

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

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

1.1 Product identifier

Product name: Hempel's Antifouling Globic 7000

Product identity: 7835051110
Product type: antifouling paint

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

Field of application : ships and shipyards.

Identified uses: Industrial applications, Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details : HEMPEL A/S

Lundtoftegårdsvej 91 DK-2800 Kgs. Lyngby

Denmark

Tel.: + 45 45 93 38 00 hempel@hempel.com 21 November 2022 15 November 2021.

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226 FLAMMABLE LIQUIDS
Acute Tox. 4, H332 ACUTE TOXICITY (inhalation)
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION

Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION

Skin Sens. 1, H317
Carc. 2, H351
CARCINOGENICITY
Repr. 2, H361d
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

SKIN SENSITIZATION
CARCINOGENICITY
TOXIC TO REPRODUCTION
AQUATIC HAZARD (ACUTE)
AQUATIC HAZARD (LONG-TERM)

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Date of issue:

Date of previous issue:

Hazard pictograms:











1.4 Emergency telephone number

+45 45 93 38 00 (08.00 - 17.00)

See section 4 First aid measures.

Emergency telephone number (with hours of operation)

Signal word : Danger

Hazard statements : H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

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

H332 - Harmful if inhaled.

H351 - Suspected of causing cancer.

H361d - Suspected of damaging the unborn child. H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention: Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep

away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid

release to the environment.

Response: Collect spillage. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

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# **SECTION 2: Hazards identification**

Hazardous ingredients : popper (I) oxide

zineb (ISO) copper pyrithione 4-methylpentan-2-one

Supplemental label elements :

Special packaging requirements

Containers to be fitted with child-

Not applicable.

resistant fastenings:

Tactile warning of danger: Not applicable.

#### 2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result None known.

in classification:

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) N	lo. 1272/2008 [CLP]	Туре
propper (I) oxide	REACH #: 01-2119513794-36 EC: 215-270-7 CAS: 1317-39-1 Index: 029-002-00-X	≥25 - ≤31	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg ATE [Inhalation (dusts and mists)] = 3.34 mg/l M [Acute] = 100 M [Chronic] = 10	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 5000 ppm	[1] [2]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≥5 - ≤10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
zineb (ISO)	EC: 235-180-1 CAS: 12122-67-7 Index: 006-078-00-2	≥3 - ≤5	Flam. Sol. 1, H228 Skin Sens. 1, H317 Repr. 2, H361d STOT SE 3, H335 Aquatic Chronic 1, H410	M [Chronic] = 1	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥3 - ≤5	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
C10 aromatics hydrocarbons, <1% naphthalene	REACH #: 01-2119463583-34 EC: 265-198-5 CAS: 64742-94-5	≥1 - ≤3	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	-	[1] [2]
copper pyrithione	EC: 238-984-0 CAS: 14915-37-8	≥1 - ≤2	Acute Tox. 4, H302 Acute Tox. 2, H330 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 1075 mg/kg ATE [Inhalation (dusts and mists)] = 0.07 mg/l M [Acute] = 100 M [Chronic] = 100	[1]
4-methylpentan-2-one	REACH #: 01-2119473980-30 EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≥1 - ≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066	ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≤1.1	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	ATE [Oral] = 790 mg/kg	[1]
cupric oxide	EC: 215-269-1 CAS: 1317-38-0 Index: 029-016-00-6	≤1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 100 M [Chronic] = 10	[1]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤0.3	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336	-	[1] [2]

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# **Hempel's Antifouling Globic 7000**



# **SECTION 3: Composition/information on ingredients**

STOT RE 2, H373 Asp. Tox. 1, H304	
See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### Type

Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

#### **Active substances**

# Product/ingredient name (% by weight)

copper (I) oxide (28.2 w by weight) zineb (ISO) (3.8 w by weight) copper pyrithione (1.8 w by weight)

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth

to an unconscious person.

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate

treatment (first aid).

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15

minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms

persist, seek medical attention.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if

respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by

mouth. If unconscious, place in recovery position and get medical attention immediately.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use

recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm

and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so

that vomit will not re-enter the mouth and throat.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that

fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

# Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation: Harmful if inhaled.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

watering redness

Inhalation: Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

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#### **SECTION 4: First aid measures**

Ingestion: Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician: If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat

symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested

or inhaled.

Specific treatments: No specific treatment.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Extinguishing media: Recommended: alcohol resistant foam, CO<sub>2</sub>, powders, water spray.

Not to be used: waterjet.

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

Hazards from the substance or

mixture:

Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products: Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur

oxides metal oxide/oxides

#### 5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## **SECTION 6: Accidental release measures**

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

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

# 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

#### 6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

# 6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

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# SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

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

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

#### 7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

Specific end use(s): Antifouling products.

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

#### 8.1 Control parameters

Product/ingredient name	Exposure limit values
<b>M</b> ene €	EU OEL (Europe, 1/2022). [xylene, mixed isomers] Absorbed through skin.  TWA: 50 ppm 8 hours.  TWA: 221 mg/m³ 8 hours.  STEL: 100 ppm 15 minutes.  STEL: 442 mg/m³ 15 minutes.
ethylbenzene	EU OEL (Europe, 1/2022). Absorbed through skin.  STEL: 884 mg/m³ 15 minutes.  STEL: 200 ppm 15 minutes.  TWA: 442 mg/m³ 8 hours.  TWA: 100 ppm 8 hours.
C10 aromatics hydrocarbons, <1% naphthalene	EU OEL (Europe, 2000). TWA: 25 ppm 8 hours.
4-methylpentan-2-one	EU OEL (Europe, 1/2022).  TWA: 20 ppm 8 hours.  TWA: 83 mg/m³ 8 hours.  STEL: 50 ppm 15 minutes.  STEL: 208 mg/m³ 15 minutes.
toluene	EU OEL (Europe, 1/2022). Absorbed through skin. TWA: 192 mg/m³ 8 hours. TWA: 50 ppm 8 hours. STEL: 384 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes.

# Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### **Derived effect levels**

Not applicable.

# Predicted effect concentrations

Not applicable.

# 8.2 Exposure controls

Appropriate engineering controls

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

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

## Individual protection measures

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be

worn when soiling is so great that regular work clothes do not adequately protect skin against contact

with the product. Safety eyewear should be used when there is a likelihood of exposure.









Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking,

using lavatory, and at the end of day.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment

indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face

respirator may be required instead.

Hand protection: Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The

quality of the chemical-resistant protective gloves must be chosen as a function of the specific

workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the

appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton®

May be used: nitrile rubber

Short term exposure: neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl chloride (PVC)

Body protection: Personal protective equipment for the body should be selected based on the task being performed and

the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk

assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

# **Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Color : Brown.

Odor : Solvent-like

pH: Testing not relevant or not possible due to nature of the product.

Melting point/freezing point: Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range: Testing not relevant or not possible due to nature of the product.

Flash point : Closed cup: 24°C (75.2°F)

Evaporation rate: Testing not relevant or not possible due to nature of the product.

Flammability: Highly flammable in the presence of the following materials or conditions: open flames, sparks and

static discharge and heat.

Flammable in the presence of the following materials or conditions: oxidizing materials. Slightly flammable in the presence of the following materials or conditions: reducing materials.

ive 0.5 - 11.3 vol %

Lower and upper explosive (flammable) limits:

Vapor pressure: Testing not relevant or not possible due to nature of the product.

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# **SECTION 9: Physical and chemical properties**

Vapor density: Testing not relevant or not possible due to nature of the product.

Specific gravity: 1.731 g/cm<sup>3</sup>

Partition coefficient (LogKow): Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature: Lowest known value: 220 - 250°C (428 - 482°F) (C10 aromatics hydrocarbons, <1% naphthalene).

Decomposition temperature: Testing not relevant or not possible due to nature of the product.

Viscosity: Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

Explosive properties: Explosive in the presence of the following materials or conditions: open flames, sparks and static

discharge and heat.

Oxidizing properties: Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 22 % Water % by weight : Weighted average: 0 %

VOC content: 381.3 g/l

TOC Content: Weighted average: 335 g/l
Solvent Gas: Weighted average: 0.086 m³/l

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

The product is stable

#### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

#### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

## 10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials and reducing materials. Reactive or incompatible with the following materials: organic materials, acids, alkalis and moisture.

# 10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

# **SECTION 11: Toxicological information**

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

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

# **Acute toxicity**

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# **Hempel's Antifouling Globic 7000**



# **SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
popper (I) oxide	LC50 Inhalation Dusts and mists	Rat	3.34 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	1340 mg/kg	-
xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
•	LC50 Inhalation Vapor	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	>4200 mg/kg	-
	LD50 Oral	Rat	3523 mg/kg	-
zinc oxide	LC50 Inhalation Dusts and mists	Rat	>5.7 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
zineb (ISO)	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
, ,	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
•	LD50 Oral	Rat	3500 mg/kg	-
C10 aromatics hydrocarbons, <1% naphthalene	LD50 Oral	Rat	5000 mg/kg	-
copper pyrithione	LC50 Inhalation Dusts and mists	Rat	0.07 mg/l	4 hours
,	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	1075 mg/kg	-
4-methylpentan-2-one	LD Dermal	Rabbit	>3 g/kg	-
butan-1-ol	LC50 Inhalation Vapor	Rat	24000 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
toluene	LC50 Inhalation Vapor	Rat	>20 mg/l	4 hours
	LD50 Oral	Rat	636 mg/kg	-

# Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
Hempel's Antifouling Globic 7000	2258.1	10811.9	49144.9	352.5	3.9
copper (I) oxide	500				3.34
xylene	3523	1100	5000		
ethylbenzene	3500			11	
C10 aromatics hydrocarbons, <1% naphthalene	5000				
copper pyrithione	1075				0.07
4-methylpentan-2-one				11	
butan-1-ol	790	3400		24	

# Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
popper (I) oxide	Eyes - Irritant	Rabbit	-	-
xylene	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
	Skin - Irritant	Rabbit	_	-
	Skin - Moderate irritant	Rabbit	_	24 hours 500 milligrams
zinc oxide	Eyes - Mild irritant	Rabbit	_	24 hours 500 milligrams
	Skin - Mild irritant	Rabbit	_	24 hours 500 milligrams
ethylbenzene	Eyes - Mild irritant	Rabbit	_	-
•	Respiratory - Mild irritant	Rabbit	_	-
	Skin - Mild irritant	Rabbit	_	24 hours 15 milligrams
C10 aromatics hydrocarbons, <1% naphthalene	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters
copper pyrithione	Eyes - Severe irritant	Rabbit	-	-
4-methylpentan-2-one	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters
•	Skin - Mild irritant	Rabbit	_	24 hours 500 milligrams
butan-1-ol	Eyes - Severe irritant	Rabbit	_	24 hours 2 milligrams
	Skin - Moderate irritant	Rabbit	_	24 hours 20 milligrams
toluene	Eyes - Mild irritant	Rabbit	_	0.5 minutes 100 milligrams
	Skin - Moderate irritant	Rabbit	_	24 hours 20 milligrams

# **Mutagenic effects**

No known significant effects or critical hazards.

# Carcinogenicity

Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

# Reproductive toxicity

No known significant effects or critical hazards.

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# **SECTION 11: Toxicological information**

# **Teratogenic effects**

Suspected of damaging the unborn child.

# Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
zineb (ISO)	Category 3		Respiratory tract irritation
C10 aromatics hydrocarbons, <1% naphthalene	Category 3		Narcotic effects
4-methylpentan-2-one	Category 3		Narcotic effects
butan-1-ol	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects
toluene	Category 3		Narcotic effects

# Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
toluene	Category 2	-	-

# **Aspiration hazard**

Product/ingredient name	Result
ethylbenzene C10 aromatics hydrocarbons, <1% naphthalene toluene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

## Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

## Potential chronic health effects

Sensitization : Contains zineb (ISO). May produce an allergic reaction.

# 11.2 Information on other hazards

Endocrine disrupting properties : See Section 15 for details.

Other information : No additional known significant effects or critical hazards.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Do not allow to enter drains or watercourses. Very toxic to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
popper (I) oxide	Acute EC50 65 mg/l	Algae	96 hours
	Acute EC50 0.51 mg/l	Daphnia - Daphnia Magna	48 hours
	Acute LC50 0.0081 mg/l	Fish - Pimephales promelas	96 hours
zinc oxide	EC50 0.413 mg/l	Daphnia	48 hours
	LC50 0.1169 mg/l	Fish	96 hours
	Acute EC50 0.17 mg/l	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute EC50 1 mg/l	Daphnia - Pseudokirchneriella subcapitata - Exponential growth phase	48 hours
	Acute LC50 24600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Chronic EC50 0.136 mg/l	Algae	72 hours
zineb (ISO)	Acute EC50 0.036 mg/l	Algae	72 hours
	Acute LC50 970 - 1800 μg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 7200 - 10300 µg/l Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 0.05 mg/l Fresh water	Algae - Chlorella vulgaris	96 hours
ethylbenzene	Chronic NOEC <1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
copper pyrithione	Acute EC50 0.022 mg/l	Daphnia	48 hours
	Acute LC50 0.0043 mg/l	Fish	96 hours
4-methylpentan-2-one	Chronic NOEC 7800 - 39000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas - Embryo	33 days
butan-1-ol	Acute EC50 1328 mg/l	Daphnia	96 hours
	Acute LC50 1.376 mg/l	Fish	96 hours
toluene	Chronic NOEC <500000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days

# 12.2 Persistence and degradability

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# **Hempel's Antifouling Globic 7000**



# **SECTION 12: Ecological information**

Product/ingredient name	Test	Result	Dose	Inoculum
<b>M</b> ene	OECD 301F Ready	90 - 98 % - Readily - 28 days	-	-
	Biodegradability - Manometric			
	Respirometry Test			
	-	>60 % - Readily - 28 days	-	-
ethylbenzene	-	>70 % - Readily - 28 days	-	-
C10 aromatics hydrocarbons, <1%	OECD 301F Ready	49.56 % - Not readily - 28 days	-	-
naphthalene	Biodegradability - Manometric			
	Respirometry Test			
4-methylpentan-2-one	-	84 % - 14 days	100 mg/l	-
butan-1-ol	OECD 301D Ready	92 % - 20 days	-	-
	Biodegradability - Closed Bottle Test	-		
toluene	-	100 % - Readily - 14 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>M</b> ene	-	-	Readily
zinc oxide	-	-	Not readily
ethylbenzene	-	-	Readily
C10 aromatics hydrocarbons, <1%	-	-	Not readily
naphthalene			
4-methylpentan-2-one	-	-	Readily
butan-1-ol	-	-	Readily
toluene	-	-	Readily

## 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Mene	3.12	8.1 - 25.9	low
zinc oxide	2.2	60960	high
zineb (ISO)	1.3	-	low
ethylbenzene	3.6	-	low
C10 aromatics hydrocarbons, <1% naphthalene	2.8 - 6.5	99 - 5780	high
copper pyrithione	-	50	low
4-methylpentan-2-one	1.31	2	low
butan-1-ol	1	3.16	low
toluene	2.73	90	low

## 12.4 Mobility in soil

Soil/water partition coefficient No known data avaliable in our database.

(Koc):

Mobility: No known data avaliable in our database.

#### 12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB	
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.								

# 12.6 Endocrine disrupting properties

See Section 15 for details.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC): 08 01 11\*

#### **Packaging**

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# **Hempel's Antifouling Globic 7000**



# **SECTION 13: Disposal considerations**

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

# **SECTION 14: Transport information**

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN2929	TOXIC LIQUID FLAMMABLE, ORGANIC, N.O.S. (copper pyrithione, xylene)	, 6.1 3 <b>1</b>	II	Yes.	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.  Tunnel code (D/E)
IMDG Class	UN2929	TOXIC LIQUID FLAMMABLE, ORGANIC, N.O.S. (copper pyrithione, xylene). (copper (I) oxide)	, 3	II	Yes.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <b>Emergency schedules</b> F-E, S-D
IATA Class	UN2929	TOXIC LIQUID FLAMMABLE, ORGANIC, N.O.S. (copper pyrithione, xylene)	, 3	II	Yes.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

PG\* : Packing group

Env.\*: Environmental hazards

#### 14.6 Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

# 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

# **SECTION 15: Regulatory information**

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

#### **Annex XIV**

None of the components are listed.

# Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

# Other EU regulations

### Prior Informed Consent (PIC) (649/2012/EU)

Product/ingredient name	Annex	Status
zineb (ISO)	Annex I - Part 1	Listed

#### Seveso category This product is controlled under the Seveso III Directive.

# Seveso category

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b E1: Hazardous to the aquatic environment - Acute 1 or Chronic 1

# **Biocidal Products Regulations**

Restrictions on use. : Product is not intended for consumer use.

Directions for use and dose rate : Spray or Roller application or brushing

Dose: See separate Product Data Sheet, Application instructions or label.

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# **Hempel's Antifouling Globic 7000**



#### **SECTION 15: Regulatory information**

Additional information: (Product Type: 21 - Antifouling products) Liquid. Wear suitable protective clothing, gloves and eye/face

protection. In case of contact with eyes, rinse immediately with plenty of water. If swallowed, seek medical advice immediately and show this container or label. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety

data sheet.

# International regulations

# IMO Anti-fouling System Convention Compliant (AFS/CONF/26)

This product does not contain organotin compounds acting as biocides and complies with the International Convention on the Control of Harmful Anti-fouling Systems on Ships as adopted by IMO October 2001 (IMO document AFS/CONF/26)

Product type : antifouling paint

Manufacturer : Hempel A/S

Product name and/or code: Hempel's Antifouling Globic 7000

7835051110

Colour: Brown.

Note: This name is shown on the product container. All products in HEMPEL's containers carrying this name comply with the IMO

Convention (AFS/CONF/26).

Active ingredient(s): copper (I) oxide 1317-39-1

zineb (ISO) 12122-67-7 copper pyrithione 14915-37-8

#### 15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

# **SECTION 16: Other information**

Abbreviations and acronyms : ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

EUH statement = CLP-specific Hazard statement

RRN = REACH Registration Number DNEL = Derived No Effect Level

PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements : F225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor. H228 Flammable solid. H302 Harmful if swallowed.

H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.

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.

H330 Fatal if inhaled. H332 Harmful if inhaled.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS] : Acute Tox. 2 ACUTE TOXICITY - Category 2
Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Acute 1 AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1 AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2 AQUATIC HAZARD (LONG-TERM) - Category 2

Asp. Tox. 1 ASPIRATION HAZARD - Category 1 Carc. 2 CARCINOGENICITY - Category 2

Eye Dam. 1 SERIOUS EYE DAMAGE/ EYE İRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3
Flam. Sol. 1 FLAMMABLE SOLIDS - Category 1
Repr. 2 TOXIC TO REPRODUCTION - Category 2

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# **SECTION 16: Other information**

Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1 SKIN SENSITIZATION - Category 1

STOT RE 2 SPECIFIC TARGET ORGAN ŤOXICITY (REPEATED EXPOSURE) - Category 2 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

# Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
ACUTE TOXICITY (inhalation) SKIN CORROSION/IRRITATION SERIOUS EYE DAMAGE/ EYE IRRITATION SKIN SENSITIZATION CARCINOGENICITY	On basis of test data Calculation method
AQUATIC HAZARD (ACUTE)	Calculation method Calculation method

#### Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

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