

# SAFETY DATA SHEET

TMC AEON TH

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Trade name: TMC AEON TH  
 Product no.: 305885  
 Unique formula identifier (UFI): 4J3G-01MJ-U006-HTAX

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture: Marine compressors, Lubricant Restricted to professional users.  
 Uses advised against : None known.

### 1.3. Details of the supplier of the safety data sheet

Company and address: **Tamrotor Marine Compressors AS**  
 Prof. Birkelands vei 24D  
 1081 Oslo  
 Norway  
 +47 22 91 85 00  
 www.tmc.com  
 E-mail: aftersales@tmc.com  
 Revision: 24/05/2024  
 SDS Version: 1.0

### 1.4. Emergency telephone number

In urgent situations: Call 113 and request the poison information centre. (24h service)  
 Poison Center at Tel.: + 47 22 59 13 00  
 See section 4 on 'First Aid Measures'

## SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

### 2.1. Classification of the substance or mixture

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

Hazard pictogram(s): Not applicable.  
 Signal word: Not applicable.  
 Hazard statement(s): Harmful to aquatic life with long lasting effects. (H412)  
 Precautionary statement(s):  
*General:* -  
*Prevention:* Avoid release to the environment. (P273)  
*Response:* -  
*Storage:* -  
*Disposal:* Dispose of contents/container in accordance with local regulation (P501)  
 Hazardous substances: None known.  
 Additional labelling: UFI: 4J3G-01MJ-U006-HTAX

### 2.3. Other hazards

Additional warnings: This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.  
 This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate	CAS No.: 1330-78-5 EC No.: 215-548-8 REACH: Index No.:	0,25 - 1%	Repr. 2, H361 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General information:	In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.
Inhalation:	Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.
Skin contact:	Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
Eye contact:	If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.
Ingestion:	If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.
Burns:	Not applicable.

#### 4.2. Most important symptoms and effects, both acute and delayed

None known.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.  
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

#### 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.  
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

**6.4. Reference to other sections**

See section 13 "Disposal considerations" on handling of waste.  
See section 8 "Exposure controls/personal protection" for protective measures.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.  
Smoking, drinking and consumption of food is not allowed in the work area.  
See section 8 "Exposure controls/personal protection" for information on personal protection.

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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.  
Recommended storage material: Always store in containers of the same material as the original container.  
Storage temperature: No specific requirements  
Incompatible materials: Strong acids  
Strong bases  
Strong oxidizing agents  
Mineral acids

**7.3. Specific end use(s)**

This product should only be used for applications quoted in section 1.2.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

No substances are listed in the national list of substances with an occupational exposure limit.

**DNEL**

Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	0,15 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	0,41 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	0,03 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	0,18 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	0,02 mg/kg bw/day

**PNEC**

Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1 µg/L
Freshwater sediment		2.05 mg/kg
Intermittent release (freshwater)		1.46 µg/L
Marine water		100 ng/L
Marine water sediment		205 µg/kg
Predators		650 µg/kg
Sewage treatment plant		100 mg/L
Soil		1.01 mg/kg

**8.2. Exposure controls**


Apply general control to prevent unnecessary exposure  
General recommendations: Smoking, drinking and consumption of food is not allowed in the work area.  
Exposure scenarios: There are no exposure scenarios implemented for this product.  
Exposure limits: Occupational exposure limits have not been defined for the substances in this product.  
Appropriate technical measures: Apply standard precautions during use of the product. Avoid inhalation of vapours.  
Hygiene measures: In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.  
Measures to avoid: Keep damming materials near the workplace. If possible, collect spillage during work.

environmental exposure:


**Individual protection measures, such as personal protective equipment**

Generally: Use only CE marked protective equipment.


Respiratory Equipment:

Work situation	Type	Class	Colour	Standards	
	Respiratory protection is not needed in the event of adequate ventilation.				
Exceeding exposure limit values.	A full face respirator and suitable respirator cartridges.			EN 143	


Skin protection:

Work situation	Recommended	Type/Category	Standards	
In the event of prolonged exposure or high concentrations	Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	

Hand protection:

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Where hand contact with the product may occur the use of gloves approved to relevant standards is recommended.	Nitrile	0,38	> 480	EN374-2, EN374-3, EN388	

Eye protection:

Work situation	Type	Standards	
When there is risk of splash- / intermittent exposure	Safety glasses with side shields.	EN166	

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	Colourless, Yellowish
Odour / Odour threshold:	Mild
pH:	Testing not relevant or not possible due to the nature of the product.
Density (g/cm <sup>3</sup> ):	-
Relative density:	0.925 (15.6 °C)
Kinematic viscosity:	> 61,20 mm <sup>2</sup> /s (40 °C)
Particle characteristics:	Does not apply to liquids.

**Phase changes**

Melting point/Freezing point (°C):	Testing not relevant or not possible due to the nature of the product.
Softening point/range (waxes and pastes) (°C):	Does not apply to liquids.
Boiling point (°C):	Testing not relevant or not possible due to the nature of the product.
Vapour pressure:	Testing not relevant or not possible due to the nature of the product.
Relative vapour density:	Testing not relevant or not possible due to the nature of the product.
Decomposition temperature (°C):	Testing not relevant or not possible due to the nature of the product.

**Data on fire and explosion hazards**

Flash point (°C):	257.1
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Flammability (°C):	Testing not relevant or not possible due to the nature of the product.
Auto-ignition temperature (°C):	Testing not relevant or not possible due to the nature of the product.
Lower and upper explosion limit (% v/v):	Testing not relevant or not possible due to the nature of the product.

#### Solubility

Solubility in water:	Insoluble
n-octanol/water coefficient (LogKow):	Testing not relevant or not possible due to the nature of the product.
Solubility in fat (g/L):	Testing not relevant or not possible due to the nature of the product.

#### 9.2. Other information

Other physical and chemical parameters:	No data available.
Oxidizing properties:	Testing not relevant or not possible due to the nature of the product.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No data available.

#### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

#### 10.3. Possibility of hazardous reactions

None known.

#### 10.4. Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

#### 10.5. Incompatible materials

Strong acids  
Strong bases  
Strong oxidizing agents  
Mineral acids

#### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

##### Acute toxicity

Based on available data, the classification criteria are not met.

##### Skin corrosion/irritation

Based on available data, the classification criteria are not met.  
Not classified as a primary skin irritant. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin. Prolonged or repeated contact may cause irritation.

##### Serious eye damage/irritation

Based on available data, the classification criteria are not met.

##### Respiratory sensitisation

Based on available data, the classification criteria are not met.

##### Skin sensitisation

Based on available data, the classification criteria are not met.

##### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

##### Carcinogenicity

Based on available data, the classification criteria are not met.

##### Reproductive toxicity

Based on available data, the classification criteria are not met.  
(Rxn mass of 3-methylphenyl di-4-methylphenyl Phosphate & 4-methylphenyl di-3-methylphenyl Phosphate & tris(3-methylphenyl) phosphate): This substance has been shown to impair fertility and cause adverse reproductive effects in rats and mice.

##### STOT-single exposure

Based on available data, the classification criteria are not met.  
If the material turns into a mist/haze, or if vapors are formed when heated, exposure may cause irritation of the mucous membranes and upper respiratory tract.

### STOT-repeated exposure

Based on available data, the classification criteria are not met.

Repeated occupational exposure to tricresyl phosphate over a prolonged period of time may cause delayed neurotoxicity characterized by ataxia and tremors.

### Aspiration hazard

Based on available data, the classification criteria are not met.

## 11.2. Information on other hazards

### Long term effects

None known.

### Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

### Other information

None known.

## SECTION 12: Ecological information

### 12.1. Toxicity

Product/substance	Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate
Species:	Fish, <i>Oncorhynchus mykiss</i>
Duration:	4 hours
Test:	LC50
Result:	0,6 mg/L

Product/substance	Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate
Species:	Daphnia, <i>Daphnia magna</i>
Duration:	48 hours
Test:	EC50
Result:	0,146 mg/L

Product/substance	Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	0,4042 mg/L

Product/substance	Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate
Species:	Bacteria
Compartment:	Activated Sludge Plant
Duration:	3 hours
Test:	LC50
Result:	> 1000 mg/L

Harmful to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

Product/substance	Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate
Duration:	28 days
Result:	24,8 %
Conclusion:	Not readily biodegradable
Test:	OECD 301 D

### 12.3. Bioaccumulative potential

Product/substance	Reaction mass of 3-methylphenyl bis(4-methylphenyl) phosphate and bis(3-methylphenyl) 4-methylphenyl phosphate and tris(3-methylphenyl) phosphate
LogKow:	5,93
Conclusion:	-

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

### 12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

### 12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.  
 This product contains substances, which may cause adverse long-term effects to the aquatic environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.  
 HP 14 – Ecotoxic  
 Dispose of contents/container to an approved waste disposal plant.  
 Disposal to the sewer is discouraged.  
 Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.  
 EWC code: Not applicable.

### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

### Additional information

Not dangerous goods according to ADR, IATA and IMDG.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Maritime transport in bulk according to IMO instruments

No data available.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions for application: Restricted to professional users.  
 Demands for specific education: No specific requirements.  
 SEVESO - Categories / dangerous substances: Not applicable.  
 Declaration of chemicals: If the product is imported or produced in more than 100 kg/year it is subject to registration in the Product Register because it is classified as hazardous.  
 Additional information: Not applicable.  
 Sources: Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.  
 Regulation of 15 May 2015 no. 541 on declaring chemicals to the product register (Declaration Regulations)  
 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).  
 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

### 15.2. Chemical safety assessment

No

## SECTION 16: Other information

### Full text of H-phrases as mentioned in section 3

H361, Suspected of damaging fertility or the unborn child.  
 H400, Very toxic to aquatic life.  
 H410, Very toxic to aquatic life with long lasting effects.

### Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
CSA = Chemical Safety Assessment  
CSR = Chemical Safety Report  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EINECS = European Inventory of Existing Commercial chemical Substances  
ES = Exposure Scenario  
EUH statement = CLP-specific Hazard statement  
EuPCS = European Product Categorisation System  
EWC = European Waste Catalogue  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
GWP = Global warming potential  
IARC = International Agency for Research on Cancer (IARC)  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
OECD = Organisation for Economic Co-operation and Development  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
RRN = REACH Registration Number  
SCL = A specific concentration limit  
SVHC = Substances of Very High Concern  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
TWA = Time weighted average  
UN = United Nations  
UVBC = Unknown or variable composition, complex reaction products or of biological materials  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

**Additional information**

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

**The safety data sheet is validated by**

Ecoonline AS - Regulatory Affairs

**Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle. The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products. It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.  
Country-language: NO-en