



## CSFC TAIWAN ENTERPRISE CORPORATION

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### MATERIAL SAFETY DATA SHEET CSFC 186

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PAGE: 1-5

#### SECTION 1 IDENTIFICATION OF THE SUBSTANCE

**Product name** CSFC 186  
**Chemical identification** Tris-(2,4-di-tert-butylphenyl) phosphite  
**CAS Number** 31570-04-4  
**Use** Stabiliser

#### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number	product name	content	R-phrase(s)
31570-04-4	Tris-(2,4-di-tert-butylphenyl) phosphite	>99%	R52/53

#### SECTION 3 HAZARDS IDENTIFICATION

Not classified as hazardous according to the EU directives.  
No special hazards.

#### SECTION 4 FIRST AID MEASURES

##### **Skin contact**

Wash off with soap and plenty of water. Do not use organic solvents.

##### **Eye contact**

Rinse immediately with plenty of water for at least 15 minutes. In case of eye irritation, seek medical attention.

##### **Inhalation**

Move to fresh air. In case of irritation of respiratory system or mucous membranes, seek medical attention. In case of indisposition, seek medical attention. In case of prolonged exposure, seek medical attention.

##### **Ingestion**

Immediately give plenty (> 500 ml) of water (if possible charcoal slurry). In case of spontaneous vomiting be sure that vomitus can freely drain due to danger of suffocation. Give water repeatedly. Artificial induction of vomiting should be restricted to first aid staff. Give nothing by mouth in cases of unconsciousness or convulsion. Seek medical advice.

#### SECTION 5 FIRE-FIGHTING MEASURES

##### **Suitable extinguishing media**

Water spray, Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder

##### **Extinguishing media which must not be used for safety reasons**



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High volume water jet

### Exposure hazards

Contaminated water from fire hoses or sprinklers, etc., must be prevented from draining into watercourses, sewers, or the ground water. Sufficient measures must be taken to retain water used for extinguishing. Contaminated water and soil must be disposed of in conformity with local regulations.

### Special protective equipment for firefighters

Wear full protective clothing. Wear self-contained breathing apparatus.

### Combustion products

Oxides of carbon; Oxides of nitrogen (NO<sub>x</sub>); Toxic gases/vapours

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions

Do not breathe vapours/dust. Remove all sources of ignition. Avoid contact with skin, eyes and clothing.

### Environmental precautions

Do not flush into surface water, sanitary sewer or ground water system.

### Methods for cleaning up

Use mechanical handling equipment. Collect the spilled product into suitable containers, which must be tightly sealed and properly labelled. Avoid dust formation

## SECTION 7 HANDLING AND STORAGE

### Handling

Avoid dust formation and ignition sources. Ensure good local exhaust ventilation. Do not eat, drink or smoke at the workplace.

### Storage

Keep away from food and drink. Store in the original container securely closed.

Caution, keep this product well sealed. Keep in cool, dry place. Close containers immediately after use. Danger!

Explosion risk. Risk of explosion if an air-dust mixture forms. Avoid creating dusty conditions. Empty only into earthed containers. If container is larger than 2000 liter in volume, or when flammable solvents are present inert container or use a system otherwise designed to prevent or contain an explosion -- seek expert advice.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit(s)

#### *Exposure limit (8 hour time weighted average)*

10 mg/m<sup>3</sup>

Effects on lymph nodes in animal studies

### Technical measures/Precautions

Exposure limit(s) should be monitored using suitable analytical equipments.

### Respiratory protection



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Effective dust mask.

### Hand protection

Protective gloves

### Eye protection

Suitable goggles or face protection

### Skin and body protection

Working clothes , Closed footwear

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	powder	
<b>Colour</b>	white	
<b>Melting/freezing temperature</b>	183-187 °C	
<b>Boiling point/range</b>	not applicable	
<b>Relative density 25 °C</b>	1.03 g/cm <sup>3</sup>	
<b>Flash point</b>	257 °C	<b>DIN 51758</b>
<b>Ignition Temperature</b>	380 °C	<b>BAM</b>
<b>Oxidising properties</b>	not tested	
<b>Self-ignition temperature</b>	not tested	
<b>Water solubility 20 °C</b>	< 1 mg/l	
<b>Vapour pressure 25 °C</b>	Ca 1E-10 Pa	
<b>pH-value 1 % suspension in water 20 - 25°C</b>	6.0	
<b>Explosive properties</b>	not tested	

## SECTION 10 STABILITY AND REACTIVITY

<b>Decomposition temperature</b>	> 380 °C
<b>Conditions to avoid</b>	Static discharges.
<b>Materials to avoid</b>	Strong acids, strong bases and strong oxidising agents.
<b>Hazardous decomposition products</b>	Oxides of carbon, Oxides of nitrogen (NO <sub>x</sub> ), Toxic gases/vapours

## SECTION 11 TOXICOLOGICAL INFORMATION

<b>Acute oral toxicity</b>	LD50 > 5000 mg/kg
<i>Rat</i>	
<b>Acute dermal toxicity</b>	LD50 > 2000 mg/kg
<i>Rat 14 d</i>	
<b>Acute eye irritation/corrosion</b>	not irritant
<i>Rabbit</i>	
<b>Acute dermal irritation/corrosion</b>	not irritant



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*Rabbit*

**Acute skin sensitisation**

not sensitising

*Guinea pig*

**Further information**

Following prolonged exposure, lymph node swelling (inflammation) was observed in rats.

### SECTION 12 ECOLOGICAL INFORMATION

**Acute toxicity to fish**

LC50 > 100 mg/l OECD 203 /EEC C 1

*Zebra fish (Brachydanio rerio) 96 h*

**Tested with supersaturated solution (100 mg active substance / L prepared without any additive)**

**Acute toxicity to daphnia**

EC50 > 100 mg/l OECD 202 /EEC C 2

*Daphnia magna 24 h 20 °C*

**Tested with supersaturated solution (100 mg active substance / L prepared without any additive)**

**Acute toxicity to bacteria**

IC50 > 100 mg/l OECD 209

*Sewage sludge 3 h*

**Acute toxicity to algae**

EC50 > 100 mg/l OECD 201 /EEC C 3

*Scenedesmus sp. 72 h*

**Biodegradability**

**Not biodegradable** OECD 301 B

**Ecotoxic effects**

Do not discharge product uncontrolled into the environment

### SECTION 13 DISPOSAL CONSIDERATIONS

**Waste from residues / unused products**

Residual chemical should be disposed by incineration or by other modes of disposal in compliance with local legislation.

**Contaminated packaging**

Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation

### SECTION 14 TRANSPORT INFORMATION

**Flash point**

257 °C

**ADR/RID**

Class: Free

**IMO**

Class: Free

**ICAO**

Class: Free



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### **SECTION 15 REGULATORY INFORMATION**

#### **Classification**

Classification not required

### **SECTION 16 OTHER INFORMATION**

The information in this MSDS is only on what we have available data. This product is not on the prolonged exposure to mucous membranes, broken skin or blood or body into the case conducted a special experiment. Recommend that users use in practice, taking into account the specific circumstances of this MSDS to develop the appropriate combination of the safe operation procedures.

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