Printing date 08/12/2024

Reviewed on 08/12/2024

1 Identification

- · Product identifier
- Trade name: <u>o-Dichlorobenzene 98*%</u>
- Article number: D4410
- CAS Number:
- 95-50-1
- *EC number:* 202-425-9
- Index number: 602-034-00-7
- 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
- *Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666*

2 Hazard(s) identification

· Classification of the substance or mixture



Acute Toxicity - Oral 4H302 Harmful if swallowed.Skin Irritation 2H315 Causes skin irritation.Eye Irritation 2AH319 Causes serious eye irritation.Specific Target Organ Toxicity - Single Exposure 3H335 May cause respiratory irritation.

H227 Combustible liquid.

Flammable Liquids 4

· Label elements

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



Signal word Warning
 Hazard statements
 Combustible liquid.
 Harmful if swallowed.
 Causes skin irritation.
 Causes serious eye irritation.
 May cause respiratory irritation.

(Contd. on page 2)

⁻ US

Printing date 08/12/2024

*

Reviewed on 08/12/2024

Trade name: o-Dichlorobenzene 98*%

	(Contd. of page 1)
· Precautionar	
	om flames and hot surfaces. – No smoking.
	ing dust/fume/gas/mist/vapors/spray
	ghly after handling.
Do not eat, di	rink or smoke when using this product.
Use only outa	loors or in a well-ventilated area.
Wear protecti	ive gloves/protective clothing/eye protection/face protection.
If swallowed:	Call a poison center/doctor if you feel unwell.
Rinse mouth.	
If on skin: Wo	ash with plenty of water.
	ment (see on this label).
	: Remove person to fresh air and keep comfortable for breathing.
	inse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rins	
	aminated clothing and wash it before reuse.
	on occurs: Get medical advice/attention.
	on persists: Get medical advice/attention.
	:: Use CO2, powder or water spray to extinguish.
	ll-ventilated place. Keep container tightly closed.
	ll-ventilated place. Keep cool.
Store locked	
	ntents/container in accordance with local/regional/national/international regulations.
· Classification	
· NFPA rating	s (scale 0 - 4)
	Health = 2
2	Fire = 2
	Reactivity = 0
· HMIS-rating	s (scale 0 - 4)
HEALTH 2	Health = 2
FIRE 2	
REACTIVITY 0	Reactivity = 0
• Other hazard	's
	BT and vPvB assessment
• PBT: Not app	
• vPvB: Not ap	
,1,2,1100 up	
3 Compositio	on/information on ingredients
5 Compositio	in injormation on ingreatents
· Chemical ch	aracterization: Substances
· CAS No. Des	-
	1,2-dichlorobenzene
· Identification	
· EC number:	
	r: 602-034-00-7
· index numbe	F. 002-034-00-7

(Contd. on page 3)

US

Printing date 08/12/2024

Reviewed on 08/12/2024

Trade name: o-Dichlorobenzene 98*%

(Contd. of page 2)

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:* 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: 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:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 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: 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). Ensure adequate ventilation.

- · 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: 50 ppm
- · PAC-2: 170 ppm
- · PAC-3: 1,000 ppm

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.
- Further information about storage conditions: Keep receptacle tightly sealed.

(Contd. on page 4)

Printing date 08/12/2024

Reviewed on 08/12/2024

Trade name: o-Dichlorobenzene 98*%

• 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: 95-50-1 1,2-dichlorobenzene

PEL Ceiling limit value: 300 mg/m³, 50 ppm

- REL Ceiling limit value: 300 mg/m³, 50 ppm
- TLV Short-term value: 50 ppm Long-term value: 25 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 eyes and skin.

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• 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

· Body protection: Protective work clothing

(Contd. on page 5)

(Contd. of page 3)

Printing date 08/12/2024

*

Reviewed on 08/12/2024

Trade name: o-Dichlorobenzene 98*%

(Contd. of page 4)

Information on basic physical and c	hemical properties
General Information	
Appearance:	
Form:	Oily
Color:	Colorless
Odor:	Pungent
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	-16.7 °C (1.9 °F)
Boiling point/Boiling range:	179 °C (354.2 °F)
Flash point:	66 °C (150.8 °F)
Flammability (solid, gaseous):	Not applicable.
Auto igniting:	640 °C (1,184 °F)
Decomposition temperature:	Not determined.
Ignition temperature:	Not determined.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	2.2 Vol %
Upper:	12 Vol %
Vapor pressure at 20 °C (68 °F):	1.3 hPa (1 mm Hg)
Vapor pressure at 50 °C (122 °F):	8.2 hPa (6.2 mm Hg)
Density at 20 °C (68 °F):	1.32 g/cm ³ (11.0154 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water at 20 °C (68 °F):	0.1 g/l
Partition coefficient (n-octanol/wate	r): Not determined.
Viscosity:	
Dynamic at 20 °C (68 °F):	1.32 mPas
Kinematic:	Not determined.

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.

(Contd. on page 6)

US

Printing date 08/12/2024

Reviewed on 08/12/2024

Trade name: o-Dichlorobenzene 98*%

· 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: Irritating effect.
- Sensitization: No sensitizing effects known.
- · 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. Danger to drinking water if even small quantities leak into the ground.
- · 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.

(Contd. on page 7)

(Contd. of page 5)

Printing date 08/12/2024

Reviewed on 08/12/2024

Trade name: o-Dichlorobenzene 98*%

(Contd. of page 6)

UN-Number DOT, IMDG, IATA	UN1591
UN proper shipping name DOT IMDG, IATA	o-Dichlorobenzene o-DICHLOROBENZENE
Transport hazard class(es)	
DOT	
Toxic 6	
Class Label	6.1 Toxic substances 6.1
IMDG	
Class Label	6.1 Toxic substances 6.1
IATA	
Class Label	6.1 Toxic substances 6.1
Packing group DOT, IMDG, IATA	111
Environmental hazards: Marine pollutant:	Environmentally hazardous substance, liquid; Marine Pollutar Symbol (fish and tree)
Special precautions for user Hazard identification number (Kemler code): EMS Number: Segregation groups	Warning: Toxic substances 60 F-A,S-A (SGG10) Liquid halogenated hydrocarbons
Stowage Category	A
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: 60 L On cargo aircraft only: 220 L
Hazardous substance:	100 lbs, 45.4 kg

Printing date 08/12/2024

Reviewed on 08/12/2024

Trade name: o-Dichlorobenzene 98*%

(Contd.	of page	7)
(Conta.	or puge	''

· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml	
· UN "Model Regulation":	UN 1591 O-DICHLOROBENZENE, 6.1, 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): Substance is not listed.
- Section 313 (Specific toxic chemical listings): Substance is 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) D
- 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



· Signal word Warning

· Hazard statements Combustible liquid. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. · Precautionary statements Keep away from flames and hot surfaces. – No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. Specific treatment (see on this label).

(Contd. on page 9)

US

Printing date 08/12/2024

Reviewed on 08/12/2024

Trade name: o-Dichlorobenzene 98*%

(Contd. of page 8)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

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, 08-12-2024: Reviewed SDS for accuracy. STN/GW Revision 0.0, creation date for SDS 12-01-2015. STN 08/12/2024 / -

· 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 Flammable Liquids 4: Flammable liquids – Category 4 Acute Toxicity - Oral 4: Acute toxicity - Category 4 Skin Irritation 2: Skin corrosion/irritation - Category 2 Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3 * Data compared to the previous version altered.