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#### 1. Identification

# Product identifier used on the label

# SULTAN

#### Recommended use of the chemical and restriction on use

Recommended use\*: crop protection product; insecticide

\* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

# Details of the supplier of the safety data sheet

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

Telephone: +1 973 245-6000

# **Emergency telephone number**

CHEMTREC: 1-800-424-9300

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

# Other means of identification

Substance number: 521965
EPA Register number: 7969-337
Synonyms: Cyflumetofen

# 2. Hazards Identification

# According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

# Classification of the product

No need for classification according to GHS criteria for this product.

#### Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

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# According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

# **Emergency overview**

CAUTION:

HARMFUL IF SWALLOWED.

HARMFUL IF ABSORBED THROUGH SKIN.

HARMFUL IF INHALED.

Moderately irritating to the eyes. Avoid inhalation of mists/vapours.

Avoid contact with the skin, eyes and clothing.

# 3. Composition / Information on Ingredients

#### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	Chemical name
400882-07-7	18.72 %	Benzenepropanoic acid, .alphacyanoalpha[4-(1,1-
		dimethylethyl)phenyl]betaoxo-2-(trifluoromethyl)-, 2-
		methoxyethyl ester
57-55-6	< 10.0 %	Propylene glycol

#### According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	Chemical name
400882-07-7	18.7 %	Cyflumetofen
	81.3 %	Proprietary ingredients

# 4. First-Aid Measures

#### **Description of first aid measures**

#### General advice:

Remove contaminated clothing.

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.

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

# If on skin:

Wash thoroughly with soap and water.

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

#### If in eyes:

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

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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.

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

# Most important symptoms and effects, both acute and delayed

Symptoms: 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.

# Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: No known specific antidote. Treatment: Treat symptomatically.

# 5. Fire-Fighting Measures

# **Extinguishing media**

Suitable extinguishing media: water spray, carbon dioxide, foam, dry powder

# Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxides, fluorine oxides

The substances/groups of substances mentioned can be released in case of fire.

#### Advice for fire-fighters

Protective equipment for fire-fighting:

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

#### 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, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

## **Environmental precautions**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

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# Methods and material for containment and cleaning up

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

# Precautions for safe handling

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 against heat. Protect contents from the effects of light. 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. 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.

# Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: 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.

Protect from temperatures below: 0 °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/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.

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#### 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) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. 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). Remove 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: suspension Odour: odourless

Odour threshold:

Colour: milky white pH value: approx. 5 - 7

Melting point: < 20 °C onset of boiling: 99 °C

onset of boiling: § Flash point:

(Directive 92/69/EEC, A.9) No flash point - Measurement made up to the boiling point.

not applicable, odour not perceivable

(10 g/l, 25 °C)

Flammability: No dangerous

quantities of flammable gases will be produced by contact with water. Based on the structure or composition there is no indication of flammability

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Lower 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.

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.

Autoignition: approx. 370 °C Vapour pressure:

(20 °C) approx. 23.4 hPa

(Regulation 440/2008/EC, A.15) Information applies to the

Density: approx. 1.07 solvent. (20°C)

g/cm3

not applicable

Partitioning coefficient noctanol/water (log Pow):

not applicable

Self-ignition

not applicable

temperature:

Vapour density:

Thermal decomposition: 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.

(20°C)

approx. 20 Viscosity, dynamic:

mPa.s

Solubility in water: dispersible Evaporation rate: not applicable

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

# 10. Stability and Reactivity

#### Reactivity

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

Oxidizing properties: not fire-propagating

# Chemical stability

The product is stable if stored and handled as prescribed/indicated.

# Possibility of hazardous reactions

The product is chemically stable.

Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

#### 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.

#### Incompatible materials

strong acids, strong bases, strong oxidizing agents

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# **Hazardous decomposition products**

#### Decomposition products:

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

# Thermal decomposition:

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.

# 11. Toxicological information

# Primary routes of exposure

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

# **Acute Toxicity/Effects**

#### Acute toxicity

Assessment of acute toxicity: Slightly toxic after single ingestion. Relatively nontoxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

#### Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 423)

No mortality was observed.

# **Inhalation**

Type of value: LC50 Species: rat (male/female)

Value: > 5.18 mg/l (OECD Guideline 403)

Exposure time: 4 h

No mortality was observed.

#### Dermal

Type of value: LD50 Species: rat (male/female)

Value: > 5,000 mg/kg (OECD Guideline 402)

#### Irritation / corrosion

Assessment of irritating effects: May cause slight irritation to the skin. May cause slight but temporary irritation to the eyes.

# <u>Skin</u>

Species: rabbit Result: non-irritant

Method: OECD Guideline 404

#### Eye

Species: rabbit Result: non-irritant

Method: OECD Guideline 405

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#### **Sensitization**

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

Mouse Local Lymph Node Assay (LLNA)

Species: mouse Result: Non-sensitizing. Method: OECD Guideline 429

# **Chronic Toxicity/Effects**

# Repeated dose toxicity

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

#### **Genetic toxicity**

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

#### Carcinogenicity

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

# Reproductive toxicity

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

#### **Teratogenicity**

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

#### Other Information

Misuse can be harmful to health.

#### Symptoms of Exposure

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.

# Medical conditions aggravated by overexposure

Individuals with pre-existing diseases of the respiratory system, skin or eyes may have increased susceptibility to excessive exposures.

# 12. Ecological Information

# **Toxicity**

# Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to fish. Acutely harmful for aquatic invertebrates. There is a high probability that the product is not acutely harmful to aquatic plants.

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Toxicity to fish

LC50 (96 h) > 5.0 mg/l, Oncorhynchus mykiss

Aquatic invertebrates

EC50 (48 h) > 5.0 mg/l, Daphnia magna

Aquatic plants

EC50 (72 h) > 5.0 mg/l (growth rate), Pseudokirchneriella subcapitata

# Persistence and degradability

Assessment biodegradation and elimination (H2O)

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

# **Bioaccumulative potential**

#### Assessment bioaccumulation potential

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

# Mobility in soil

# Assessment transport between environmental compartments

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

Information on: Benzenepropanoic acid, .alpha.-cyano-.alpha.-[4-(1,1-dimethylethyl)phenyl]-.beta.-oxo-2-(trifluoromethyl)-, 2-methoxyethyl ester

Adsorption to solid soil phase is expected.

#### Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

# 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.

# 14. Transport Information

Land transport USDOT

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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 CYFLUMETOFEN)

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 CYFLUMETOFEN)

# 15. Regulatory Information

#### **Federal Regulations**

Registration status:

Chemical TSCA, US blocked / not listed

Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Not hazardous;

CA Prop. 65:

**NFPA Hazard codes:** 

Health: 1 Fire: 1 Reactivity: 1 Special:

# Labeling requirements under FIFRA

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:

HARMFUL IF SWALLOWED.

HARMFUL IF ABSORBED THROUGH SKIN.

HARMFUL IF INHALED. Causes eve irritation.

Avoid inhalation of mists/vapours.

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Avoid contact with the skin, eyes and clothing.

#### 16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2014/09/23

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.

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**