

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Opticool 972(E)

Revision date: 23.02.2022

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

1.1. Product identifier

Opticool 972(E)

UFI: M061-E128-TP25-D0ER

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:	D-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

Eye Dam. 1; H318
Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

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:



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.

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P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

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 (Regulation (EC) No 1272/2008)	
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
	01-2120761540-60	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H302 H315 H318 H317 H400 H411	
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.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
39464-70-5		Poly(oxy-1,2-ethanediol)-phenyl-hydroxyphosphat	>=5 - <10 %
		oral: LD50 = > 2000 mg/kg	
2634-33-5	220-120-9	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one	>0,25 - <0,5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 670 mg/kg Skin Sens. 1; H317: >= 0,05 - 100 M acute; H400: M=10	
3811-73-2	223-296-5	Pyridine-2-thiol 1-oxide, sodium salt	>0,025-<0,25 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 1900 mg/kg; oral: LD50 = 1208 mg/kg	

Further Information

No information available.

SECTION 4: First aid measures

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4.1. Description of first aid measures

General information

Remove victim out of the danger area. If unconscious but breathing normally, place in recovery position and seek medical advice. 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 (CO₂).
- 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_x),
- Carbon dioxide (CO₂),
- Carbon monoxide,
-

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

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General advice

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.

6.3. Methods and material for containment and cleaning up

For containment

Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Absorb with liquid-binding material (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

Safe handling: see section 7
Personal protection equipment: see section 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.

Advice on general occupational hygiene

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.

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.

Hints on joint storage

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

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8.1. Control parameters

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 ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
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		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection:
Eye glasses with side protection
goggles

Hand protection

Tested protective gloves must be worn: EN ISO 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))
Wearing time with permanent contact 240 - 480 min (NBR (Nitrile rubber))
Observe the wear time limits as specified by the manufacturer.

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Skin protection

Wear protective gloves/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

Thermal hazards

No data available

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

Test method

Changes in the physical state

Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
Flash point:	> 100 °C DIN ISO 2592

Flammability

Solid/liquid:	No data available
Gas:	No data available

Explosive properties

not explosive according to EU A.14

Lower explosion limits:	No data available
Upper explosion limits:	No data available
Auto-ignition temperature:	No data available

Self-ignition temperature

Solid:	No data available
Gas:	No data available

Decomposition temperature: No data available

pH-Value (at 20 °C): 9 DIN 513

Viscosity / dynamic: No data available

Viscosity / kinematic: 22 mm²/s
(at 20 °C)

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Water solubility: miscible

Solubility in other solvents

No information available.

Vapour pressure: No data available

Density (at 15 °C): 1,095 g/cm³

Relative vapour density: No data available

9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate: No data available

Further 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 hazard classes as defined in Regulation (EC) No 1272/2008

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
39464-70-5	Poly(oxy-1,2-ethanediol)-phenyl-hydroxyphosphat				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2018)	OECD Guideline 423
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one				
	oral	LD50 670 mg/kg	Rat	Study report (1988)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1994)	OECD Guideline 402
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 dust/mist	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.

11.2. Information on other hazards

Endocrine disrupting properties

No data available

SECTION 12: Ecological information

12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
39464-70-5	Poly(oxy-1,2-ethanediol)-phenyl-hydroxyphosphat					
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Pseudokirchneriella subcapitata	REACH Registration Dossier OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna	REACH Registration Dossier OECD Guideline 202
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one					
	Acute fish toxicity	LC50 mg/l	ca. 16,7	96 h	Cyprinodon variegatus	REACH Registration Dossier other:
	Acute algae toxicity	ErC50 mg/l	0,15	72 h	Pseudokirchneriella subcapitata	Study report (1994) OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	2,94	48 h	Daphnia magna	Study report (1995) OECD Guideline 202
	Algae toxicity	NOEC mg/l	0,0403	72 d		
	Acute bacteria toxicity	(EC50 mg/l)	13	3 h	activated sludge of a predominantly domestic sewage	REACH Registration Dossier OECD Guideline 209
3811-73-2	Pyridine-2-thiol 1-oxide, sodium salt					
	Acute fish toxicity	LC50 mg/l	0,0073	96 h	Oncorhynchus mykiss	Study report (1988) EPA OPP 72-1
	Acute algae toxicity	ErC50 mg/l	0,22	72 h	Desmodesmus subspicatus	Study report (2002) OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	0,022	48 h	Daphnia magna	Study report (1976) EPA OPP 72-2
	Acute bacteria toxicity	(EC50 mg/l)	1,81	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

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
39464-70-5	Poly(oxy-1,2-ethanediol)-phenyl-hydroxyphosphat	ca. 0,72
2634-33-5	1,2-benzisothiazol-3(2H)-one, 1,2-benzisothiazolin-3-one	0,63
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	ca. 6,62	Lepomis macrochirus	REACH Registration D

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. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of. Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

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Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	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. Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,5,6,8,9,10,11,12,13.

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: Effectice concentration, 50 percent
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic

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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.

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