

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Opticool 972(E)

Revision date: 04.09.2018

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

##### 1.1. Product identifier

Opticool 972(E)

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

###### Use of the substance/mixture

Metal working fluids

###### Uses advised against

No information available.

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

Company name:	Chesterton International GmbH	
Street:	Am Lenzenfleck 23	
Place:	DE-85737 Ismaning GERMANY	
Telephone:	+49 89 99 65 46 - 0	Telefax: +49 89 99 65 46 - 50
e-mail:	eu-sds@chesterton.com	
e-mail (Contact person):	eu-sds@chesterton.com	
Internet:	www.chesterton.com	
Responsible Department:	eu-sds@chesterton.com	

##### 1.4. Emergency telephone number:

+49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

#### SECTION 2: Hazards identification

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

###### Regulation (EC) No. 1272/2008

Hazard categories:

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

Causes serious eye damage.

May cause an allergic skin reaction.

##### 2.2. Label elements

###### Regulation (EC) No. 1272/2008

###### Hazard components for labelling

Poly(oxy-1,2-ethanediol)-phenyl-hydroxyphosphat  
1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one

Signal word: Danger

Pictograms:



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#### Hazard statements

- H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.

#### Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P310 Immediately call a POISON CENTER/doctor.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name	Quantity
	EC No      Index No      REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
39464-70-5	Poly(oxy-1,2-ethanediol)-phenyl-hydroxyphosphat	>=5 - <10 %
	Skin Irrit. 2, Eye Dam. 1; H315 H318	
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one	>0,25 - <0,5 %
	220-120-9      613-088-00-6	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1; H302 H315 H318 H317 H400	
3811-73-2	Pyridine-2-thiol 1-oxide, sodium salt	>0,025-<0,25 %
	223-296-5      01-2119493385-28	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1, Aquatic Chronic 2; H332 H312 H302 H315 H319 H400 H411	

Full text of H and EUH statements: see section 16.

#### Further Information

No information available.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Remove victim out of the danger area. If unconscious place in recovery position and seek medical advice.

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When in doubt or if symptoms are observed, get medical advice.

#### **After inhalation**

Remove casualty to fresh air and keep warm and at rest.

#### **After contact with skin**

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

#### **After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

#### **After ingestion**

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

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

No information available.

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

First Aid, decontamination, treatment of symptoms.

### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Dry extinguishing powder. Carbon dioxide (CO<sub>2</sub>). alcohol resistant foam. Water spray jet

##### **Unsuitable extinguishing media**

Full water jet

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

Nitrogen oxides (NO<sub>x</sub>), Carbon dioxide (CO<sub>2</sub>), Carbon monoxide, Phosphorus oxides

#### **5.3. Advice for firefighters**

Special protective equipment for firefighters: Chemical protection clothing  
In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

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

See protective measures under point 7 and 8.  
Provide adequate ventilation.  
Personal protection equipment: see section 8

#### **6.2. Environmental precautions**

Cover drains. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Make sure spills can be contained, e.g. in sump pallets or kerbed areas.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal. Ventilate affected area. Clean contaminated articles and floor according to the environmental legislation.

#### **6.4. Reference to other sections**

See protective measures under point 7 and 8.  
Disposal: see section 13

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Wear personal protection equipment (refer to section 8). Use only in well-ventilated areas. Handle and open container with care. Always close containers tightly after the removal of product. Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray.

##### **Advice on protection against fire and explosion**

Usual measures for fire prevention.

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

##### **Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product. Protect containers against damage.

##### **Advice on storage compatibility**

Keep away from: Oxidising agent

##### **Further information on storage conditions**

Recommended storage temperature: 5-40°C

Protect against: Heat, UV-radiation/sunlight, Frost

storage stability: ~ 12 Mon

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

No information available.

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

#### **8.1. Control parameters**

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#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day

#### PNEC values

CAS No	Substance	Value
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one	
Freshwater		0,011 mg/l
Marine water		0,0011 mg/l
Freshwater sediment		0,0499 mg/l
Marine sediment		0,00499 mg/l
Soil		3 mg/kg

#### 8.2. Exposure controls

##### Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

##### Protective and hygiene measures

When using do not eat, drink, smoke, sniff.

Wash hands before breaks and after work. Do not put any product-impregnated cleaning rags into your trouser pockets. Wash contaminated clothing prior to re-use. Apply skin care products after work.

##### Eye/face protection

Suitable eye protection:

Eye glasses with side protection  
goggles

##### Hand protection

Tested protective gloves must be worn: DIN EN 374

NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)

Thickness of the glove material  $\geq$  0,7 mm

Breakthrough times and swelling properties of the material must be taken into consideration.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Wearing time with occasional contact (splashes): max. 480 min. (NBR (Nitrile rubber))

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Wearing time with permanent contact 240 - 480 min (NBR (Nitrile rubber))  
Observe the wear time limits as specified by the manufacturer.

#### Skin protection

Wear protective gloves and protective clothing.

#### Respiratory protection

No special measures are necessary. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Respiratory protection necessary at: insufficient ventilation, aerosol or mist formation

#### Environmental exposure controls

No special measures are necessary.

### SECTION 9: Physical and chemical properties

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

Physical state:	liquid
Colour:	colourless
Odour:	characteristic

pH-Value (at 20 °C):

**Test method**  
9 DIN 51369

#### Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Flash point:	>100 °C DIN ISO 2592

#### Flammability

Solid:	not determined
Gas:	not determined

#### Explosive properties

not explosive according to EU A.14

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not determined

#### Auto-ignition temperature

Solid:	not determined
Gas:	not determined

Decomposition temperature:	not determined
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#### Oxidizing properties

Not oxidising.

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Vapour pressure: not determined

Density (at 15 °C): 1,1 g/cm<sup>3</sup>

Water solubility: miscible

#### **Solubility in other solvents**

No information available.

Viscosity / dynamic: not determined

Viscosity / kinematic:  
(at 20 °C) 22 mm<sup>2</sup>/s

#### **9.2. Other information**

No information available.

### **SECTION 10: Stability and reactivity**

#### **10.1. Reactivity**

The product is stable under storage at normal ambient temperatures.

#### **10.2. Chemical stability**

The substance is chemically stable under recommended conditions of storage, use and temperature.

#### **10.3. Possibility of hazardous reactions**

Exothermic reaction with: Acid

#### **10.4. Conditions to avoid**

No information available.

#### **10.5. Incompatible materials**

Oxidising agent, strong  
Acid

#### **10.6. Hazardous decomposition products**

Does not decompose when used for intended uses.

### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

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

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one				
	oral	ATE 500 mg/kg			
3811-73-2	Pyridine-2-thiol 1-oxide, sodium salt				
	oral	LD50 1208 mg/kg	Rat	Study report (1996)	OECD Guideline 401
	dermal	LD50 1900 mg/kg	Rabbit	Study report (1987)	EPA OPP 81-2
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

#### Irritation and corrosivity

Causes serious eye damage.

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

#### Sensitising effects

May cause an allergic skin reaction. (1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one)

#### Carcinogenic/mutagenic/toxic effects for reproduction

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

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

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

## SECTION 12: Ecological information

### 12.1. Toxicity



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one					
	Acute fish toxicity	LC50	22 mg/l	96 h		
3811-73-2	Pyridine-2-thiol 1-oxide, sodium salt					
	Acute fish toxicity	LC50	0,0073 mg/l	96 h	Oncorhynchus mykiss	Study report (1988)
	Acute algae toxicity	ErC50	0,22 mg/l	72 h	Desmodesmus subspicatus	Study report (2002)
	Acute crustacea toxicity	EC50	0,022 mg/l	48 h	Daphnia magna	Study report (1976)
	Acute bacteria toxicity	(1,81 mg/l)		3 h	activated sludge of a predominantly domestic sewage	Study report (2002)
						OECD Guideline 209

#### 12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one			
	OECD 303A Activated sludge S 978	>70%		
	OECD 302B Activated sludge S 3509	90%		

#### 12.3. Bioaccumulative potential

##### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one	0,7
3811-73-2	Pyridine-2-thiol 1-oxide, sodium salt	0,002

#### BCF

CAS No	Chemical name	BCF	Species	Source
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one	6,95	fish	OECD 305

#### 12.4. Mobility in soil

No information available.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6. Other adverse effects

No information available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

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#### Advice on disposal

Dispose of waste according to applicable legislation.

#### Contaminated packaging

Dispose of waste according to applicable legislation.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

- |  |  |
|--|--|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

#### Inland waterways transport (ADN)

- |  |  |
|--|--|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

#### Marine transport (IMDG)

- |  |  |
|--|--|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

#### Air transport (ICAO-TI/IATA-DGR)

- |  |  |
|--|--|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No information available.

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

No information available.

### SECTION 15: Regulatory information

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

##### National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

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#### **15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

#### **SECTION 16: Other information**

##### **Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
(Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
EC50: Effective concentration, 50 percent  
DNEL: Derived No Effect Level  
PNEC: Predicted No Effect Concentration  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

##### **Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method

##### **Relevant H and EUH statements (number and full text)**

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

##### **Further Information**

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself.  
No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose.  
The user must make their own determination as to suitability.



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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*