



## SAFETY DATA SHEET NESTE TURBINE HYDRO 46

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

#### 1.1. Product identifier

<b>Product name</b>	NESTE TURBINE HYDRO 46
<b>Product number</b>	ID 19093
<b>Internal identification</b>	3081
<b>Synonyms; trade names</b>	Previous product name: NESTE HYDRO TURBINE 46, product number 3080, ID 18054.

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

<b>Identified uses</b>	Lubricant.
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#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Neste Markkinointi Oy  
Keilaranta 21, Espoo, PL 95, FIN-00095 NESTE, FINLAND  
Tel. +358 10 45811  
lubetec@neste.com

#### 1.4. Emergency telephone number

**National emergency telephone number** +358-9-471 977, +358-9-4711, Poison Information Centre

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

<b>Physical hazards</b>	Not Classified
<b>Health hazards</b>	Not Classified
<b>Environmental hazards</b>	Aquatic Chronic 3 - H412

#### 2.2. Label elements

<b>Hazard statements</b>	H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P273 Avoid release to the environment. P501 Dispose of contents/ container in accordance with national regulations. P102 Keep out of reach of children.

#### 2.3. Other hazards

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

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<b>Distillates (petroleum), hydrotreated light naphthenic</b>	<b>2,5 - &lt; 5 %</b>
CAS number: 64742-53-6	EC number: 265-156-6
	REACH registration number: 01-2119480375-34-XXXX
<b>Classification</b>	
Asp. Tox. 1 - H304	

  

<b>2,6-di-tert-butyl-p-cresol (BHT)</b>	<b>0,25 - &lt; 0,5 %</b>
CAS number: 128-37-0	EC number: 204-881-4
	REACH registration number: 01-2119565113-46-XXXX
M factor (Acute) = 1	M factor (Chronic) = 1
<b>Classification</b>	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>Inhalation</b>	Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting unless under the direction of medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms are severe or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.

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

**General information** No specific health hazards known.

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

**Notes for the doctor** Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide, dry powder or water fog.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

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

<b>Specific hazards</b>	None known.
<b>Hazardous combustion products</b>	Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO).

#### 5.3. Advice for firefighters

**Protective actions during firefighting** Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Contain and collect extinguishing water. Avoid discharge into drains.

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**Special protective equipment for firefighters**      Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

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

**Personal precautions**      Wear suitable protective clothing as protection against splashing or contamination.

**For emergency responders**      Keep unnecessary and unprotected personnel away from the spillage.

#### 6.2. Environmental precautions

**Environmental precautions**      Stop leak if safe to do so. Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

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

**Methods for cleaning up**      Absorb spillage with sand or other inert absorbent. Place waste in labelled, sealed containers. Dispose of waste via a licensed waste disposal contractor.

#### 6.4. Reference to other sections

**Reference to other sections**      For personal protection, see Section 8.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions**      Avoid inhalation of vapours and spray/mists. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. All handling should only take place in well-ventilated areas. Take precautionary measures against static discharges. For personal protection, see Section 8.

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

**Storage precautions**      Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep containers upright. Keep away from food, drink and animal feeding stuffs.

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

**Specific end use(s)**      Not known.

### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### **2,6-di-tert-butyl-p-cresol (BHT)**

2,6-di-tert-butyl-p-cresol (BHT): 10 mg/m<sup>3</sup> (8h), 20 mg/m<sup>3</sup> (15min), HTP 2016/FIN

##### 2,6-di-tert-butyl-p-cresol (BHT) (CAS: 128-37-0)

<b>DNEL</b>	Workers - Dermal; Long term systemic effects: 0,5 mg/kg/day Workers - Inhalation; Long term systemic effects: 3,5 mg/m <sup>3</sup>
<b>PNEC</b>	- Fresh water; 0,199 µg/l - Marine water; 0,0199 µg/l - Fresh water, Intermittent release; 1,99 µg/l - Sediment (Freshwater); 99,6 mg/kg - Sediment (Marinewater); 9,96 mg/kg - Soil; 47,69 µg/kg

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### 8.2. Exposure controls

<b>Appropriate engineering controls</b>	All handling should only take place in well-ventilated areas. Provide eyewash station and safety shower.
<b>Eye/face protection</b>	No specific eye protection required during normal use.
<b>Hand protection</b>	Wear protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. Butyl rubber.
<b>Other skin and body protection</b>	Wear suitable protective clothing as protection against splashing or contamination.
<b>Respiratory protection</b>	No specific recommendations.
<b>Environmental exposure controls</b>	Store in a demarcated bunded area to prevent release to drains and/or watercourses.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Liquid.
<b>Colour</b>	-
<b>Odour</b>	-
<b>Odour threshold</b>	-
<b>pH</b>	-
<b>Melting point</b>	< -30°C Pour point
<b>Initial boiling point and range</b>	-
<b>Flash point</b>	240°C COC (Cleveland open cup).
<b>Flammability (solid, gas)</b>	-
<b>Upper/lower flammability or explosive limits</b>	-
<b>Vapour pressure</b>	-
<b>Vapour density</b>	-
<b>Relative density</b>	~ 0,848 @ 15°C
<b>Solubility(ies)</b>	-
<b>Partition coefficient</b>	-
<b>Auto-ignition temperature</b>	-
<b>Decomposition Temperature</b>	-
<b>Viscosity</b>	Kinematic viscosity 46 mm <sup>2</sup> /s @ 40°C
<b>Explosive properties</b>	-
<b>Oxidising properties</b>	-

#### 9.2. Other information

<b>Other information</b>	Not known.
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### SECTION 10: Stability and reactivity

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### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** No potentially hazardous reactions known.

### 10.4. Conditions to avoid

**Conditions to avoid** There are no known conditions that are likely to result in a hazardous situation.

### 10.5. Incompatible materials

**Materials to avoid** Oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

**Skin corrosion/irritation** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

#### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

#### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vivo** Based on available data the classification criteria are not met.

#### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development**

Based on available data the classification criteria are not met.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Based on available data the classification criteria are not met.

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

#### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

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### Distillates (petroleum), hydrotreated light naphthenic

#### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> > 5000 mg/kg, Oral, Rat

#### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> > 2000 mg/kg, Dermal, Rabbit

### 2,6-di-tert-butyl-p-cresol (BHT)

#### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> > 6000 mg/kg, Oral, Rat (OECD TG 401)

#### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> > 2000 mg/kg, Dermal, Rat (OECD 402)

## SECTION 12: Ecological Information

### 12.1. Toxicity

**Toxicity** Harmful to aquatic life with long lasting effects. The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

### 2,6-di-tert-butyl-p-cresol (BHT)

#### Acute aquatic toxicity

LE(C)<sub>50</sub> 0.1 < L(E)C<sub>50</sub> ≤ 1

M factor (Acute) 1

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 0,199 mg/l, Algae  
Estimated value.  
(QSAR)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 0,48 mg/l, Daphnia magna  
(OECD TG 202)

#### Chronic aquatic toxicity

M factor (Chronic) 1

**Chronic toxicity - fish early life stage** NOEC, 42 days: 0,053 mg/l, Oryzias latipes (Red killifish)

### 12.2. Persistence and degradability

**Persistence and degradability** No data available.

**Biodegradation** No data available.

### 2,6-di-tert-butyl-p-cresol (BHT)

**Biodegradation** 4,5 %, 28 d (OECD TG 301C)

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** -

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### 2,6-di-tert-butyl-p-cresol (BHT)

Partition coefficient                      log Pow: 4,17 (21 °C)

#### 12.4. Mobility in soil

Mobility    No data available.

#### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment                      No data available.

#### 12.6. Other adverse effects

Other adverse effects                                      None known.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal methods**                                      Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Do not reuse empty containers.

### SECTION 14: Transport information

**General**    The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

#### 14.1. UN number

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UN No. (ADR/RID)                                      -

#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)                      -

#### 14.3. Transport hazard class(es)

ADR/RID class    -

#### 14.4. Packing group

ADR/RID packing group                                      -

#### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**  
No.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code                      Not applicable.

### SECTION 15: Regulatory information

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

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### EU legislation

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) (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

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 (as amended).

### 15.2. Chemical safety assessment

No data available.

### SECTION 16: Other information

**Abbreviations and acronyms used in the safety data sheet** DNEL = Derived No-Effect Level  
PNEC = Predicted No-Effect Concentration

**Key literature references and sources for data** The manufacturer's SDS. 6.7.2017

**Revision comments** Product name change.

**Revision date** 01/09/2017

**Supersedes date** 10/07/2017

**SDS number** 4984

**Hazard statements in full** H304 May be fatal if swallowed and enters airways.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.