations

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA, NJ, PA</td>
<td>526-73-8</td>
<td>Benzene, 1,2,3-trimethyl-</td>
</tr>
<tr>
<td>MA, NJ, PA</td>
<td>98-82-8</td>
<td>cumene</td>
</tr>
<tr>
<td>MA, NJ, PA</td>
<td>1330-20-7</td>
<td>Xylene</td>
</tr>
</tbody>
</table>

CA Prop. 65: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

16. Other Information

Refer to product label for EPA registration number.
Recommended use: insecticide

NFPA Hazard codes:
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: 2013/01/28

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