

1 Identification

- **Product identifier**
- **Trade name:** *Emulsifier-Safe*
- **Article number:** 6013389, 6013381
- **Application of the substance / the mixture** *Laboratory chemicals*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
*Revvity Health Sciences B.V.
Rigaweg 22
9723 TH Groningen
The Netherlands
Phone: 0031 50 5445900
www.revvity.com*
- **Information department:**
*Quality Assurance, Environment, Safety & Health (QA/ESH)
SDS.Groningen@revvity.com*
- **Emergency telephone number:**
*+31 50 5445971
CHEMTREC (within U.S.A. and Canada) 1-800-424-9300
CHEMTREC (from outside U.S.A. and Canada) +1703-527-3887*

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



GHS05 Corrosion

Eye Damage 1 H318 Causes serious eye damage.



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irritation 2 H315 Causes skin irritation.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Trade name: Emulsifier-Safe

(Contd. of page 1)

Hazard pictograms



GHS05 GHS08 GHS09

Signal word Danger

Hazard-determining components of labeling:

benzene, C10-13-alkyl derivatives
Alkylphenol Polyglycoether

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
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.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture: consisting of the following components.

Dangerous components:

67774-74-7	benzene, C10-13-alkyl derivatives Aspiration Hazard 1, H304	60-80%
9016-45-9	Alkylphenol Polyglycoether Skin Irritation 2, H315; Eye Irritation 2A, H319	10-20%
9016-45-9	Alkylphenol Polyglycoether Eye Damage 1, H318 Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315	10-20%
78-40-0	Triethyl phosphate Acute Toxicity - Oral 4, H302; Eye Irritation 2A, H319	0-2.5%
12645-31-7	Phosphoric acid, 2-ethylhexyl ester Skin Corrosion 1B, H314	0-2.5%

Non-Dangerous components

7732-18-5	water, distilled, conductivity or of similar purity	0-2.5%
92-71-7	2,5-Diphenyloxazole (PPO)	0-2.5%

(Contd. on page 3)

Trade name: Emulsifier-Safe

(Contd. of page 2)

13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	0-2.5%
------------	--	--------

0-2.5%

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

4 First-aid measures

- **Description of first aid measures**
- **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.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Foam
Fire-extinguishing powder
Carbon dioxide
- **Special hazards arising from the substance or mixture** Carbon monoxide (CO)
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

78-40-0	Triethyl phosphate	23 mg/m ³
92-71-7	2,5-Diphenyloxazole (PPO)	2.5 mg/m ³
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	12 mg/m ³

· **PAC-2:**

78-40-0	Triethyl phosphate	250 mg/m ³
92-71-7	2,5-Diphenyloxazole (PPO)	27 mg/m ³

(Contd. on page 4)

Trade name: Emulsifier-Safe

(Contd. of page 3)

13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	130 mg/m ³
· PAC-3:		
78-40-0	Triethyl phosphate	320 mg/m ³
92-71-7	2,5-Diphenyloxazole (PPO)	160 mg/m ³
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	790 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **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.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

EN ISO 374-1/Type B

- **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.2 mm

Breakthrough time: > 120 minutes

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.

(Contd. on page 5)

Trade name: Emulsifier-Safe

(Contd. of page 4)

- **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

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Fluid
Color: Colorless
Odor: Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 285 °C (545 °F)

· **Flash point:** 150 °C (302 °F)

· **Auto igniting:** 400 °C (752 °F)

· **Ignition temperature:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20 °C (68 °F):** 0.925 g/cm³ (7.71913 lbs/gal)

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

· **Solvent content:**

VOC content: 1-3 %

· **Other information**

No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide

Trade name: Emulsifier-Safe

(Contd. of page 5)

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral	LD50	3,861 mg/kg
------	------	-------------

· Primary irritant effect:

· on the skin: Irritant to skin and mucous membranes.

· on the eye: Irritating effect.

· Sensitization: No sensitizing effects known.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:

9016-45-9 Alkylphenol Polyglycoether

chronic NOEC/ECx	>1 mg/l (Alge)
------------------	----------------

9016-45-9 Alkylphenol Polyglycoether

chronic NOEC/ECx	>1 mg/l (Alge)
------------------	----------------

· Persistence and degradability No further relevant information available.

· Behavior in environmental systems:

· Bioaccumulative potential No further relevant information available.

· Mobility in soil No further relevant information available.

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.



(Contd. on page 7)

Trade name: Emulsifier-Safe

(Contd. of page 6)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number · ADR, IMDG, IATA	UN3082
· UN proper shipping name · ADR · IMDG · IATA	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkylphenol Polyglycoether) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkylphenol Polyglycoether), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkylphenol Polyglycoether)
· Transport hazard class(es) · ADR	
	
· Class · Label	9 (M6) Miscellaneous dangerous substances and articles 9
· IMDG, IATA	
	
· Class · Label	9 Miscellaneous dangerous substances and articles 9
· Packing group · ADR, IMDG, IATA	III
· Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Product contains environmentally hazardous substances: Alkylphenol Polyglycoether Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number:	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

(Contd. on page 8)

Trade name: Emulsifier-Safe

(Contd. of page 7)

- **Remarks:** Special marking with the symbol (fish and tree).
- **UN "Model Regulation":** UN3082, Environmentally hazardous substances, liquid, n.o.s. (Alkylphenol Polyglycoether), 9, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

67774-74-7	benzene, C10-13-alkyl derivatives	ACTIVE
78-40-0	Triethyl phosphate	ACTIVE
7732-18-5	water, distilled, conductivity or of similar purity	ACTIVE
92-71-7	2,5-Diphenyloxazole (PPO)	ACTIVE
12645-31-7	Phosphoric acid, 2-ethylhexyl ester	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 9)

Printing date 11/28/2023

Reviewed on 11/28/2023

Trade name: Emulsifier-Safe

(Contd. of page 8)

· Hazard pictograms



GHS05 GHS08 GHS09

· Signal word *Danger*

· Hazard-determining components of labeling:

benzene, C10-13-alkyl derivatives
Alkylphenol Polyglycoether

· Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P273 Avoid release to the environment.
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.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

* 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.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.

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

· Contact: SDS.Groningen@revvity.com

· Date of preparation / last revision 11/28/2023

· 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 relatif au transport international 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
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)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent

(Contd. on page 10)

Printing date 11/28/2023

Reviewed on 11/28/2023

Trade name: Emulsifier-Safe

(Contd. of page 9)

LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Toxicity - Oral 4: Acute toxicity – Category 4
Skin Corrosion 1B: Skin corrosion/irritation – Category 1B
Skin Irritation 2: Skin corrosion/irritation – Category 2
Eye Damage 1: Serious eye damage/eye irritation – Category 1
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
Aspiration Hazard 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

*** Data compared to the previous version altered.**

US