

Date of preparation (revision): 26/Jan./2018

## Safety Data Sheet

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DEFENDER SC  
 Synonym : DANISARABA 20SC, Cyflumetofen 20%SC  
 Manufacturer : OAT Agrico Co., Ltd.  
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### 2. HAZARDS IDENTIFICATION

#### GHS Classification

##### Health hazards

Acute toxicity (Oral)	Not classified
Acute toxicity (Dermal)	Not classified
Acute toxicity (Inhalation/mist)	Not classified
Skin corrosion/irritation	Not classified
Eye damage/irritation	Not classified
Skin sensitization	Not classified

##### Environmental hazards

Hazardous to the aquatic environment, acute toxicity	Category 3
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#### GHS label elements

Symbol	No symbol	
Signal words	No signal word	
Hazard statements	Harmful to aquatic life	H402
Precautionary statements		
Prevention		
Avoid release to the environment if this is not the intended use. (P273)		
Disposal		
Dispose of contents/container to in accordance with local regulations in your country. (P501)		

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/mixture : Mixture

Ingredient name	Composition (%)	CAS No.
2-methoxyethyl (RS)-2-(4- <i>tert</i> -butylphenyl)-2-cyano-3-oxo-3-( $\alpha,\alpha,\alpha$ -trifluoro- <i>o</i> -tolyl)propionate (IUPAC) (Cyflumetofen)	20	400882-07-7
Silica	<0.1	7631-86-9
Water, surfactant, etc.	Residue	Trade secret

### 4. FIRST-AID MEASURES

#### Inhalation

Move person to fresh air.  
 Have victim lie down and keep quiet.  
 If victim is not breathing, start artificial respiration, preferably by mouth to mouth.  
 Call a poison control center or doctor for further treatment advice.

#### Skin contact

Take off contaminated clothing.  
 Rinse skin immediately with plenty of water.  
 Call a poison control center or doctor for treatment advice.

#### Eye contact

Immediately flush eyes with copious amounts of water for at least 15 minutes.  
 Remove contact lenses, if present, after the first 15 minutes, and then continue rinsing eyes.  
 Call a poison control center or doctor for treatment advice.

**Ingestion**

Have victim rinse mouth thoroughly with water. Have victim drink 240 to 300ml of water, and induce vomiting. Get medical attention immediately.

Do not give anything by mouth to an unconscious person.

**Note to physician**

No specific antidote. Supportive care.

Treatment based on judgment of the physician in response to reactions of the patient.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

Use water fog, carbon dioxide, dry chemical or foam

**Specific Hazards with regard to Fire-Fighting Measures**

Keep people away. Isolate fire area and deny unnecessary entry.

Under fire situation, some components of this product may decompose.

The smoke may contain unidentified toxic and/or irritating compounds.

**Specific fire-fighting measures**

In fire situations involving the surrounding area, move container to safe place if you can do it without risk, or cool the product down with plenty of water.

**Protection of fire-fighters**

Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, pants, boots, and gloves).

If protective equipment is not available or not used, fight fire from a protected location or safe distance.

**6. ACCIDENTAL RELEASE MEASURES**

**Measures for Handling Personnel**

Wear appropriate personal protective equipment (refer to Section 8) during clean up.

Avoid contact with eyes and skin.

**Measures for environmental effects**

Do not entry into water way.

**Measures when handling spilled substances**

For small spills, wipe away the spilt.

For large spills, dike spilt to prevent spreading. Absorb spilt with inert material (e.g., dry sand or earth), then place in a chemical containers for later disposal.

**7. HANDLING AND STORAGE**

**Handling**

Care should be taken in handling this product to avoid contact with the eyes.

If there is a possibility of inhalation or accidental contact with the eyes, wear goggles or suitable eye shield and a recommended respirator.

Exhaust ventilation should be designed and installed so that, as far as reasonably practicable, exhaust air is properly treated and is not re-circulated into a workplace.

Wash thoroughly with soap and water after handling and before eating, drinking, or smoking.

Remove contaminated clothing and wash with soap and water before reuse.

Follow good industrial hygiene practices for ventilation and clean up.

**Storage**

Store in a well-ventilated place.

Tightly closed.

**8. EXPOSURE CONTROLS / PERSONAL PRECAUTION**

**Engineering measures**

Mechanical exhaust and/or local exhaust are necessary when use indoor.

**Adopted value**

TLVs are specified by ACGIH for some ingredients.

## Personal protective equipment

- Respiratory protection : Appropriate respirator which is approved or made according to a standard approved by the relevant national body for health and safety.
- Hand protection : Rubber gloves
- Eye protection : Safety goggles
- Skin and body protection : Clean body-covering clothing, boots and apron which do not soak this material.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

## Physical properties

- Appearance : An opaque liquid
- Color : White-milky color
- Odor : Low odor
- pH : 7.5~9.5 (20°C)
- Phase change temperature
- Boiling point : Not determined
- Melting point/Freezing point : Not determined
- Decomposition temperature : Not determined
- Flash point : Not determined
- Ignition temperature : Not determined
- Vapor pressure : Not determined
- Vapor density : Not determined
- Specific gravity/Density : 1.05~1.10 (20°C)
- Viscosity : 200~600 mPa·s (20°C)
- Solubility
- Solubility in water : Not determined
- Octanol /water partition coefficient (log Pow) : Not determined

**10. STABILITY AND REACTIVITY**

## Stability

This product is stable under normal conditions of storage.

## Conditions to avoid

Conditions which may cause dangerous reaction are not known.

## Incompatible materials

Materials which may cause dangerous reaction are not known.

## Hazardous decomposition products

Some components of this product can decompose at elevated temperature.

Hazardous decomposition products depend upon temperature, air supply, and the presence of other materials.

**11. TOXICOLOGICAL INFORMATION**

## Acute toxicity

- Oral LD<sub>50</sub> : >2000 mg/L (Male and female rats)
- Dermal LD<sub>50</sub> : >2000 mg/L (Male and female rats)
- Inhalation LC<sub>50</sub> : >5.01 g/m<sup>3</sup> (Male and female rats)

## Skin corrosion/irritation

Very slight irritation (Rabbit)

## Eye damage/irritation

Minimal irritation (Rabbit)

## Sensitization

Skin sensitization : Negative (Guinea-pigs)

**12. ECOLOGICAL INFORMATION**

## Ecotoxicity

- LC<sub>50</sub> (96hrs) : 320 mg/L (Carp)
- EC<sub>50</sub> (48hrs) : 31 mg/L (*Daphnia magna*)
- ErC<sub>50</sub> (24-72hrs) : >460 mg/L (*Pseudokirchneriella subcapitata*)
- EbC<sub>50</sub> (0-72hrs) : 280 mg/L (*Pseudokirchneriella subcapitata*)

**13. DISPOSAL CONSIDERATIONS**

Waste from residues/unused products: In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not allow material to contaminate ground water system. Do not contaminate surface water.

Contaminated packing: Do not re-use empty containers. Do not contaminate ponds, waterways or ditches with chemical or used container.

**14. TRANSPORT INFORMATION**

Specific safety measures and conditions on transport

The cautions which should be taken during transportation are same as the cautions mentioned in Section 7. In case of accidental release or fire during transportation, see the instructions given in Section 5, 6, 7 and 8 above.

UN No. : Not applicable

UN CLASS : Not applicable

**15. REGULATORY INFORMATION**

Other regulatory information

Follow all regulations in your country.

OAT Agrio Company Limited is not able to check up the regulatory information in regard to this product in your country or region. Therefore, we request this matter would be filled by your responsibility.

**16. OTHER INFORMATION**

Reference

OAT Agrio's published and unpublished data  
MSDSnavi (Japan Chemical Database Ltd., 2017)

**Limitation of our responsibility**

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