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• Trade name: <u>Certified W</u>	aste Water Cyanide C	
Article number: CWW-C	V-C	
• Details of the supplier of • Manufacturer/Supplier: High-Purity Standards 7221 Investment Drive, N Telephone: +1-843-767-7 Fax: +1-843-767-7906 highpuritystandards.com Email: info@highpurityst	orth Charleston, SC 29418 United States 900	
• Emergency telephone nu INFOTRAC Emergency telephone num		
2 Hazard(s) identificat	ion	

GHS07

Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation.

· Label elements

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



Signal word Warning
Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
Precautionary statements
Wash thoroughly after handling.
Wear protective gloves / eye protection / face protection.
If on skin: Wash with plenty of water.
Specific treatment (see on this label).

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(Contd. of page 1) If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention.

*Take off contaminated clothing and wash it before reuse. If eye irritation persists: Get medical advice/attention.* 

- · Classification system:
- · NFPA ratings (scale 0 4)



· HMIS-ratings (scale 0 - 4)

HEALTH2Health = 2FIRE0Fire = 0REACTIVITY0Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.

## 3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous	components:	
1310-58-3	potassium hydroxide	0.5%
· Chemical i	dentification of the substance/preparation	
7732-18-5	water, distilled, conductivity or of similar purity	99.48%
143-33-9	sodium cyanide	0.02%

## 4 First-aid measures

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · 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: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

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• *Indication of any immediate medical attention and special treatment needed No further relevant information available.* 

### 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: No special measures required.
- 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:	
1310-58-3 potassium hydroxide	0.18 mg/m <sup>3</sup>
143-33-9 sodium cyanide	$4.0 \ mg/m^3$
· PAC-2:	
1310-58-3 potassium hydroxide	$2 mg/m^3$
143-33-9 sodium cyanide	14 mg/m <sup>3</sup>
· PAC-3:	
1310-58-3 potassium hydroxide	$54 mg/m^3$
143-33-9 sodium cyanide	30 mg/m <sup>3</sup>

## 7 Handling and storage

· Handling:

- Precautions for safe handling No special precautions are necessary if used correctly.
- · 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: No special requirements.
- · Information about storage in one common storage facility: Not required.

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• 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 item 7.

· Control parameters

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

1310-58-3 potassium hydroxide

*REL Ceiling limit value: 2 mg/m<sup>3</sup>* 

TLV Ceiling limit value: 2 mg/m<sup>3</sup>

- 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 eves and skin.
- · Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

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

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• Eye protection:

Tightly sealed goggles

# 9 Physical and chemical properties

Information on basic physical and c General Information	nemieu properues	
Appearance:		
Form:	Liquid	
Color:	According to product specification	
Odor:	Characteristic	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wate	<b>r):</b> Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	

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Solvent content: Water: VOC content:	99.5 % 0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.5 %	
• 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: No dangerous decomposition products known.

## **11** Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

1310-58-3 potassium hydroxide

Oral LD50 273 mg/kg (rat)

- · 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.

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# Safety Data Sheet acc. to OSHA HCS

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## **12 Ecological information**

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · 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.
- Additional ecological information:
- · General notes: Not hazardous for water.
- · 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.

· Uncleaned packagings:

• Recommendation: Disposal must be made according to official regulations.

UN-Number		
DOT, ADR, IMDG, IATA	UN1814	
UN proper shipping name		
DOT	Potassium hydroxide, solution	
ADR	1814 POTASSIUM HYDROXIDE SOLUTION	
IMDG, IATA	POTASSIUM HYDROXIDE SOLUTION	



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Transport hazard class(es)		
DOT		
CORROSIVE		
Class	8 Corrosive substances	
Label	8	
ADR		
A CONTRACT OF A		
Class	8 (C5) Corrosive substances	
Label	8	
Class	8 Corrosive substances	
Label	8	
Packing group DOT, ADR, IMDG, IATA	III	
Environmental hazards:	Not applicable.	
Special precautions for user Hazard identification number (Kemler code): EMS Number:	Warning: Corrosive substances 80 F-A,S-B	
Segregation groups	Alkalis	
Stowage Category	A	
Segregation Code	SG35 Stow "separated from" SGG1-acids	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.	
Transport/Additional information:		
DOT		
Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L	
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· ADR · Excepted quantities (EQ)	Code: El
(= <u>_</u> )	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
·IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: El
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, 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):

143-33-9 sodium cyanide

· Section 313 (Specific toxic chemical listings):

143-33-9 sodium cyanide

• TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

143-33-9 sodium cyanide

· 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:

143-33-9 sodium cyanide

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

143-33-9 sodium cyanide

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• TLV (Threshold Limit Value)

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). • *Hazard pictograms* 



· Signal word Warning

• Hazard statements

H315 Causes skin irritation. H319 Causes serious eye irritation.

Precautionary statements

Wash thoroughly after handling.
Wear protective gloves / eye protection / face protection.
If on skin: Wash with plenty of water.
Specific treatment (see on this label).
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
If eye irritation persists: Get medical advice/attention.
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.

· Department issuing SDS: Environment protection department.

· Contact:

High-Purity Standards Tel: 843-767-7900 Fax: 843-767-7906

· Date of preparation / last revision 06/01/2022 / -

Abbreviations and acronyms:

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

DOT: US Department of Transportation 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)

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NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent DD50: 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 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A (Contd. of page 10)

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