



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-phrases(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 (CO₂), 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_x); 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/m³

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

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

SECTION 10 STABILITY AND REACTIVITY

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

SECTION 11 TOXICOLOGICAL INFORMATION

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