Otto Chemie Pet Ltd An ISO 9001 : 2015 & GMP Certified Company

Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

MATERIAL SAFETY DATA SHEET (MSDS)

H318: Causes serious eye damage

H411: Toxic to aquatic life with long lasting

Very toxic to aquatic life with long lasting effects.

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

Dispose of contents/ container to an approved waste disposal

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

H400: Very toxic to aquatic life.

Causes serious eye damage.

Avoid release to the environment.

Wear eye protection/ face protection.

effects.

Danger

rinsing.

plant

Danger

Collect spillage.

SECTION 1: Product identifiers

Product Name : Chlorhexidine gluconate, solution Product Code : C 2116 CAS No: 18472-51-0

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet Company identification OTTO CHEMIE PVT LTD No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number Phone no. : + 91 98200 41841 (10 : 00 am - 06 : 00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Serious eye damage, (Category 1)
Short-term (acute) aquatic hazard, (Category 1)
Long-term (chronic) aquatic

hazard, (Category 2) 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Hazard Statements H318 H410 Precautionary Statements P273 P280 P305 + P351 + P338

P391 P501

Supplemental Hazard Statements none Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard Statements H318 Precautionary Statements P280 P305 + P351 + P338

rinsing. Supplemental Hazard Statements none 2.3 Other hazards

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Causes serious eye damage.

Wear eye protection/ face protection.

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This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component		Classification	Concentration
D-Gluconic acio (2:1)	d, compound with N	I,N"-bis(4-chlorophenyl)-3,12-diimino-2,4,11	,13- tetraazatetradecanediamidine
CAS-No. EC-No.	18472-51-0 242-354-0	Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H318, H400, H410 M-Factor - Aquatic Acute: 10 M-Factor - Aquatic Chronic: 1	>= 20 - < 25 %

*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with

water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Remove contact lenses.

If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a

physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 114.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

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Hydrogen chloride gas
Not combustible.
Ambient fire may liberate hazardous vapours.
5.3 Advice for firefighters
In the event of fire, wear self-contained breathing apparatus.
5.4 Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.
6.2 Environmental precautions Do not let product enter drains.
6.3 Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®).
Dispose of properly. Clean up affected area.
6.4 Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Storage conditions
Tightly closed.
Storage stabilityRecommended storage temperature
2 - 8 °C
Light sensitive.
Storage class
Storage class (TRGS 510): 12: Non Combustible Liquids
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eve/face protection Use equipment for eve protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm

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Break through time: 480 min data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. Body Protection protective clothing Respiratory protection required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties a) Physical state liquid b) Color No data available c) Odor No data available d) Melting No data available point/freezing point e) Initial boiling point No data available and boiling range f) Flammability (solid, No data available gas) g) Úpper/lower No data available flammability or explosive limits h) Flash point No data available i) Autoignition Not applicable temperature j) Decomposition No data available temperature k) pH No data available Viscosity, kinematic: No data available I) Viscosity Viscosity, dynamic: No data available m) Water solubility at 20 °C soluble n) Partition coefficient: No data available n-octanol/water o) Vapor pressure No data available 1,06 g/cm3 at 25 °C - lit. p) Density Relative density No data available q) Relative vapor No data available density r) Particle No data available characteristics s) Explosive properties Not classified as explosive. t) Oxidizing properties none 9.2 Other safety information

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No data available

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SECTION 10: Stability and reactivity

10.1 Reactivity No data available 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) . 10.3 Possibility of hazardous reactions Violent reactions possible with: The generally known reaction partners of water. 10.4 Conditions to avoid no information available 10.5 Incompatible materials Strong oxidizing agents 10.6 Hazardous decomposition products In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity Mixture No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Endocrine disrupting properties Product: Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. 12.7 Other adverse effects No data available Components D-Gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12-diimino2,4,11,13-tetraazatetradecanediamidine (2:1) Toxicity to fish semi-static test LC50 - Danio rerio (zebra fish) - 2,08 mg/l -96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 0,087 mg/l -48 h (OECD Test Guideline 202)

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0,03 mg/l - 72 h (OECD Test Guideline 201) static test ErC50 - Desmodes 0,081 mg/l - 72 h (OECD Test Guideline 201) Toxicity to bacteria static test (OECD Test Guideline 209) Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	C10 - Desmodesmus subspicatus (green mus subspicatus (green algae) - EC50 - activated sludge - 25 mg/l - 3 h nia magna (Water flea) - 0,0206	algae) -		
SECTION 13: Disposal cons	iderations			
13.1 Waste treatment method				
No data available				
SECTION 14: Transport info 14.1 UN number	rmation			
ADR/RID: 3082	IMDG: 3082	IATA: 3082		
14.2 UN proper shipping nam		IATA. 5002		
ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (D-Gluconic acid,				
compound with N,N"-bis(4-chlorophenyl)-3,12-diimino-2,4,11,13-				
	tetraazatetradecanediamidine (2:1)) (D-	-Gluconic acid, compound with N,N"-		
	bis(4-chlorophenyl)-3,12-diimino-2,4,11	,13-tetraazatetradecanediamidine		
(2:1)) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (D-Gluconic				
	bis(4-chlorophenyl)-3,12-diimino-2,4,11			
(2:1))				
	IATA: Environmentally hazardous substance, liquid, n.o.s. (D-Gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12-diimino-2,4,11,13- tetraazatetradecanediamidine (2:1)) (D-Gluconic acid, compound with N,N"- bis(4-chlorophenyl)-3,12-diimino-2,4,11,13-tetraazatetradecanediamidine			
(2:1))				
14.3 Transport hazard class(e	es)			
ADR/RID: 9	IMDG: 9	IATA: 9		
14.4 Packaging group	IMDG: III	IATA: III		
ADR/RID: III 14.5 Environmental hazards	IMDG. III			
ADR/RID: yes	IMDG Marine pollutant: yes	IATA: yes		
14.6 Special precautions for u				
Tunnel restriction code : (-)				
Further information				
EHS-Mark required (ADR 2.2	.9.1.10, IMDG code 2.10.3) for single page	ckagings and		
	aining inner packagings with Dangerous			
	smaller than or equal to 5 kg / L , not dar	ngerous goods of		
Class 9				
SECTION 15: Regulatory inf	ormation			
	onmental regulations/legislation specific f	for the		
substance or mixture				
	et complies with the requirements of Reg	ulation (EC) No.		
1907/2006.				
National legislation				
Seveso III: Directive 2012/18/				
European Parliament and of t	ne Council			

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on the control of major-accident hazards involving dangerous substances. E1 ENVIRONMENTAL HAZARDS E1 ENVIRONMENTAL HAZARDS Other regulations Take note of Dir 94/33/EC on the protection of young people at work. 15.2 Chemical Safety Assessment For this product a chemical safety assessment was not carried out

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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