





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

- **1.1 Product identifier**
- **Trade name:** OptiPhase HiSafe 3
- **Article number:** 1200.437
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
PerkinElmer Health Sciences B.V.
Rigaweg 22
9723 TH Groningen
The Netherlands
Phone: 0031 50 5445900
Fax: 0031 50 5445950
www.perkinelmer.com
- **Further information obtainable from:**
Quality Assurance, Environment, Safety & Health (QA/ESH)
SDS.Groningen@perkinelmer.com
- **1.4 Emergency telephone number:**
+31 50 5445971
CHEMTREC: +1 703-527-3887

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
 -  **GHS08 health hazard**
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
 -  **GHS05 corrosion**
Eye Dam. 1 H318 Causes serious eye damage.
 -  **GHS09 environment**
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.
 -  **GHS07**
Skin Irrit. 2 H315 Causes skin irritation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**



GHS05 GHS08 GHS09

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

Alkylphenol Polyglycoether
Diisopropyl naphthalene isomers
Alkoxy phosphate
2,2'-iminodiethanol

· **Hazard statements**

H315 Causes skin irritation.
H318 Causes serious eye damage.
H304 May be fatal if swallowed and enters airways.
H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:**

38640-62-9 | *Diisopropyl naphthalene isomers*

· **vPvB:**

38640-62-9 | *Diisopropyl naphthalene isomers*

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture: consisting of the following components.










· **Dangerous components:**

CAS: 38640-62-9 EINECS: 254-052-6	<i>Diisopropyl naphthalene isomers</i> PBT; vPvB ⚠ Asp. Tox. 1, H304 ⚠ Aquatic Chronic 1, H410	40-60%
CAS: 9016-45-9 NLP: 500-024-6	<i>Alkylphenol Polyglycoether</i> ⚠ Eye Dam. 1, H318 ⚠ Aquatic Chronic 2, H411 ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	10-20%
CAS: 112-34-5 EINECS: 203-961-6 Index number: 603-096-00-8	<i>2-(2-butoxyethoxy)ethanol</i> ⚠ Eye Irrit. 2, H319	10-20%

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CAS: 9016-45-9 NLP: 500-024-6	Alkylphenol Polyglycoether   	10-20%
CAS: 39464-70-5	Alkoxy phosphate  	2.5-10%
CAS: 111-42-2 EINECS: 203-868-0 Index number: 603-071-00-1	2,2'-iminodiethanol    	0-2.5%

· Non-dangerous components

CAS: 92-71-7 EINECS: 202-181-3	2,5-Diphenyloxazole (PPO)	0-2.5%
CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity	0-2.5%
CAS: 13280-61-0 EINECS: 236-285-5	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	0-2.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Foam
Fire-extinguishing powder
Carbon dioxide
- **5.2 Special hazards arising from the substance or mixture** Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear fully protective suit.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

· 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

112-34-5 2-(2-butoxyethoxy)ethanol

WEL	Short-term value: 101.2 mg/m ³ , 15 ppm
	Long-term value: 67.5 mg/m ³ , 10 ppm

- **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection: Protective work clothing**

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

· Form:	Fluid
· Colour:	Colourless
· Odour:	Characteristic

· **pH-value at 20 °C (68 °F):** 5.8

· **Change in condition**

Initial boiling point and boiling range: 290 °C (554 °F)

· **Flash point:** 152 °C (305.6 °F)

· **Ignition temperature:** 500 °C (932 °F)

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Density at 20 °C (68 °F):** 0.99 g/cm³ (8.26155 lbs/gal)

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

· **9.2 Other information**

No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

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- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Oral	LD50	2,935 mg/kg
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38640-62-9 Diisopropyl naphthalene isomers

Oral	LD50	4,000 mg/kg (Rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **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**
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

9016-45-9 Alkylphenol Polyglycoether

chronic NOEC/ECx	>1 mg/l (Alge)
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9016-45-9 Alkylphenol Polyglycoether

chronic NOEC/ECx	>1 mg/l (Alge)
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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**

- **PBT:**

38640-62-9	Diisopropyl naphthalene isomers
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- **vPvB:**

38640-62-9	Diisopropyl naphthalene isomers
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- **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** *Disposal must be made according to official regulations.*

SECTION 14: Transport information

- **14.1 UN-Number**
· **ADR, IMDG, IATA** UN3082
- **14.2 UN proper shipping name**
· **ADR** *3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether)*
· **IMDG** *ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether), MARINE POLLUTANT*
· **IATA** *ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether)*
- **14.3 Transport hazard class(es)**
- **ADR**

· **Class** *9 (M6) Miscellaneous dangerous substances and articles.*
· **Label** *9*
- **IMDG, IATA**

· **Class** *9 Miscellaneous dangerous substances and articles.*
· **Label** *9*
- **14.4 Packing group**
· **ADR, IMDG, IATA** *III*
- **14.5 Environmental hazards:** *Product contains environmentally hazardous substances: Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether*
- **Marine pollutant:** *Yes*
Symbol (fish and tree)
- **Special marking (ADR):** *Symbol (fish and tree)*

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· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Hazard identification number (Kemler code):	90
· EMS Number:	F-A,S-F
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	

· ADR	
· Tunnel restriction code	E
· UN "Model Regulation":	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether), 9, III

SECTION 15: Regulatory information

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

· **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**

9016-45-9	Alkylphenol Polyglycoether	Sunset date: 2021-01-04
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· **REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 46b, 55**

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
Wasser	0-2.5
NK	10-20

· **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

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

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS: Quality Assurance, Environment, Safety & Health (QA/ESH)**

· **Contact: SDS.Groningen@perkinelmer.com**

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· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - oral – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· * Data compared to the previous version altered.