

TRITOLYL PHOSPHATE

GHS Safety Data Sheet

Version No:5.1.1.1

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

TRICRESYL PHOSPHATE

OTHER NAMES

C21H21O4P, (CH₃-C₆H₄-O)₃-PO, TCP, "tritoyl phosphate, isomeric mixture", "tri-p-cresyl phosphate", tricresylphosphate, "tri-m-cresyl phosphate", tritoylphosphate, "tri-o-cresyl phosphate", "tris(tolyloxy)phosphine oxide", "tri-orthocresyl phosphate", "tri-metacresyl phosphate", "tri-paracresyl phosphate", "triaryl phosphate", "cresyl phosphate", "Celluflex 179C", "Disflamoll TKP", Durad, "Flexol Plasticiser TCP", "Fyrquel 150", "Imol S 140", Kronitex, Lindol, NCI-C61041, PX-917, phosphate-ester

PROPER SHIPPING NAME

TRICRESYL PHOSPHATE with more than 3% ortho isomer

PRODUCT USE

As a solvent plasticiser in nitrocellulose lacquers and vinyl plastics and plasticiser flame retardant in cellulose plastic mouldings. As TCP lead scavenger in gasoline. Additive in extreme pressure lubricants. As a non-flammable fluid in hydraulic systems. Archaic use: to sterilize certain surgical instruments.
Intermediate

SUPPLIER

Company: S D FINE- CHEM LIMITED

Address:

315- 317, T.V.Ind.Estate,

248, Worli Road,

Mumbai- 400030, India

www.sdfine.com

Telephone: 91- 22 24959898/99

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Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Acute Toxicity Category 4

Chronic Aquatic Hazard Category 2

STOT - SE Category 1



EMERGENCY OVERVIEW

HAZARD

DANGER

Determined by using GHS criteria

H312

Harmful in contact with skin.

H370

Causes damage to organs.

continued...

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Section 2 - HAZARDS IDENTIFICATION

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention

Code	Phrase
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

Code	Phrase
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P307+P311	IF exposed: Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

Storage

Code	Phrase
P405	Store locked up.

Disposal

Code	Phrase
P501	Dispose of contents/container to ...

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
Commercial mixture :		
tricresyl phosphate	1330-78-5	> 95
tri- ortho- cresyl phosphate	78-30-8	> 3
tri- meta- cresyl phosphate	563-04-2	
tri- para- cresyl phosphate	78-32-0	
(Commercial grades usually exclude as much as possible of the ortho isomer.)		

Section 4 - FIRST AID MEASURES

SWALLOWED

- IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.

EYE

- If this product comes in contact with the eyes:
- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.

SKIN

- If skin or hair contact occurs:
- Quickly but gently, wipe material off skin with a dry, clean cloth.
- Immediately remove all contaminated clothing, including footwear.
- Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- Transport to hospital, or doctor.

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Section 4 - FIRST AID MEASURES

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

NOTES TO PHYSICIAN

- TREATMENT for the ortho-isomer of tricresyl phosphate:.
- In the absence of spontaneous vomiting administer a slurry of activated charcoal followed by gastric lavage.
- Saline cathartics, eg sodium and magnesium sulfate (15-20gm) in water.
- Daily doses of vitamin B1(300 mg) together with 1000 ug B12 by intramuscular injection over 45 days may have a protective effect on the nervous system if begun early but no effect on regeneration of peripheral motor neurons in controlled trials.
- Corticosteroids with the dose adjusted and tapered in accord with individual tolerances over a 30 day period may hasten regeneration.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.

FIRE/EXPLOSION HAZARD

- Combustible.
 - Slight fire hazard when exposed to heat or flame.
 - Heating may cause expansion or decomposition leading to violent rupture of containers.
 - On combustion, may emit toxic fumes of carbon monoxide (CO).
- Combustion products include: carbon dioxide (CO₂), phosphorus oxides (PO_x), other pyrolysis products typical of burning organic material.
- May emit poisonous fumes.

FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

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Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- DO NOT allow clothing wet with material to stay in contact with skin.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

SUITABLE CONTAINER

- Lined metal can, lined metal pail/ can.
- Plastic pail.
- Polyliner drum.
- Packing as recommended by manufacturer.

For low viscosity materials

- Drums and jerricans must be of the non-removable head type.
- Where a can is to be used as an inner package, the can must have a screwed enclosure. <</>.

All inner and sole packagings for substances that have been assigned to Packaging Groups I or II on the basis of inhalation toxicity criteria, must be hermetically sealed.

STORAGE INCOMPATIBILITY

- Aryl phosphates will hydrolyse with water at elevated temperatures. Hydrolysis is accelerated by acids or bases.
- Vinyl-based resins may be degraded by aryl phosphates.

Tricresyl phosphate:

- hydrolyses in water to produce phosphoric acid
- reacts violently with strong oxidisers
- will explode in contact with magnesium
- aqueous solutions are incompatible with sulfuric acid, caustics, ammonia, aliphatic amines, alkanolamines, isocyanates, alkylene oxides, epichlorohydrin, nitromethane.
- Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

- | | |
|---------------------------------|-----------------|
| • tricresyl phosphate: | CAS:1330- 78- 5 |
| • tri- ortho- cresyl phosphate: | CAS:78- 30- 8 |
| • tri- meta- cresyl phosphate: | CAS:563- 04- 2 |
| • tri- para- cresyl phosphate: | CAS:78- 32- 0 |

MATERIAL DATA

TRICRESYL PHOSPHATE:

TRI-META-CRESYL PHOSPHATE:

TRI-ORTHO-CRESYL PHOSPHATE:

TRI-PARA-CRESYL PHOSPHATE:

■ Exposure to TOCP causes central and peripheral neuropathies with paralysis of the distal muscles of the lower and upper extremities.

Air concentrations between 0.55 and 1.7 mg/m³ have been associated with polyneuritis, reduced cholinesterase activity has been related to air concentrations of 0.27 - > 3 mg/m³.

TRICRESYL PHOSPHATE:

TRI-META-CRESYL PHOSPHATE:

TRI-PARA-CRESYL PHOSPHATE:

- No exposure limits set by NOHSC or ACGIH.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

TRICRESYL PHOSPHATE:

CEL TWA: 0.1 mg/m³ [compare OEL TWA (Poland): 0.1 mg/m³]

PERSONAL PROTECTION



RESPIRATOR

• Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

EYE

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

HANDS/FEET

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber.

NOTE:

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:.

- Neoprene rubber gloves.

OTHER

- Overalls.
- Eyewash unit.
- Barrier cream.
- Skin cleansing cream.

ENGINEERING CONTROLS

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Pale brown to colourless oily liquid with a faint odour or no odour. Immiscible with water. Miscible with all the common organic solvents and thinners, linseed oil, china wood oil, castor oil.

It is easily hydrolysed in an alkaline medium to produce dicresyl phosphate and cresol, but it is stable in neutral and acidic media at normal temperatures.

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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Colourless to pale yellow liquid.

State	Liquid	Molecular Weight	368.37
Melting Range (°C)	- 33	Viscosity	Not Available
Boiling Range (°C)	410	Solubility in water (g/L)	Immiscible
Flash Point (°C)	210	pH (1% solution)	Not applicable.
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not applicable
Autoignition Temp (°C)	385	Vapour Pressure (kPa)	0.013 at 155 C.
Upper Explosive Limit (%)	1.4 (estimated)	Specific Gravity (water=1)	1.16- 1.18
Lower Explosive Limit (%)	0.4 (calculated)	Relative Vapour Density (air=1)	12.7
Volatile Component (%vol)	Nil.	Evaporation Rate	Not available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

Health hazard summary table:

Acute toxicity	Acute Tox. (dermal) 4
Skin corrosion/irritation	Not applicable
Serious eye damage/irritation	Not applicable
Respiratory or skin sensitization	Not applicable
Germ cell mutagenicity	Not applicable
Carcinogenicity	Not applicable
Reproductive toxicity	Not applicable
STOT- single exposure	STOT SE 1
STOT- repeated exposure	Not applicable
Aspiration hazard	Not applicable

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

- Strong evidence exists that exposure to the material may produce serious irreversible damage (other than carcinogenesis, mutagenesis and teratogenesis) following a single exposure by swallowing.
 - Deaths have occurred due to oral poisonings from tricresyl phosphate (TCP) – mainly due to accidental contamination of food and drink.
- Post-mortems have generally shown degeneration of spinal nerves and muscle wasting.
- Tri-o-cresyl phosphate (TOCP) first gained notoriety as the culpable neurotoxic agent of the "Ginger Jake" epidemic. Jamaican Ginger Extract (known in the United States by the slang name Jake) was an early 20th century patent medicine that provided a convenient way to bypass Prohibition laws, since it contained between 70-80% ethyl alcohol by weight.

EYE

- Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

SKIN

- There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs.

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Section 11 - TOXICOLOGICAL INFORMATION

■ The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis.

The material is unlikely to produce an irritant dermatitis as described in EC Directives .

■ Open cuts, abraded or irritated skin should not be exposed to this material.

■ Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.

Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

■ Tricresyl-o-phosphate (TOCP) is readily absorbed through intact human skin.

Only 0.

■ Absorption by skin may readily exceed vapour inhalation exposure.

Symptoms for skin absorption are the same as for inhalation.

■ Skin contact with the material may be harmful; systemic effects may result following absorption.

INHALED

■ The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models).

Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.

■ Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may produce serious damage to the health of the individual.

■ Inhalation hazard is increased at higher temperatures.

■ There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs.

CHRONIC HEALTH EFFECTS

■ There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

Based on experience with similar materials, there is a possibility that exposure to the material may reduce fertility in humans at levels which do not cause other toxic effects.

Prolonged skin exposure to tricresyl phosphate may produce an allergic skin rash, bilateral wrist drop, and numbness of the fingers. Recovery is slow and some residual paralysis may remain. Menstrual disorders may occur. There may be decreased number and viability of offspring, damage to the sex organs, decreased motility of sperm, and decreased fertility in both sexes. There may also be non-cancerous changes in the liver and adrenal gland.

TOXICITY AND IRRITATION

■ The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

SKIN

tricresyl phosphate	GESAMP/EHS Composite List - GESAMP Hazard Profiles	D1: skin irritation/corrosion	1
tri- ortho- cresyl phosphate	GESAMP/EHS Composite List - GESAMP Hazard Profiles	D1: skin irritation/corrosion	1
tri- meta- cresyl phosphate	GESAMP/EHS Composite List - GESAMP Hazard Profiles	D1: skin irritation/corrosion	1
tri- para- cresyl phosphate	GESAMP/EHS Composite List - GESAMP Hazard Profiles	D1: skin irritation/corrosion	1

Section 12 - ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment.

Refer to special instructions/ safety data sheets.

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
tri- ortho- cresyl phosphate	HIGH	No Data Available	LOW	LOW

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Section 12 - ECOLOGICAL INFORMATION

tri- meta- cresyl phosphate	HIGH	No Data Available	LOW	LOW
tri- para- cresyl phosphate	HIGH	No Data Available	LOW	LOW

GESAMP/EHS COMPOSITE LIST - GESAMP Hazard Profiles

Name /	EHS	TRN	A1a	A1b	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3
Cas No /																	
RTECS No																	
/	133	699	5		3	R	4	4	0	1	0		1	N		S	2
CAS:1330-	2																
78- 5 /																	

Legend:

EHS=EHS Number (EHS=GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships) NRT=Net Register Tonnage, A1a=Bioaccumulation log Pow, A1b=Bioaccumulation BCF, A1=Bioaccumulation, A2=Biodegradation, B1=Acuteaquatic toxicity LC/ECIC50 (mg/l), B2=Chronic aquatic toxicity NOEC (mg/l), C1=Acute mammalian oral toxicity LD50 (mg/kg), C2=Acute mammalian dermal toxicity LD50 (mg/kg), C3=Acute mammalian inhalation toxicity LC50 (mg/kg), D1=Skin irritation & corrosion, D2=Eye irritation & corrosion, D3=Long-term health effects, E1=Tainting, E2=Physical effects on wildlife & benthic habitats, E3=Interference with coastal amenities,
For column A2: R=Readily biodegradable, NR=Not readily biodegradable.
For column D3: C=Carcinogen, M=Mutagenic, R=Reprotoxic, S=Sensitising, A=Aspiration hazard, T=Target organ systemic toxicity, L=Lunginjury, N=Neurotoxic, I=Immunotoxic.
For column E1: NT=Not tainting (tested), T=Tainting test positive.
For column E2: Fp=Persistent floater, F=Floater, S=Sinking substances.
The numerical scales start from 0 (no hazard), while higher numbers reflect increasing hazard.
(GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships)

Section 13 - DISPOSAL CONSIDERATIONS

■ Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION



Labels Required: TOXIC

HAZCHEM:
2X

Land Transport UNDG:

Class or division:	6.1	Subsidiary risk:	None
UN No.:	2574	UN packing group:	II
Shipping Name:TRICRESYL PHOSPHATE with more than 3% ortho isomer with more than 3% ortho isomer			

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Section 14 - TRANSPORTATION INFORMATION

Air Transport IATA:

ICAO/IATA Class:	6.1	ICAO/IATA Subrisk:	None
UN/ID Number:	2574	Packing Group:	II
Special provisions:	None		

Shipping name:TRICRESYL PHOSPHATE with more than 3% ortho isomer

Maritime Transport IMDG:

IMDG Class:	6.1	IMDG Subrisk:	P
UN Number:	2574	Packing Group:	II
EMS Number:	F- A, S- A	Special provisions:	None
Limited Quantities:	100 ml	Marine Pollutant:	Yes

Shipping name:TRICRESYL PHOSPHATE with more than 3% ortho isomer

GESAMP hazard profiles for this material can be found in section 12 of the MSDS.

Section 15 - REGULATORY INFORMATION

REGULATIONS

tricresyl phosphate (CAS: 1330-78-5) is found on the following regulatory lists;

"FisherTransport Information","GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO IBC Code Chapter 17: Summary of minimum requirements","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","India Chemical Accidents Rules - Schedule 1: List of Hazardous Chemicals","International Council of Chemical Associations (ICCA) - High Production Volume List","International Maritime Dangerous Goods Requirements (IMDG Code) - Marine Pollutants","OECD List of High Production Volume (HPV) Chemicals","OSPAR Substances removed from the List of Substances of Possible Concern","Sigma-AldrichTransport Information"

Regulations for ingredients

tri-ortho-cresyl phosphate (CAS: 78-30-8) is found on the following regulatory lists;

"FisherTransport Information","GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO IBC Code Chapter 17: Summary of minimum requirements","India Chemical Accidents Rules - Schedule 1: List of Hazardous Chemicals","India Manufacture, Storage and Import of Hazardous Chemical Rules - Schedule 1: List of Hazardous and Toxic Chemicals","International Maritime Dangerous Goods Requirements (IMDG Code) - Marine Pollutants","United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments"

tri-meta-cresyl phosphate (CAS: 563-04-2) is found on the following regulatory lists;

"FisherTransport Information","GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO IBC Code Chapter 17: Summary of minimum requirements","International Maritime Dangerous Goods Requirements (IMDG Code) - Marine Pollutants"

tri-para-cresyl phosphate (CAS: 78-32-0) is found on the following regulatory lists;

"FisherTransport Information","GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO IBC Code Chapter 17: Summary of minimum requirements","International Maritime Dangerous Goods Requirements (IMDG Code) - Marine Pollutants","OSPAR National List of Candidates for Substitution – United Kingdom"

Section 16 - OTHER INFORMATION

Denmark Advisory list for selfclassification of dangerous substances

Substance	CAS	Suggested codes
tricresyl phosphate	1330- 78- 5	Carc3; R40 Mut3; R68 Rep3; R63 N; R50/53
tri- ortho- cresyl phosphate	78- 30- 8	Carc3; R40 Mut3; R68 Rep3; R63 N; R50/53
tri- meta- cresyl phosphate	563- 04- 2	Carc3; R40 Mut3; R68 Rep3; R63 N; R50/53
tri- para- cresyl phosphate	78- 32- 0	Carc3; R40 Mut3; R68 Rep3;

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Section 16 - OTHER INFORMATION

R63 N; R50/53

- Classification of the preparation and its individual components has drawn on official and authoritative sources using available literature references.

- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

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