Printing date 05/29/2024 Reviewed on 05/28/2024

1 Identification

· Product identifier

· Trade name: Resorcinol, Laboratory Grade Crystal

· Article number: S76796

• CAS Number: 108-46-3 • EC number: 203-585-2

• Index number: 604-010-00-1

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson shermann@aquasolutions.org

Technical Coordinator

Sherman Nelson shermann@aquasolutions.org

Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666



2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Specific Target Organ Toxicity - Single Exposure 2 H371 May cause damage to organs.



GHS05 Corrosion

Eye Damage 1 H318 Causes serious eye damage.



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed. Skin Irritation 2 H315 Causes skin irritation.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

· Label elements

· GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). (Contd. on page 2)

– US

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Safety Data Sheet acc. to OSHA HCS

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· Hazard pictograms







- · Signal word Danger
- · Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye damage.

May cause an allergic skin reaction.

May cause damage to organs.

· Precautionary statements

Wash thoroughly after handling.

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

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Rinse mouth.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing.

Collect spillage.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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



Health = 3Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *3Fire = 1

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

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

CAS: 108-46-3 Resorcinol, Laboratory Grade, Crystal

(Contd. on page 3)

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Trade name: Resorcinol, Laboratory Grade Crystal

(Contd. of page 2)

· Identification number(s) · EC number: 203-585-2 · Index number: 604-010-00-1

4 First-aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

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. Then consult a doctor.
- · After swallowing: Immediately call a doctor.
- · 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: 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

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Use neutralizing agent.

Dispose contaminated material as waste according to section 13.

· 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: 20 ppm
- · PAC-2: 28 ppm
- · PAC-3: 170 ppm

7 Handling and storage

- · Handling:
- · Precautions for safe handling Thorough dedusting.

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- · 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.
- · 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:

CAS: 108-46-3 Resorcinol, Laboratory Grade, Crystal

REL Short-term value: 90 mg/m³, 20 ppm Long-term value: 45 mg/m³, 10 ppm

TLV Short-term value: 20 ppm Long-term value: 10 ppm

A4

- · 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 skin.

Avoid contact with the eyes 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.

· 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

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· **Body protection:** Protective work clothing

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Physical and chemical propert	
Information on basic physical and ch	nemical properties
General Information	
Appearance: Form:	Cali J
rorm: Color:	Solid White
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value:	20
Change in condition	
Melting point/Melting range:	109-112 °C (228.2-233.6 °F)
Boiling point/Boiling range:	178 °C (352.4 °F)
Flash point:	127 °C (260.6 °F)
Flammability (solid, gaseous):	Product is not flammable.
Auto igniting:	605 °C (1,121 °F)
Decomposition temperature:	Not determined.
Ignition temperature:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 21 $^{\circ}$ C (69.8 $^{\circ}$ F):	1 hPa (0.8 mm Hg)
Vapor pressure at 50 °C (122 °F):	$0.06 \; hPa \; (0 \; mm \; Hg)$
Density at 20 °C (68 °F):	1.272 g/cm³ (10.61484 lbs/gal)
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water at 20 °C (68 °F):	1.4 g/l
Partition coefficient (n-octanol/water	·): Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability

· Other information

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

No further relevant information available.

· Possibility of hazardous reactions No dangerous reactions known.

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(Contd. of page 5)

- · 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:

Oral LD50 500 mg/kg (ATE)

- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) 3
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not 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:

Water hazard class 2 (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- · 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.

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 $\cdot \textbf{Recommended cleansing agent:} \ Water, if necessary with cleansing agents.$

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Transport information		
· UN-Number · DOT, IMDG, IATA	UN2876	
· UN proper shipping name · DOT · IMDG, IATA	Resorcinol RESORCINOL	
· Transport hazard class(es)		
DOT		
TOXIC		
· Class	6.1 Toxic substances	
· Label	6.1	
· Class	6.1 Toxic substances	
· Label	6.1	
· IATA · Class · Label	6.1 Toxic substances 6.1	
· Packing group · DOT, IMDG, IATA	III	
· Environmental hazards:	Environmentally hazardous substance, solid	
· Marine pollutant:	No Symbol (fish and tree)	
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Warning: Toxic substances : 60 F-A,S-A A	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.	

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· Transport/Additional information:

 $\cdot DOT$

· Quantity limitations On passenger aircraft/rail: 100 kg

On cargo aircraft only: 200 kg

· Hazardous substance: 5000 lbs, 2270 kg

· 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

UN 2876 RESORCINOL, 6.1, III · UN "Model Regulation":

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): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): ACTIVE
- · Hazardous Air Pollutants Substance is not listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- · TLV (Threshold Limit Value) A4
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS05

GHS07

- · Signal word Danger
- · Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye damage.

May cause an allergic skin reaction.

May cause damage to organs.

· Precautionary statements

Wash thoroughly after handling.

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

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

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Trade name: Resorcinol, Laboratory Grade Crystal

(Contd. of page 8)

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Rinse mouth.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing.

Collect spillage.

Store locked up.

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.

- · Department issuing SDS: Environment protection department.
- · Contact:

Date of Preparation / Last Revision:

· Date of preparation / last revision

Revision 1.2, 05/29/2024: Reviewed SDS for accuracy. MH/STN

Creation date for SDS 11-10-2014. STN

05/29/2024

· Abbreviations and acronyms:

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

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

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 Irritation 2: Skin corrosion/irritation – Category 2

Eye Damage 1: Serious eye damage/eye irritation - Category 1

Sensitization - Skin 1: Skin sensitisation - Category 1

Specific Target Organ Toxicity - Single Exposure 2: Specific target organ toxicity (single exposure) - Category 2

* Data compared to the previous version altered.

US ·