



Safety Data Sheet
(according to 1907/2006/EC)
JLS-DUO Legionella Protection
Component 1

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Issued on: 30.07.09
Last altered: 10.11.10
Order no.: 1702268

1 Identification of substance

Type of product: Legionella protection
Trade name: JLS-DUO Component 1
Order numbers: 8680001, 8680002, 8680003

Supplier/manufacturer:
JUDO Wasseraufbereitung GmbH
Hohreuschstr. 39 - 41, 71364 Winnenden / Germany
Phone: 0049(0)7195/692-0
Information issued by: Industrial Water Technology Dept.
email: peter.mueller@judo-eu

Emergency information: Service phone, Munich 0049(0)89/19240

2 Possible Hazards

Type of danger:

Classification: No labeling requirements as per Production guide lines 1999/45EG. Please, however, pay careful attention to any and all information contained in this sheet.

Additional possible hazards for Humans & the environment

This product is flammable when dried. Dirtied or soaked clothing should be removed immediately.

3 Composition/information on ingredients

Chemical characteristics : Liquid sodium chloride

Materials posing health hazards: Mixture of compounds and additives as described herein and which are not subject to labelling requirements of GefStoffY.

CAS no.	EINECS no.	Description	Code letter	Weight %	R phrases (risks)
7758-19-2	231-892-1	sodium chloride	O T	< 1,0 %	8, 20, 24/25, 32, 36/37/38

4 First aid measures

General measures: Remove injured person from the danger area and lay flat. Ensure safety of first aid helpers.

If breathed in: Where chlorine dioxide is formed: Remove injured person into fresh air. Place seated with upper body upright. Keep warm and quiet and cover with blanket. Call doctor immediately.

Upon skin contact: Wash immediately with soap & water and rinse well. Remove all clothing & shoes which have been in contact with the solution. If skin irritation persists, call doctor.

Upon eye contact: Hold eyelids open and rinse under flowing water for several minutes, then consult doctor immediately.

If swallowed: Rinse mouth out well and drink plenty of water. Do not induce vomiting! Consult a doctor immediately.

Doctor's information: After eye contact: Treat as acid burn.
If swallowed: gastric lavage and treat as acid burn or haemoglobins.
Where chlorine dioxide, aerosols or spray has been breathed in: treat as pulmonary oedema.

5 Fire fighting measures

Extinguishing agents: CO₂, extinguishing powder or water spray. Larger blazes are to be extinguished using water spray or alcohol resistant foam.

Extinguishing agents to be avoided for safety reasons: solid extinguishing agents, carbon dioxide



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Hazards relating to the product itself or its manufacture, its flammability or gas properties:

In case of fire or over-heating, chlorine dioxide, chlorine and oxygen may be formed. Heating in an enclosed chamber may lead to an increase in pressure – danger of bursting. At temperatures in excess of 150 °C, oxygen which may be contusive to fires.

Protective equipment: Wear self contained protective respirator and protective clothing.

Further details: Heating the container will result in an increase in pressure and danger of bursting or explosion. Spray heated container with water. Contaminated cooling water must be collected separately and may not be fed to the drain. Fire residue and extinguishing water must be disposed of in accordance with local regulations.

6 Accidental release measures

Personal safety measures: wear protective clothing and ensure unprotected persons are kept away from the contaminated area. All persons not required on site should clear the contaminated area immediately. Use respirators where danger of fumes, dust, aerosols is present. Ensure adequate ventilation. Avoid skin and eye contact.

Environmental protection measures: Do not allow to flow into drains/ ground water / surface water. Do not allow to seep into earth.

Cleaning/Collection process: Do not allow to dry. Collect in absorbent medium (sand, infusorial earth, universal binder). And dispose of waste as per section 13. Dispose of using suitable containers. Do not use textiles, wood shavings or any inflammable materials!!

Additional notes: Never return leaked material to the container for re-use (danger of decomposition).

7 Handling and storage

Handling:

Keep container closed at all times. Protect from heat & direct sunlight. Ensure good ventilation at place of use. Avoid contact with skin or eyes. Protect product from impurities. Do not re-use spilt product.

Notes on fire & explosion protection:

Never allow larger quantities of product to dry. Where dried, residue is to be removed using water. Do not use near acids, reducing agents, sulphurous materials and any flammable materials such as wood, paper, straw, textiles, oils, fats, rubber, dirt, etc.

Storage: Container must always be transported and stored in an upright position. Store in containers suitable for use with the product only. Ensure that all containers have adequate ventilation. Ensure containers are kept firmly closed and are stored in a cool and well ventilated environment.

Suitable containers: austenitic steel, PVC, PE, PP, Polyetraflourethylene, glass, ceramics.

Storage requirements: Do not store together with acids, reducing agents, metallic salts, flammable materials.

8 Exposure limitation and personal protection equipment

As per monitored values relevant to the workplace:

CAS no.	EG no.	Description	MAK:
10049-04-4	233-162-8	chlorine dioxide	0.3 mg/m ³ , 0.1 ml/m ³

Personal protective equipment:

General protection and hygiene measure:

The minimal requirements for safety standards when working with such materials are given in the TRGS 500.



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Do not eat, drink, smoke or sneeze when working directly with such substances. Clothing covered or soaked in such materials should be removed immediately. Hands should be washed thoroughly during breaks and at the close of work. Additional skin protection may be obtained by using hand creams. Avoid the formation of Aerosols or mists.

Respiratory protection: Where maximum permitted levels are exceeded, use respirators with grey, type B filters.

Protection for hands: Protective gloves made of PVC, Neoprene or nitrile rubber should be used. Avoid the use of gloves made of leather or wool.

Eye protection: tight fitting protective goggles

Skin protection: Wear protective clothing made of PVC, Neoprene or nitrile rubber. Boots made of rubber or plastic. Avoid the use of protective footwear made of leather.

9 Physical & chemical properties

Aggregate state:	liquid
Colour:	colourless
Odour:	almost odourless
Melting point/ melting range:	approx. 0 °C
Boiling point / boiling range:	approx. 100 °C
Flash point:	not relevant
Ignition temperature:	not relevant
Decomposition temperature:	> 180 °C
Spontaneous ignition:	The substance is not subject to spontaneous ignition.
Explosion risk:	The substance is not subject to an explosion risk.
Density:	1.0 g/ml at 20 °C
Solubility /miscibility in water is unlimited.	
PH value at 20 °C	approx. 11

10 Product stability & reactivity

Thermal decomposition / measure to be avoided: danger of container exploding when substance is heated.

Substances to be avoided: metallic ions, metallic salts, reducing agents, inflammable substances.

Substances which may cause decomposition: chlorine dioxide (poisonous gas), May lead to over-pressurisation and container burst where decomposition occurs in containers and pipe work.

Further details: Do not allow product to dry out. Where dried on lightly inflammable materials (wood, paper, textiles) the risk of inflammation is increased.

11 Toxicological information

Acutely toxic: possible relevant values LD/L C50 values: 7758-19-2 sodium

Oral:	Dermal:	By inhalation:	referring to sodium chloride solution
LD ₅₀ : 1.136 mg/kg (rat)	LD ₅₀ : > 2.000 mg/kg	LC ₅₀ / 4 h: 0.75 mg/	→ 30%

Primary irritation effects:

On skin: irritable

On eyes: irritable

Allergisation: No allergisation effects known.

Practical experience: mucous irritation possible

12 Environmental information

Environmental impact information:

May have toxic effects on water:

Type of test	Substance concentration	Method	Values
Brachydanio rerio	> 500 mg/l/96 h	LC50	



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Further environmentally relevant notes:

The properties of this substance do not require the inclusion of organically bonded halogen.

General notes: Water hazardous classification WGK 1 (low hazard risk) as per VwVwS, appendix 4

13 Notes for correct disposal



Product: May not be disposed of together with household refuse. Do not feed to public drainage system. Must be disposed of in accordance with the hazardous waste regulations valid at point and time of use. Suggested waste classification key as per EAKV: 061301 inorganic pesticides, biocides and timber preservatives.

Packaging:

Suggested waste classification key for the choice of packaging materials as per EAKC 15 01 10: Packaging for substances with hazardous waste residue or which are contaminated by same.

14 Notes on transportation

Not classified as hazardous goods as stipulated in transport regulations (please check local regulations).

Land transport: In Germany: ADR/RID and GGVS/GGVE (internat./nat.): ADR/RID-GGVS/E class (other countries please check local regulations)

Sea transport IMDG /GGVsee:

IMDG / GGVSee class: non hazardous as per regulations

Marine pollutant: no

Air transport ICAO-TI and IATA-DGR:

ICAO / IATA class: non hazardous as per regulations

Further transport notes:

Transport by post: Permissible in Germany. Other countries please check local regulations.

Do not transport together with acids or foodstuffs.

15 Regulatory information

This product does not require specialised labelling under the terms of the EU-Listings or any other regulation known to us. All safety measures commonly required when handling chemical substances should be adhered to here.

Safety standards: 25 Avoid contact with eyes
27 Removed soiled clothing immediately.
36 Wear protective clothing at the work place.

National Regulations (Germany)

Water hazardous classification WGK 1 (low hazard risk) as per VwVwS, appendix 4

16 Further information:

Risks : 8 Fire hazard when in contact with flammable materials.
20 Health risk when inhaled.
24/25 Poisonous when in contact with skin or swallowed.
32 Forms very poisonous gases when in contact with acids.
36/37/38 Causes irritation to eyes, lungs and skin.

This information reflects the current knowledge available to us at this point in time. It does not indicate actual product properties and does not form a any part of a contractual obligating.

Date sheet composed by: Works safety department

Contact: Mr. P. Müller