SAFETY DATA SHEET



Create Date: 2021-02-12

Address

SECTION 1: COMPANY AND PRODUCT INFORMATION

1.1	Product identifiers		
	Product name	:	CHES (2-[N-cyclohexylamino]ethane sulfonic acid)
	Product code	:	ZXB-09-298
	CAS number	:	103-47-9
	Synonyms	:	2-(Cyclohexylamino)ethanesulfonic acid
1.2	Relevant identified us	se	s of the substance or mixture and uses advised against
	Identified uses	:	Laboratory chemicals, manufacture of substances
1.3	Details of the supplie	er c	of the safety data sheet

: Hinter den Gärten 56

	89173 Lonsee Germany
Email	: info@zellx.de
Phone	: +49(0)731 55211521
Fax	: +49(0)731 55211719

1.4 Emergency telephone number

Emergency phone : +49(0)731 55211521

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Eye irritation (Category 2A), H319.

2.2 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Eye irritation (Category 2A), H319.

2.3 Label elements and precautionary statements

Pictogram

:	
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Signal word	: Warning
Hazard statement(s)	: H319 Causes serious eye irritation.
Precautionary statement(s)	 P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ eye protection/ face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention.

2.4 Hazards not otherwise classified (HNOC) or not covered by GHS

None

2.5 NFPA Rating

	Health hazard	:	2	
	Fire hazard	:	0	
	Reactivity hazard	:	0	
2.6	HMIS Rating			
	Health hazard	:	2	
	Chronic health hazard	:	0	
	Reactivity hazard	:	0	
	Flammability	:	0	
	Physical hazard	:	0	

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance	CAS#	EC#	Concentration
CHES M.F: C ₈ H ₁₇ NO ₃ S M.W: 207.29 g/mol	103-47-9	203-115-6	>98%

3.2 Hazardous components & classification

Eye Irrit. 2A; H319

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

In case of inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In case of ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Not available

4.3 Indication of any immediate medical attention and special treatment needed

Not available

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Unsuitable extinguishing media

Not available

5.3 Special hazards arising from the substance

Carbon oxides, nitrogen oxides (NOx), Sulphur oxides

5.4 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

For proper disposal see section 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.

For precautions see section 2

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep container tightly closed in a dry and well-ventilated place. Keep out of the
	reach of children. Keep containers tightly closed in a cool, well-ventilated place.
	Keep in properly labeled containers. Protect from moisture. Store at room
	temperature.

Incompatible materials : Not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Engineering controls

Showers, Eyewash stations, Ventilation systems

8.3 Personal protective equipment

Eye/face protection	: Tight sealing safety goggles. Face protection shield.
Skin protection	: Wear protective gloves and protective clothing.
Body protection	: Wear protective gloves and protective clothing.

Respiratory protection	: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.	
Control of environmental exposure	: Do not let product enter drains.	
General hygiene considerations	: When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physica	and chemical properties
a)	Appearance	: White
b)	Physical states	: Crystalline
c)	Odor	: Not available
d)	Odor threshold	: Not available
e)	Melting point	: 300 °C (572 °F)
f)	Boiling point range	: 356.22 °C
g)	рН	: 3.0 - 5.0 at 103.6 g/l at 25 °C (77 °F)
h)	Density	: 1.23 g/cm3
i)	Flash point	: 100 °C
i)	Evaporation rate	: Not available
k)	Flammability	: Not available
)	Upper/lower flammability or explosive limits:	: Not available
m)	Vapor pressure	: 1.64E-009
n)	Vapor density	: Not available
0)	Relative density	: Not available
o)	Water solubility	: ca.103.6 g/l at 20 °C (68 °F)
q)	Partition coefficient:n-octanol/water	: -0.63
r)	Autoignition temperature	: Not available
s)	Decomposition temperature	: Not available
t)	Kinematic viscosity	: Not available
u)	Explosive properties	: Not available
v)	Oxidizing properties	: Not available
w)	Solubility in other solvents	: Not available
x)	Surface tension	: Not available

SECTION 10: STABILITY AND REACTIVITY

Not available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Stability note(s)

Not available

10.4 Polymerization

Not available

10.5 Possibility of hazardous reactions

Not available

11.1 Acute toxicity

10.6 Incompatible materials

Strong oxidizing agents.

10.7 Hazardous decomposition products

Carbon oxides, Nitrogen oxides (NOx), Hydrogen sulfide

SECTION 11: TOXICOLOGICAL INFORMATION

Not available

11.4 Respiratory or skin sensitization

Not available

11.5 Germ cell mutagenicity

Not available

11.6 Carcinogenicity

IARC	: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

11.7 Reproductive toxicity

Not available

11.8 Specific target organ toxicity - single exposure

Not available

11.9 Specific target organ toxicity - repeated exposure

Not available

11.10 Aspiration hazard

Not available

11.11 Additional Information

Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not available

12.2 Aquatic toxicity

Not available

12.3 Persistence and degradability

Not available

12.4 Bioaccumulative potential

Not available

12.5 Mobility in soil

Not available

12.6 Results of PBT and vPvB assessment

Not available

12.7 Other adverse effect

Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product

Disposal should be in accordance with applicable regional, national and local laws and regulations.

13.2 Packaging

Do not reuse container

13.3 Recommendation

Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: TRANSPORTATION INFORMATION

14.1 DOT (US)

Not regulated

14.2 IMDG

Not regulated

14.3 IATA

Not regulated

SECTION 15: REGULATORY INFORMATION

15.1 SARA

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories Acute health hazard Yes Chronic Health Hazard No Fire hazard No Sudden release of pressure hazard No Reactive hazard No

15.2 Clean water act (CWA)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

15.3 Right to know components

Massachusetts	:	No components are subject to the Massachusetts Right to Know Act.
Pennsylvania	:	2-(Cyclohexylamino)ethanesulphonic acid CAS-No-103-47-9
New Jersey	:	2-(Cyclohexylamino)ethanesulphonic acid CAS-No-103-47-9
California proposition 65 components	:	This product does not contain any Proposition 65 chemicals.

SECTION 16: OTHER INFORMATION

16.1 Disclaimer

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16.2 Preparation Information

Create Date: 2021-02-12