



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 32 (replaces version 31)

Revision: 26.08.2021

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

1.1 Product identifier

Product name: **Reagent Acidifying SE Tablets**

Catalog number: 100735E

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

Application of the substance / the preparation: Reagent for water analysis

1.3 Details of the supplier of the safety data sheet

Supplier:

Vecom Marine B.V.
Mozartlaan 3
3144 NA Maassluis
The Netherlands

phone: + 31 (0)10 5930 210
Email: sales@vecom-marine.com

1.4 Emergency telephone number:

Dutch Poisons Information Center (NVIC): +31 (0)88 755 8000 (24 hour service)
Only for the purpose of informing medical personnel in case of acute intoxications.
See section 4 on first aid measures.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05

Signal word Danger

Hazard-determining components of labelling:

sodium bisulfate

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 32 (replaces version 31)

Revision: 26.08.2021

Product name: Reagent Acidifying SE Tablets

(Contd. of page 1)

H412 Harmful to aquatic life with long lasting effects.

• Precautionary statements

P280 Wear protective gloves / eye protection.

P273 Avoid release to the environment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P362 Take off contaminated clothing.

P302+P352 IF ON SKIN: Wash with plenty of water.

• **2.3 Other hazards** No further relevant information available.

• Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

• Determination of endocrine-disrupting properties

The product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

• 3.2 Mixtures

• **Description:** Mixture of organic and inorganic compounds

• Dangerous components:

CAS: 5329-14-6 EINECS: 226-218-8 Index No: 016-026-00-0 Reg.nr.: 01-2119846728-XXXX	sulfamic acid ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	40-50%
CAS: 7681-38-1 EINECS: 231-665-7 Index No: 016-046-00-X Reg.nr.: 01-2119552465-36-XXXX	sodium bisulfate ⚠ Eye Dam. 1, H318	20-30%

• **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** Instantly remove any clothing soiled by the product.

• **After inhalation** Supply fresh air and call for doctor for safety reasons.

• After skin contact

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

• After eye contact

Rinse opened eye for several minutes (at least 15 min) under running water.

Call a doctor immediately.

• After swallowing

Rinse out mouth and then drink 1-2 glasses of water.

Seek medical treatment.

• 4.2 Most important symptoms and effects, both acute and delayed:

burns

after swallowing of large amounts:

mucous membrane irritation

breathing difficulty

irritations

after absorption:

gastric or intestinal trouble

coughing

vomiting

fatigue

ataxia (impaired locomotor coordination)

drop in temperature

cramps

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 32 (replaces version 31)

Revision: 26.08.2021

Product name: Reagent Acidifying SE Tablets

(Contd. of page 2)

· 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** Use fire fighting measures that suit the environment.

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Nitrogen oxides (NO_x)Sulphur oxides (SO_x)

· 5.3 Advice for firefighters

· **Protective equipment:** Wear self-contained breathing apparatus.

· Additional information

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Advice for non-emergency personnel:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid causing dust.

· **Advice for emergency responders:** Protective equipment: see section 8

· 6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies.

Inform respective authorities in case product reaches water or sewage system.

· 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Collect mechanically.

Dispose of contaminated material as waste according to item 13.

· 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 information on disposal.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

· Advice on safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Hygiene measures:

Avoid contact with the skin.

Avoid contact with the eyes.

Take off immediately all contaminated clothing.

Wash hands during breaks and at the end of the work.

Do not eat, drink or smoke when using this product.

· 7.2 Conditions for safe storage, including any incompatibilities

· **Requirements to be met by storerooms and containers:** Store in cool location.

· Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

Store away from oxidising agents.

Store away from water.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 32 (replaces version 31)

Revision: 26.08.2021

Product name: Reagent Acidifying SE Tablets

(Contd. of page 3)

- Protect from the effects of light.
- Store under dry conditions.
- Protect from humidity and keep away from water.
- This product is hygroscopic.
- **Recommended storage temperature:** 20°C +/- 5°C

• **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

• 8.1 Control parameters

• **Components with limit values that require monitoring at the workplace:**

CAS: 9004-34-6 cellulose (20-30%)

WEL (Great Britain)	Short-term value: 20* mg/m ³ Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable
---------------------	---

• **Additional information:** The lists that were valid during the compilation were used as basis.

• 8.2 Exposure controls

- **Engineering measures:** See item 7.
- **Individual protection measures, such as personal protective equipment**
- **Eye/face protection**
Tightly sealed safety glasses.
use against the effects of fumes / dust
- **Hand protection** After use of gloves apply skin-cleaning agents and skin cosmetics.
- **Material of gloves**
nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.11 mm
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Other skin protection (body protection):** Protective work clothing.
- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
- **Recommended filter device for short term use:** Filter P2
- **Environmental exposure controls** No further relevant information available.

SECTION 9: Physical and chemical properties

• 9.1 Information on basic physical and chemical properties

• Physical state	Solid.
• Form:	Tablets
• Colour:	White
• Odour:	Odourless
• Odour threshold:	Not applicable.
• Melting point/Freezing point:	Not determined.
• Boiling point or initial boiling point and boiling range	Not determined.
• Flammability	Not determined.
• Explosive properties:	Product is not explosive.
• Lower and upper explosion limit	
• Lower:	Not applicable.
• Upper:	Not applicable.
• Flash point:	260°C (CAS: 9004-34-6 cellulose)
• Ignition temperature:	Not applicable (solid).
• Decomposition temperature:	Not determined.
• pH (37.9 g/l) at 20°C	1.3
• Kinematic viscosity	Not applicable (solid).
• Solubility	
• Water:	Partly soluble
• Partition coefficient n-octanol/water (log value)	Not applicable.
• Vapour pressure:	Not applicable.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 32 (replaces version 31)

Revision: 26.08.2021

Product name: Reagent Acidifying SE Tablets

(Contd. of page 4)

· Density and/or relative density	
· Density:	Not determined.
· Relative density:	Not determined.
· Relative gas density	Not applicable (solid).
· Particle characteristics	Not determined.
· 9.2 Other information	
· Information with regard to physical hazard classes	
· Corrosive to metals	Void
· Other safety characteristics	
· Oxidising properties:	none
· Additional information	
· Solids content:	100.0 %
· Solvent content:	
· Organic solvents:	0.0 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see section 10.3
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**
Aqueous solution reacts acidic.
Reacts with water.
Forms hydrogen in aqueous solution with metals
Aqueous solution reacts with metals.
Liberates acid in contact with water or alcohol.
Reacts with acids, alkalis and oxidizing agents
Reacts with halogenated compounds
Hydrogen is formed in the presence of aluminum or zinc.
Reacts with strong alkalis and oxidizing agents.
Violent reactions possible with:
nitrates
chlorine
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
metals
alcohols
alkalis
- **10.6 Hazardous decomposition products:** see section 5

* 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.
- **LD/LC50 values that are relevant for classification:** The following statements refer to the individual components.
- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
Risk of corneal clouding.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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 (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 32 (replaces version 31)

Revision: 26.08.2021

Product name: Reagent Acidifying SE Tablets

(Contd. of page 5)

- **Additional toxicological information:** Other dangerous properties can not be excluded.
- **11.2 Information on other hazards**

· Endocrine disrupting properties
None of the ingredients is listed.


* SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Bacterial toxicity:** sulphates toxic > 2.5 g/l
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** Quantitative data on the ecological effect of this product are not 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**
This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
Avoid transfer into the environment.
Forms corrosive mixtures with water even if diluted.
Harmful effect due to pH shift.
- **Water hazard:**
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- | |
|---|
| · European waste catalogue |
| 16 05 06 laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals |
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.
 - **Recommended cleaning agent:** Water, if necessary with cleaning agent.

* SECTION 14: Transport information

- | | |
|---|------------------------------|
| · 14.1 UN number or ID number | UN2967 |
| · ADR, IMDG, IATA | |
| · 14.2 UN proper shipping name | 2967 SULPHAMIC ACID, mixture |
| · ADR | SULPHAMIC ACID mixture |
| · IMDG, IATA | |
| · 14.3 Transport hazard class(es) | |
| · ADR | |
|  | |
| · Class | 8 (C2) Corrosive substances. |

(Contd. on page 7)

— GB —

Safety data sheet

according to 1907/2006/EC, Article 31


Printing date 26.08.2021

Version number 32 (replaces version 31)

Revision: 26.08.2021

Product name: Reagent Acidifying SE Tablets

(Contd. of page 6)

· Label	8
· IMDG, IATA	
	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	
· Kemler Number:	Warning: Corrosive substances. 80
· EMS Number:	F-A,S-B
· Segregation groups	Acids
· Stowage Category	A
· 14.7 Maritime transport in bulk according to IMO instruments	
	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Transport category	3
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

* SECTION 15: Regulatory information

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

· Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:

None of the ingredients is listed.

· LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

· Substances of very high concern (SVHC) according to REACH, Article 57

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

· Information about limitation of use: Not required.

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

* SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Training hints Provide adequate information, instruction and training for operators.

· Relevant phrases

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 32 (replaces version 31)

Revision: 26.08.2021

Product name: Reagent Acidifying SE Tablets

(Contd. of page 7)

H412 Harmful to aquatic life with long lasting effects.

- **Abbreviations and acronyms:**

EC50: effective concentration, 50 percent (in vivo)

STOT: specific target organ toxicity

SE: single exposure

RE: repeated exposure

EC50: half maximal effective concentration

IC50: half maximal inhibitory concentration

NOEL or NOEC: No Observed Effect Level or Concentration

ADR: Accord relatif au transport international 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

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

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

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

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

- **Sources**

Data arise from safety data sheets, reference works and literature.

IUCLID (International Uniform Chemical Information Database)

GESTIS- Stoffdatenbank (Substance Database, Germany)

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



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

Revision: 26.08.2021

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

1.1 Product identifier

Product name: **Reagent Permanganate Value Tablets**

Catalog number: 100734E

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

Application of the substance / the preparation: Reagent for water analysis

1.3 Details of the supplier of the safety data sheet

Supplier:

Vecom Marine B.V.
Mozartlaan 3
3144 NA Maassluis
The Netherlands

phone: + 31 (0)10 5930 210
Email: sales@vecom-marine.com

1.4 Emergency telephone number:

Dutch Poisons Information Center (NVIC): +31 (0)88 755 8000 (24 hour service)
Only for the purpose of informing medical personnel in case of acute intoxications.
See section 4 on first aid measures.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS09 environment

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



GHS07

Skin Irrit. 2

H315 Causes skin irritation.

Eye Irrit. 2

H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07



GHS09

Signal word Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

Revision: 26.08.2021

Product name: Reagent Permanganate Value Tablets

(Contd. of page 1)

· Precautionary statements

- P280 Wear protective gloves / eye protection.
 P273 Avoid release to the environment.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P302+P352 IF ON SKIN: Wash with plenty of water.

· 2.3 Other hazards No further relevant information available.

· Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

· Determination of endocrine-disrupting properties

The product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of organic and inorganic compounds

· Dangerous components:

CAS: 7722-64-7	potassium permanganate	1-≤2.5%
EINECS: 231-760-3	⚠ Ox. Sol. 2, H272; ⚠ Repr. 2, H361d; STOT RE 2, H373; ⚠ Skin Corr. 1C, H314;	
Index No: 025-002-00-9	⚠ Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); ⚠ Acute Tox. 4, H302	

· 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** Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes (at least 15 min) under running water. Then consult doctor.
- **After swallowing**
Rinse out mouth and then drink 1-2 glasses of water.
In case of persistent symptoms consult doctor.

· 4.2 Most important symptoms and effects, both acute and delayed:

- after swallowing of large amounts:
 sickness
 vomiting
 cardiovascular disorders

· **Danger** Danger of disturbed cardiac rhythm.

· 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 Use fire fighting measures that suit the environment.

· 5.2 Special hazards arising from the substance or mixture

- The product is not combustible.
 Formation of toxic gases is possible during heating or in case of fire.
 Can be released in case of fire:

Hydrogen chloride (HCl)
 Dipotassium oxide

· 5.3 Advice for firefighters

· Protective equipment:

- Wear self-contained breathing apparatus.
 Wear full protective suit.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

Revision: 26.08.2021

Product name: Reagent Permanganate Value Tablets

(Contd. of page 2)

· Additional information

Collect contaminated fire fighting water separately. It must not enter drains.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Ambient fire may liberate hazardous vapours.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

· Advice for non-emergency personnel:

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

· Advice for emergency responders: Protective equipment: see section 8

· 6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies.
Inform respective authorities in case product reaches water or sewage system.

· 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.
Collect mechanically.
Dispose of contaminated material as waste according to item 13.

· 6.4 Reference to other sections

See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

· Advice on safe handling: No special precautions necessary if used correctly.

· Hygiene measures:

Take off immediately all contaminated clothing.
Wash hands during breaks and at the end of the work.
Do not eat, drink or smoke when using this product.

· 7.2 Conditions for safe storage, including any incompatibilities

· Requirements to be met by storerooms and containers: Store in cool location.

· Information about storage in one common storage facility: Store away from oxidising agents.

· Further information about storage conditions:

Protect from heat and direct sunlight.
Protect from the effects of light.
Store under dry conditions.
Protect from humidity and keep away from water.

· Recommended storage temperature: 20°C +/- 5°C

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Components with limit values that require monitoring at the workplace:

CAS: 9004-34-6 cellulose

WEL (Great Britain)	Short-term value: 20* mg/m ³ Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable
---------------------	---

CAS: 7722-64-7 potassium permanganate

WEL (Great Britain)	Long-term value: 0.2* 0.05** mg/m ³ as Mn *inhalable fraction **respirable fraction
IOELV (European Union)	Long-term value: 0.2* 0.05** mg/m ³ as Mn; *inhalable, **respirable fraction

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

Revision: 26.08.2021

Product name: Reagent Permanganate Value Tablets

(Contd. of page 3)

Regulatory information

WEL (Great Britain): EH40/2018
IOELV (European Union): (EU) 2017/164

Recommended monitoring procedures:

Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.

Additional information: The lists that were valid during the compilation were used as basis.

8.2 Exposure controls

Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.

Individual protection measures, such as personal protective equipment

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.

Eye/face protection Safety glasses

Hand protection

Protective gloves.
Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves

nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.11 mm

Penetration time of glove material

Value for the permeation: Level = 1 (< 10 min)
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Other skin protection (body protection): Protective work clothing.

Breathing equipment: Use breathing protection against the effects of fumes/dust/aerosol.

Recommended filter device for short term use: Filter P1

Environmental exposure controls Do not allow product to reach sewage system or water bodies.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Solid.
Form:	Tablets
Colour:	Violet
Odour:	Odourless
Odour threshold:	Not applicable.
Melting point/Freezing point:	Not determined.
Boiling point or initial boiling point and boiling range	Not determined.
Flammability	The product is not combustible.
Explosive properties:	Product is not explosive.
Lower and upper explosion limit	
Lower:	Not applicable.
Upper:	Not applicable.
Flash point:	Not applicable.
Ignition temperature:	Not applicable (solid).
Decomposition temperature:	Not determined.
pH (11.3 g/l) at 20°C	9
Kinematic viscosity	Not applicable (solid).
Solubility	
Water:	Soluble
Partition coefficient n-octanol/water (log value)	Not applicable (mixture).
Vapour pressure:	Not applicable.
Density and/or relative density	
Density at 20°C:	~ 2 g/cm ³
Relative density:	Not determined.
Relative gas density	Not applicable (solid).
Particle characteristics	Not determined.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

Revision: 26.08.2021

Product name: Reagent Permanganate Value Tablets

(Contd. of page 4)

· 9.2 Other information

- | | |
|---|---------|
| · Information with regard to physical hazard classes | |
| · Corrosive to metals | Void |
| · Other safety characteristics | |
| · Oxidising properties: | none |
| · Additional information | |
| · Solids content: | 100.0 % |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see section 10.3
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**
 Reacts with acids
 Reacts with oxidizing agents
 --> forms heat
 Reacts with ammonia (NH₃).
- **10.4 Conditions to avoid** Strong heating (decomposition)
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** see section 5

* 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.
- **LD/LC50 values that are relevant for classification:**
 The following statements refer to the individual components.

CAS: 7722-64-7 potassium permanganate

Oral	LD50	750 mg/kg (rat) (RTECS)
	LDLo	100 mg/kg (human) (IUCRID)
Dermal	LD50.	>2000 mg/kg (rat) (OECD 402) (ECHA; No death of animals at this concentration, limit test)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation**
 Causes serious eye irritation.
 Risk of corneal clouding.

· Information on components:

CAS: 7722-64-7 potassium permanganate

Irritation of skin	OECD 404	(rabbit: burns) Merck: Burns after prolonged exposure.
--------------------	----------	---

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· Information on components:

CAS: 7722-64-7 potassium permanganate

Sensitisation	OECD 406	(guinea pig: negative)
---------------	----------	------------------------

- **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.

· Information on components:

CAS: 7722-64-7 potassium permanganate

OECD 471	(negative) (Bacterial Reverse Mutation Test - Ames test) (Escherichia col i/ Salmonella typhimurium)
----------	---

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

Revision: 26.08.2021

Product name: Reagent Permanganate Value Tablets

(Contd. of page 5)

OECD 476	(negative) (In Vitro Mammalian Cell Gene Mutation Test)
OECD 474	(negative) (Mammalian Erythrocyte Micronucleus Test) (Merck: rat, male and female, oral, bone marrow)

- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -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
None of the ingredients is listed.

* SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:
CAS: 7722-64-7 potassium permanganate
EC50 0.056 mg/l/48h (Daphnia magna) (ECOTOX)
EC50 0.41 mg/l/72 h (Algal toxicity) (ECOTOX)
LC50 0.1 mg/l/96h (fish) (Ictalurus catus / ECOTOX)

· **Other information:**

The following applies to manganese ions: toxic to water organisms.
In flowing waters, depending on the mixture, moderate to high toxic effect.

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential**
Pow = n-octanol/wasser partition coefficient
log Pow < 1 = Does not accumulate in organisms.

CAS: 7722-64-7 potassium permanganate
log Pow -1.73 (.) (calculated) (Merck)

- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects** Avoid transfer into the environment.
- **Water hazard:**
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into soil.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to disposers of hazardous waste.

· European waste catalogue
16 05 06* laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals

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

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

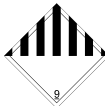



Revision: 26.08.2021

Product name: Reagent Permanganate Value Tablets

(Contd. of page 6)

 · **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN number or ID number · ADR, IMDG, IATA 	UN3077
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA 	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (POTASSIUM PERMANGANATE) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (POTASSIUM PERMANGANATE), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (POTASSIUM PERMANGANATE)
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR 	<div style="display: flex; align-items: center;">   </div> <ul style="list-style-type: none"> · Class · Label
<ul style="list-style-type: none"> · IMDG, IATA 	<div style="display: flex; align-items: center;">   </div> <ul style="list-style-type: none"> · Class · Label
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA): 	Product contains environmentally hazardous substances: potassium permanganate Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Kemler Number: · EMS Number: · Segregation groups · Stowage Category · Stowage Code 	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F Permanganates A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
<ul style="list-style-type: none"> · 14.7 Maritime transport in bulk according to IMO instruments 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code 	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g 3 E

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

Revision: 26.08.2021

Product name: Reagent Permanganate Value Tablets

(Contd. of page 7)

<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
--	--

SECTION 15: Regulatory information

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

· Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)

None of the ingredients is listed.

· Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:

None of the ingredients is listed.

· REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)

None of the ingredients is listed.

· Directive 2012/18/EU (SEVESO III):

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

· LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

None of the ingredients is listed.

· Substances of very high concern (SVHC) according to REACH, Article 57

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

· Information about limitation of use: Not required.

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

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Training hints Provide adequate information, instruction and training for operators.

· Relevant phrases

- H272 May intensify fire; oxidiser.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- 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.

· Abbreviations and acronyms:

OECD: Organisation for Economic Co-operation and Development
 STOT: specific target organ toxicity
 SE: single exposure
 RE: repeated exposure
 EC50: half maximal effective concentration
 IC50: half maximal inhibitory concentration
 NOEL or NOEC: No Observed Effect Level or Concentration
 ADR: Accord relatif au transport international 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
 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

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 23 (replaces version 22)

Revision: 26.08.2021

Product name: Reagent Permanganate Value Tablets

(Contd. of page 8)

SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Ox. Sol. 2: Oxidizing solids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Skin Irrit. 2: Skin corrosion/irritation – Category 2
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
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic 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

· **Sources** Data arise from safety data sheets, reference works and literature.

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

— GB —



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 22 (replaces version 21)

Revision: 26.08.2021

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

· 1.1 Product identifier

· Product name: **Reagent Universal pH Tablets**

· Catalog number: 100703

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

· Application of the substance / the preparation: Reagent for water analysis

· 1.3 Details of the supplier of the safety data sheet

· Supplier:

Vecom Marine B.V.
Mozartlaan 3
3144 NA Maassluis
The Netherlands

phone: + 31 (0)10 5930 210
Email: sales@vecom-marine.com

· 1.4 Emergency telephone number:

Dutch Poisons Information Center (NVIC): +31 (0)88 755 8000 (24 hour service)
Only for the purpose of informing medical personnel in case of acute intoxications.
See section 4 on first aid measures.

* SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

The product is not classified as hazardous according to the CLP regulation.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008 Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

· 2.3 Other hazards No further relevant information available.

· Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

· Determination of endocrine-disrupting properties

The product does not contain substances with endocrine disrupting properties.

* SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of organic and inorganic compounds

· Dangerous components: Void

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information Instantly remove any clothing soiled by the product.

· After inhalation Supply fresh air.

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 22 (replaces version 21)

Revision: 26.08.2021

Product name: Reagent Universal pH Tablets

(Contd. of page 1)

- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact**
Rinse opened eye for several minutes under running water (at least 15 min). If symptoms persist, consult doctor.
- **After swallowing**
Rinse out mouth and then drink 1-2 glasses of water.
In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed:**
after swallowing of large amounts:
sickness
vomiting
cardiovascular disorders
- **Danger** Danger of disturbed cardiac rhythm.
- **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** Use fire fighting measures that suit the environment.
- **5.2 Special hazards arising from the substance or mixture**
The product is not combustible.
Formation of toxic gases is possible during heating or in case of fire.
Can be released in case of fire:
Hydrogen chloride (HCl)
Dipotassium oxide
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained breathing apparatus.
Wear full protective suit.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter drains.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Ambient fire may liberate hazardous vapours.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
- **Advice for non-emergency personnel:** No special measures required.
- **Advice for emergency responders:** Protective equipment: see section 8
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Collect mechanically.
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
- **Advice on safe handling:** No special precautions necessary if used correctly.
- **Hygiene measures:**
The usual precautionary measures should be adhered to general rules for handling chemicals.
Do not eat, drink or smoke when using this product.
Wash hands during breaks and at the end of the work.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and containers:** Store in cool location.
- **Information about storage in one common storage facility:** Store away from oxidising agents.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 22 (replaces version 21)

Revision: 26.08.2021

Product name: Reagent Universal pH Tablets

(Contd. of page 2)

- **Further information about storage conditions:**
 - Protect from heat and direct sunlight.
 - Protect from the effects of light.
 - Store under dry conditions.
 - Protect from humidity and keep away from water.
- **Recommended storage temperature:** 20°C +/- 5°C
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

CAS: 9004-34-6 cellulose

WEL (Great Britain)	Short-term value: 20* mg/m ³ Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable
---------------------	---

- **Regulatory information** WEL (Great Britain): EH40/2011
- **DNELs** Derived No Effect Level (DNEL)
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Engineering measures:**
 - Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.
- **Individual protection measures, such as personal protective equipment**
 - Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.
- **Eye/face protection**
 - Safety glasses
 - use against the effects of fumes / dust
- **Hand protection** After use of gloves apply skin-cleaning agents and skin cosmetics.
- **Material of gloves**
 - nitrile rubber, NBR
 - Recommended thickness of the material: ≥ 0.11 mm
- **Penetration time of glove material**
 - Value for the permeation: Level = 1 (< 10 min)
 - The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Other skin protection (body protection):** Protective work clothing.
- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
- **Recommended filter device for short term use:** Filter P1
- **Environmental exposure controls** Do not allow product to reach sewage system or water bodies.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- **Physical state** Solid.
- **Form:** Tablets
- **Colour:** Brown
- **Odour:** Odourless
- **Odour threshold:** Not applicable.
- **Melting point/Freezing point:** Not determined.
- **Boiling point or initial boiling point and boiling range** Not determined.
- **Flammability** The product is not combustible.
- **Explosive properties:** Product is not explosive.
- **Lower and upper explosion limit**
- **Lower:** Not applicable.
- **Upper:** Not applicable.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 22 (replaces version 21)

Revision: 26.08.2021

Product name: Reagent Universal pH Tablets

(Contd. of page 3)

· Flash point:	Not applicable.
· Ignition temperature:	Not applicable (solid).
· Decomposition temperature:	Not determined.
· pH at 20°C	5.6
· Kinematic viscosity	Not applicable (solid).
· Solubility	
· Water:	Soluble
· Partition coefficient n-octanol/water (log value)	Not applicable (mixture).
· Vapour pressure:	Not applicable (solid).
· Density and/or relative density	
· Density:	Not determined.
· Relative density:	Not determined.
· Relative gas density	Not applicable (solid).
· Particle characteristics	Not determined.
· 9.2 Other information	
· Information with regard to physical hazard classes	
· Corrosive to metals	Void
· Other safety characteristics	
· Oxidising properties:	none
· Additional information	
· Solids content:	100 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see section 10.3
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**
Reacts with acids
Reacts with oxidizing agents
--> forms heat
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** see section 5

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.
- **LD/LC50 values that are relevant for classification:** The following statements refer to the individual components.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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 (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

(Contd. on page 5)

— GB —

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 22 (replaces version 21)

Revision: 26.08.2021

Product name: Reagent Universal pH Tablets

(Contd. of page 4)

· 11.2 Information on other hazards
· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information
· 12.1 Toxicity
· Aquatic toxicity: No further relevant information available.

· 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

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

· 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects Avoid transfer into the environment.

· Water hazard:

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 13: Disposal considerations
· 13.1 Waste treatment methods
· Recommendation

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

Disposal must be made according to official regulations.

· European waste catalogue

16 05 09 | discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

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

· Recommended cleaning agent: Water, if necessary with cleaning agent.

SECTION 14: Transport information
· 14.1 UN number or ID number
· ADR, IMDG, IATA Void

· 14.2 UN proper shipping name
· ADR, IMDG, IATA Void

· 14.3 Transport hazard class(es)
· ADR, IMDG, IATA
· Class Void

· 14.4 Packing group
· ADR, IMDG, IATA Void

· 14.5 Environmental hazards:

Not applicable.

· 14.6 Special precautions for user

Not applicable.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· Transport/Additional information:

Not dangerous according to the above specifications.

 — GB —
 (Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.08.2021

Version number 22 (replaces version 21)

Revision: 26.08.2021

Product name: Reagent Universal pH Tablets

(Contd. of page 5)

SECTION 15: Regulatory information

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

· Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)

None of the ingredients is listed.

· Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:

None of the ingredients is listed.

· REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)

None of the ingredients is listed.

· Directive 2012/18/EU (SEVESO III):

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

None of the ingredients is listed.

· Substances of very high concern (SVHC) according to REACH, Article 57

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

· **Information about limitation of use:** Not required.

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

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Training hints** Provide adequate information, instruction and training for operators.

· Abbreviations and acronyms:

STOT: specific target organ toxicity

SE: single exposure

RE: repeated exposure

EC50: half maximal effective concentration

IC50: half maximal inhibitory concentration

NOEL or NOEC: No Observed Effect Level or Concentration

ADR: Accord relatif au transport international 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

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)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

· **Sources** Data arise from safety data sheets, reference works and literature.

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