according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No 2020/878

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1.1 Product identifier

10

Marking Systems GmbH

Trade name:

LIEI

Neutralyt N4

GG10-S0GU-6006-20AG

1.2 Relevant identified uses of the substance or mixture and uses advised against

General use: Electrolytic marking technology, for aftertreatment, READY FOR USE

1.3 Details of the supplier of the safety data sheet

Schilling Marking Systems GmbH		
In Grubenäcker 1		
DE-78532 Tuttlingen		
www.schilling-marking.de		
info@schilling-marking.de		
+49 (0)7461 9472-0		
+49 (0)7461 9472-28		
Department responsible for information:		

Frau Bianca Schilling, Telephone: +49 (0)7461 9472-0 Email: info@schilling-marking.de

1.4 Emergency telephone number

GIZ-Nord, Germany Telephone: +49 (0)551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Eye Irrit. 2; H319 Causes serious eye irritation.

2.2 Label elements

Labelling (CLP)

Signal word:

)		
	Warning	

Hazard statements:	H319	Causes serious eye irritation.	
Precautionary statements:	P101 P102	If medical advice is needed, have product container or label at hand. Keep out of reach of children.	
	P280	Wear protective gloves/protective clothing/eye protection.	
	P305+P351+P338	³⁸ 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.	
Special labelling			
Text for labelling:	Labelling for contents according to regulation (EC) No 648/2004, annex VII:		

Contains less than 5% anionic surfactant.



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2.3 Other hazards

Special danger of slipping by leaking/spilling product.

A corrosive effect cannot be ruled out because of the pH value.

Endocrine disrupting properties, Results of PBT and vPvB assessment: No data available

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation:

Hazardous ing	gredients:
---------------	------------

Additional information:

Watery tenside solution without dye

Identifiers	Designation Classification	Content
EC No. 207-838-8 CAS 497-19-8	Sodium carbonate Eye Irrit. 2; H319.	< 3 %
EC No. 270-115-0 CAS 68411-30-3	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts Acute Tox. 4; H302. Skin Irrit. 2; H315. Eye Dam. 1; H318. Aquatic Chronic 3; H412.	< 3 %

Labelling for contents according to regulation (EC) No 648/2004, annex VII: Contains less than 5% anionic surfactant.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:	First aider: Pay attention to self-protection! If medical advice is needed, have product container or label at hand.	
In case of inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.	
Following skin contact:	Immediately clean with water and soap followed by thorough rinsing. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.	
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.	
After swallowing:	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.	
4.2 Most important symptoms and effects, both acute and delayed		

Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Extinguishing media which must not be used for safety reasons: Full water jet

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5.2 Special hazards arising from the substance or mixture

May form dangerous gases and vapours in case of fire. In the event of a fire, the following may be produced when the water evaporates: Sodium compounds, sulphur oxides, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus.

Additional information: Do not allow water used to extinguish fire to enter drains, ground or waterways. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe mist/vapours/spray. Avoid contact with the substance. If possible, eliminate leakage. Provide adequate ventilation. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Wash spill area with plenty of water.

Never return spills in original containers for re-use.

Additional information: Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Work place should be equipped with a shower and an eye rinsing apparatus.

Precautions against fire and explosion:

Product is non-combustible. Take standard precautions to prevent fire.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms	and containers:	
	Keep container tightly closed and in a well-ventilated place.	
	Keep container dry. Keep only in the original container.	
	Protect from heat and direct sunlight.	
	Store containers in upright position. Store at room temperature.	
Hints on joint storage:	Keep away from food, drink and animal feedingstuffs.	
	Do not store together with strong acids.	
Storage class:	12 = Non-combustible liquids	
7.2 Specific and use(a)		

7.3 Specific end use(s)

No information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information: Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment.

Personal protection equipment

Occupational exposure controls

Respiratory protection:	In case of inadequate ventilation wear respiratory protection. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.	
Hand protection:	Protective gloves according to EN 374. Glove material: Nitrile rubber. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.	
Eye protection:	Tightly sealed goggles according to EN 166.	
Body protection:	Wear suitable protective clothing.	
General protection and hygiene measures:		
	Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing.	
	Take off contaminated clothing and wash it before reuse.	
	Do not eat, drink or smoke when using this product.	
	Wash hands thoroughly after handling.	
	Have eye wash bottle or eye rinse ready at work place.	

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa Colour:	liquid colourless
Odour: Odour threshold: Melting point/freezing point: Initial boiling point and boiling range: Flammability: Upper/lower flammability or explosive limits:	odourless No data available No data available No data available No data available No data available
Flash point/flash point range:	Not combustible
Decomposition temperature:	No data available
pH:	approx. 11,5
Viscosity, kinematic:	No data available
Water solubility:	at 20 °C: completely miscible
Partition coefficient: n-octanol/water:	No data available
Vapour pressure: Density:	No data available at 20 °C: 1,01 g/mL
Vapour density:	No data available
Particle characteristics:	Not applicable
9.2 Other information	
Explosive properties: Oxidizing characteristics:	Not explosive No data available



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Auto-ignition temperature:

Evaporation rate: Additional information: No data available No data available No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to subsection "Possilbility of hazardous reactions".

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions with proper and specified storage and handling.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames. Protect from direct sunlight. Do not mix with other chemicals.

10.5 Incompatible materials

Strong acids

10.6 Hazardous decomposition products

 No decomposition when used properly.

 Thermal decomposition:
 No data available

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such. Acute toxicity (oral): Based on available data, the classification criteria are not met. ATEmix (calculated): > 2000 mg/kg Acute toxicity (dermal): Based on available data, the classification criteria are not met. ATEmix (calculated): > 2000 mg/kg Acute toxicity (inhalative): Lack of data. Skin corrosion/irritation: Lack of data. Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation. Sensitisation to the respiratory tract: Lack of data. Skin sensitisation: Lack of data. Germ cell mutagenicity/Genotoxicity: Lack of data. Carcinogenicity: Lack of data. Reproductive toxicity: Lack of data. Effects on or via lactation: Lack of data. Specific target organ toxicity (single exposure): Lack of data. Specific target organ toxicity (repeated exposure): Lack of data. Aspiration hazard: Lack of data.

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11.2 Information on other hazards

Marking Systems Gmbi

Endocrine disrupting properties: No data available

Other information:

Information about Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts (CAS No. 68411-30-3): LD50, oral, Rat: 1.080 mg/kg/bw. LD50, dermal, Rat: > 2.000 mg/kg/bw. Information about Sodium carbonate (CAS No. 497-19-8): LD50, Rat, oral: 2.800 mg/kg bw LD50, Rabbit, dermal: > 2.000 mg/kg

LC50, Rat, inhalative: 1,63 mg/L

Symptoms

After contact with skin: Skin contact may lead to skin irritation. After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	Information about Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:
	Fish toxicity: LC50 Lepomis macrochirus (bluegill): 1,67 mg/L/96h
	Algae toxicity: EC50 Pseudokirchneriella subcapitata (green algae): 29,0 mg/L/96h NOEC Pseudokirchneriella subcapitata (green algae): 0,5 mg/L/96h.
	Daphnia toxicity: EC50 Daphnia magna: 2,9 mg/L/48h (OECD 202).
	Harmful effects by modification of pH-value.
Water Hazard Class:	1 = slightly hazardous to water

12.2 Persistence and degradability

Further details: Information about Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: Biodegradation: 85 %/ 29 d (OECD 301 B). Easily bio-degradable.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number:	11 01 07* =	pickling bases * = Evidence for disposal must be provided.
Recommendation:	Special waste	e. Dispose of waste according to applicable legislation.
Package		
Waste key number:	15 01 02 =	Plastic packaging

Waste key number:	15 01 02 =	Plastic packaging
Recommendation:	Dispose of wa	aste according to applicable legislation.
	Non-contamir	nated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.2 UN proper shipping name

ADR/RID, ADN, IMDG, IATA-DGR: Not restricted

14.3 Transport hazard class(es)

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.4 Packing group

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant - IMDG:

14.6 Special precautions for user

no

No dangerous good in sense of these transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations - Germany

Storage class:	12 = Non-combustible liquids	
Water Hazard Class:	1 = slightly hazardous to water	
Technical guidance air:	5.2.2	
Information on working limitations:		
	Observe employment restrictions for young people.	
Further regulations, limitations and legal requirements:		
	No data available	



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National regulations - EC member states

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3, 75

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Wording of the H-phrases und	ler paragraph 2 and 3:
5	H302 = Harmful if swallowed.
	H315 = Causes skin irritation.
	H318 = Causes serious eye damage.
	H319 = Causes serious eye irritation.
	H412 = Harmful to aquatic life with long lasting effects.
Reason of change:	General revision
Date of first version:	29.9.2008
Department issuing data shee	tt see section 1: Department responsible for information
Abbreviations and acronyms:	Acute Tox.: Acute toxicity
	ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road Aquatic Chronic: Hazardous to the aquatic environment - chronic
	Aquate Chronic, Hazardous to the aquate environment - original As/NZS: Australian Standards/New Zealand Standards
	CAS: Chemical Abstracts Service
	CFR: Code of Federal Regulations
	CLP: Classification, Labelling and Packaging
	DMEL: Derived minimal effect level
	DNEL: Derived no-effect level
	EC: European Community
	EC50: Effective Concentration 50%
	EN: European Standard
	EQ: Excepted quantities
	EU: European Union
	Eye Dam.: Eye damage Eye Irrit.: Eye irritation
	LYE influence of the second seco
	IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
	IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
	IMDG Code: International Maritime Dangerous Goods Code
	LC50: Median lethal concentration
	LD50: Lethal dose 50%
	MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
	NOEC: No Observed Effect Concentration
	OSHA: Occupational Safety and Health Administration
	PBT: Persistent, bioaccumulative and toxic
	PNEC: Predicted no-effect concentration
	REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
	RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
	Skin Irrit.: Skin irritation TRGS: Technical Rules for Hazardous Substances
	vPvB: Very persistent and very bioaccumulative
	verve. Very persistent and very blockcumulative neet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the produc

late at time of revision. It does not represent a guarantee for the properties of the product described on in this o blished to our best knowl and was updge in terms of the legal warranty regulations.