

# Material Safety Data Sheet

## Tris(2,4-di-tert-butylphenyl) phosphite

### Section 1 - Chemical Product and Company Identification

**Product Name:** Tris(2,4-di-tert-butylphenyl) phosphite

**Other Name:** Antioxidant 168

**CAS NO.:** 31570-04-4

**Manufacturer/Supplier:**

Tianjin Realet Chemical Technology Co.,Ltd.

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### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINC S
31570-04-4	Tris(2,4-di-tert-butylphenyl)phosphite	98%	250-709-6

### Section 3 - Hazards Identification

**Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

**Label elements**

The product does not need to be labelled in accordance with EC directives or respective national laws.

**Other hazards** - none

### Section 4 - First Aid Measures

**Description of first aid measures**

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact**

Wash off with soap and plenty of water.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

no data available

## Section 5 - Fire Fighting Measures

**Extinguishing media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Carbon oxides, Oxides of phosphorus

**Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

no data available

## Section 6 - Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

**Environmental precautions**

No special environmental precautions required.

**Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

## Section 7 - Handling and Storage

**Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

**Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

**Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## Section 8 - Exposure Controls, Personal Protection

**Control parameters**

**Components with workplace control parameters****Exposure controls****Appropriate engineering controls**

General industrial hygiene practice.

**Personal protective equipment****Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

No special environmental precautions required.

## Section 9 - Physical and Chemical Properties

**Information on basic physical and chemical properties**

- a) Appearance Form: powder Colour: white
- b) Odour no data available
- c) Odour Threshold no data available
- d) pH no data available
- e) Melting point/freezing point  
Melting point/range: 181 - 184 °C
- f) Initial boiling point and boiling range > 400 °C
- g) Flash point no data available
- h) Evaporation rate no data available
- i) Flammability (solid, gas) The product is not flammable. - Flammability (solids)
- j) Upper/lower flammability or explosive limits no data available
- k) Vapour pressure no data available
- l) Vapour density no data available
- m) Relative density 1.021 kg/m<sup>3</sup> at 20 °C
- n) Water solubility 0,00009 g/l at 20 °C - insoluble
- o) Partition coefficient: noctanol/water no data available
- p) Auto-ignition temperature not auto-flammable

- q) Decomposition temperature no data available  
r) Viscosity no data available  
s) Explosive properties no data available  
t) Oxidizing properties no data available

**Other safety information**

no data available

## Section 10 - Stability and Reactivity

**Reactivity**

no data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

no data available

**Incompatible materials**

Strong oxidizing agents, Strong reducing agents

**Hazardous decomposition products**

Other decomposition products - no data available

In the event of fire: see section 5.

## Section 11 - Toxicological Information

**Information on toxicological effects****Acute toxicity**

LD50 Oral - rat - male and female - > 6.000 mg/kg

(OECD Test Guideline 401)

LD50 Dermal - rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

**Skin corrosion/irritation**

Skin - rabbit

Result: No skin irritation - 24 h

(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - rabbit

Result: No eye irritation - 30 s

(OECD Test Guideline 405)

**Respiratory or skin sensitisation**

- guinea pig

Result: Does not cause skin sensitisation.

(OECD Test Guideline 406)

**Germ cell mutagenicity**

no data available

Ames test

S. typhimurium

Result: negative

Mutagenicity (micronucleus test)

Hamster - male and female

Result: negative

### **Carcinogenicity**

Carcinogenicity - rat - male and female - Oral

No adverse effect has been observed in chronic toxicity tests.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### **Reproductive toxicity**

no data available

Developmental Toxicity - rabbit - Oral

No adverse effect has been observed in chronic toxicity tests.

### **Specific target organ toxicity - single exposure**

no data available

### **Specific target organ toxicity - repeated exposure**

no data available

### **Aspiration hazard**

no data available

### **Additional Information**

Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level -  $\geq$  1.000 mg/kg

No adverse effect has been observed in chronic toxicity tests.

RTECS: Not available

## Section 12 - Ecological Information

### **Toxicity**

Toxicity to fish static test LC0 - Danio rerio (zebra fish) -  $>$  100 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and

other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - ca. 510 mg/l - 24 h

(OECD Test Guideline 202)

Toxicity to algae static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) -  $>$  75 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria Respiration inhibition IC50 - Sludge Treatment -  $>$  100 mg/l - 3 h

(OECD Test Guideline 209)

### **Persistence and degradability**

Biodegradability aerobic - Exposure time 28 d

Result: 6 % - Not readily biodegradable.

(OECD Test Guideline 301B)

**Bioaccumulative potential**

**Mobility in soil**

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

## Section 13 - Disposal Considerations

**Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	No information available.	No information available.
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## Section 15 - Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

**Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

## Section 16 - Additional Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.