## **ALKANOX® 240 POWDER**



Version Revision Date: SDS Number: Country: US 1.7 2022/09/27 400000004666 Language: EN

#### **SECTION 1. IDENTIFICATION**

Product name : ALKANOX® 240 POWDER Product code : 00000000020000603

Other Identifiers : tris(2,4-ditert-butylphenyl) phosphite

CAS-No. : 31570-04-4

Recommended use of the chemical and restrictions on use

Recommended use : Antioxidant

Manufacturer or supplier's details

Company: <u>Supplier</u>

SI Group, Inc.

1790 Hughes Landing Blvd., Suite 600

The Woodlands, TX

United States of America (USA)

77380

Prepared by SI Group Regulatory Affairs

Further information for the safety data sheet: msdsre-

quest@siigroup.com

### **Emergency telephone number**

Emergency telephone number: CHEMTREC/US: +1 703-741-5970

NCEC/ROW: +44 1235 239670 NCEC/CHINA: 400 120 6011

For additional emergency telephone numbers see section 16 of the

Safety Data Sheet.

## **SECTION 2. HAZARDS IDENTIFICATION**

### Other hazards

May form combustible dust concentrations in air.

None known.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

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Substance / Mixture Substance

Substance name tris(2,4-ditert-butylphenyl) phosphite

CAS-No. 31570-04-4

**Hazardous components** No hazardous ingredients

#### **SECTION 4. FIRST AID MEASURES**

No hazards which require special first aid measures. General advice

If inhaled Move to fresh air in case of accidental inhalation of dust or

> fumes from overheating or combustion. If symptoms persist, call a physician.

Take off contaminated clothing and shoes immediately. In case of skin contact

Wash off with soap and plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes. In case of eye contact

Remove contact lenses, if present and easy to do. Continue

rinsina.

system.

If swallowed Clean mouth with water and drink afterwards plenty of water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person. Product dust may be irritating to eyes, skin and respiratory

Most important symptoms and effects, both acute and

delayed

Notes to physician The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Specific hazards during fire-

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

Hazardous combustion prod: :

ucts

Carbon oxides

Further information Standard procedure for chemical fires.

Special protective equipment: In the event of fire, wear self-contained breathing apparatus.

for firefighters

gency procedures

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec: : tive equipment and emer-

Use personal protective equipment.

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

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Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

Non-sparking tools should be used.

Avoid dust formation.

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.

#### **SECTION 7. HANDLING AND STORAGE**

Advice on protection against :

fire and explosion

Avoid dust formation. Provide appropriate exhaust ventilation

at places where dust is formed.

Advice on safe handling : Minimize dust generation and accumulation.

Routine housekeeping should be instituted to ensure that

dusts do not accumulate on surfaces.

Dry powders can build static electricity charges when subject-

ed to the friction of transfer and mixing operations. Keep away from heat and sources of ignition.

For personal protection see section 8. No special handling advice required.

Conditions for safe storage : Keep cont

Keep containers tightly closed in a dry, cool and well-

ventilated place.

Store at temperatures not exceeding 35 °C Keep away from fire, sparks and heated surfaces. In case of occurance of dust, risk of dust explosion.

Technical : Incompatible with oxidizing agents.

measures/Precautions

Incompatible with strong acids and bases.

Materials to avoid

: No special restrictions on storage with other products.

#### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## **Control parameters**

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### **Exposure controls**

**Engineering measures** : It is recommended that all dust control equipment such as

local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen defi-

cient environment.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the

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> work area (i.e., there is no leakage from the equipment). Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas.

> Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at workplaces have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for Particulates Not Otherwise Regulated of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m3 - respirable particles, 10 mg/m3 - inhalable particles.

Use with local exhaust ventilation.

Adequate general ventilation is recommended when handling

to control airborne levels.

Use mechanical ventilation for general area control.

Personal protective equipment

Respiratory protection No personal respiratory protective equipment normally re-

auired.

Hand protection

Remarks For prolonged or repeated contact use protective gloves.

Eye protection Safety glasses Skin and body protection Protective suit

General industrial hygiene practice. Hygiene measures

**Environmental exposure controls** 

Water Do not let product enter drains.

Do not let product enter drains.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

Colour white, to, off-white

Odour odourless

Odour Threshold No data available

No data available рΗ

182 - 188 °C Melting point/range

Initial boiling point and boiling :

No data available

range

Flash point No data available

**Evaporation rate** No data available

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No data available

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Flammability (solid, gas)

Self-ignition

Upper explosion limit No data available

Lower explosion limit No data available

Vapour pressure 10E-10 at 20°C

Relative vapour density No data available

Relative density 1.04 (20 °C)

Density No data available

**Bulk density** 550 kg/m3powder

Solubility(ies)

Water solubility < 1 g/l practically insoluble (25 °C)

Solubility in other solvents < 5 g/l (25 °C)

Solvent: Methanol

400 g/l (25 °C) Solvent: Toluene

580 g/l (25 °C) Solvent: Chloroform

Partition coefficient: n-

octanol/water

No data available

No data available Auto-ignition temperature

Decomposition temperature No data available

Viscosity

Viscosity, dynamic No data available Viscosity, kinematic No data available Explosive properties No data available

Oxidizing properties No data available

No data available Surface tension

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity Stable under recommended storage conditions. Chemical stability No decomposition if stored and applied as directed.

tions

Possibility of hazardous reac- : No hazards to be specially mentioned.

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Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents, Reducing agents, Strong bases

Hazardous decomposition

products

No hazardous decomposition products are known.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure

Eye contact Skin contact

### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : LD50 (Rat): 10 g/kg

Acute inhalation toxicity : Remarks: Not classified due to lack of data.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

#### Serious eye damage/eye irritation

Not classified based on available information.

## Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

## Respiratory sensitisation

Not classified based on available information.

# Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

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.

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

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#### Reproductive toxicity

Not classified based on available information.

#### STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

#### **Aspiration toxicity**

Not classified based on available information.

### **Product:**

No aspiration toxicity classification

#### **Further information**

#### **Product:**

Remarks: No data available

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

#### **Product:**

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 510 mg/l

Exposure time: 24 h Remarks: (calculated)

EC0 (Daphnia magna (Water flea)): 180 mg/l

Exposure time: 24 h

EC100 (Daphnia magna (Water flea)): 1,000 mg/l

Exposure time: 24 h

Toxicity to algae Remarks: No data is available on the product itself.

Toxicity to microorganisms Remarks: No data is available on the product itself.

#### Persistence and degradability

## **Product:**

Biodegradability Remarks: Not readily biodegradable.

### **Bioaccumulative potential**

#### **Product:**

Bioaccumulation Remarks: No data available

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Mobility in soil

**Product:** 

Stability in soil : Remarks: Adsorbs on soil.

Other adverse effects

**Product:** 

Results of PBT and vPvB

assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological infor-

mation

: Avoid release to the environment.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Offer surplus and non-recyclable solutions to a licensed dis-

posal company.

Contaminated packaging : Empty remaining contents.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

## **SECTION 14. TRANSPORT INFORMATION**

## **International Regulations**

**IATA-DGR** 

Not regulated as a dangerous good

**IMDG-Code** 

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

**National Regulations** 

49 CFR

Not regulated as a dangerous good

Special precautions for user

Not applicable

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#### **SECTION 15. REGULATORY INFORMATION**

### **EPCRA - Emergency Planning and Community Right-to-Know Act**

## **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

## SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 : No chemicals in this material are subject to the reporting re-

quirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

#### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

#### **US State Regulations**

#### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know

tris(2,4-ditert-butylphenyl) phosphite 31570-04-4

### **New Jersey Right To Know**

tris(2,4-ditert-butylphenyl) phosphite 31570-04-4

California Prop 65 This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other re-

productive harm.

## The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

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DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

CH INV : The formulation contains substances listed on the Swiss In-

ventory, On the inventory, or in compliance with the inventory

TCSI : On the inventory, or in compliance with the inventory

### **TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

#### **SECTION 16. OTHER INFORMATION**

### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New

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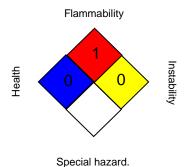


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Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

#### NFPA:



#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

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The information and recommendations contained in this safety data sheet are, to the best of SI Group's knowledge, belief and experience, accurate and reliable as of the date of its publication and describe the product only with regard to safety requirements. It is the user's responsibility to confirm that it is using the most current available version of this safety data sheet. The information and recommendations herein are offered for the user's consideration and examination. Identified uses in this safety data sheet do neither represent an agreement on the quality of the Product nor a designated use. For the avoidance of doubt, nothing herein shall be construed as relieving the user of its responsibility to ensure that the product is suitable for the intended use and that any proprietary rights, existing laws and legislation are observed. NO WARRANTIES OF EITHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTIES MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING THE PRODUCT DESCRIPTIONS, DATA OR INFORMATION HEREIN. This safety data sheet is neither a Certificate of Analysis (CoA) nor a technical data sheet and shall not be mistaken for a description of the product's specifications. If user repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the packaging. Appropriate warnings and safe-handling procedures should be provided to handlers and further users of the product. Alteration of this document is strictly prohibited. Except to

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the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted.

US / EN

## Carechem24 International Worldwide Coverage

### **Emergency Phone Numbers:**

Europe:	All European Countries	+44 (0) 1235 239 670
Asia Pacific:	East / South East Asia	Regional Number : +65 3158 1074
	Australia	+61 2801 44558
	New Zealand	+64 9929 1483
	China Taiwan	+86 10 5100 3039
	Japan	+81 345 789 341
	Indonesia	00780 3011 0293
	:Malaysia	+60 3 6207 4347
	Thailand	001800 1 2066 6751
	Korea	+65 3158 1285
	Vietnam	+65 3158 1255
	India	+65 3158 1198
	Pakistan	+65 3158 1329
	Philippines	+65 31581203
	Sri Lanka	+65 3158 1195
	Bangladesh	+65 3158 1200
Middle East / Africa:	Arabic speaking countries	+44 (0) 1235 239 671
	All other countries	+44 (0) 1235 239 670
<u>America</u>	United States / Canada	001866 928 0789
Latin America:	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
	Mexico	+52 555 004 8763