

Safety Data Sheet dated 3/9/2021, version 5

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Mixture identification: Trade name: E108 - SOLUZIONE PENNINO Trade code: E108 CAS number: 10489-46-0 EC number: 234-014-5 1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use: Galvanic, base and lab chemistry 1.3. Details of the supplier of the safety data sheet Company: CABRO SPA - AREZZO Road Setteponti 141 52100 - Italy CABRO SPA Phone n. +39 0575 984442 Office hours: 9-13 / 14.30-17.30 Competent person responsible for the safety data sheet: info@cabro.it 1.4. Emergency telephone number CABRO SPA Phone n. +39 0575 984442 Office hours: 9-13 / 14.30-17.30 Poison Information Center - 24/24h Careggi Hospital (Florence) - Phone +39 055 7947819 Poison Information Center - 24/24h Foggia Hospital - Phone +39 0881-732326 Poison Information Center - 24/24h Bergamo Hospital - Phone +39 800 883300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture EC regulation criteria 1272/2008 (CLP)
♦ Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.
♦ Danger, Eye Dam. 1, Causes serious eye damage.
Adverse physicochemical, human health and environmental effects: No other hazards
2.2. Label elements

Hazard pictograms:



Danger Hazard statements: H314 Causes severe skin burns and eye damage. Precautionary statements: P280 Wear protective gloves/clothing and eye/face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse

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skin with water [or shower]. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor. P501 Dispose of contents/container in accordance with applicable regulations. Special Provisions: None Contains sulphuric acid ... % Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards vPvB Substances: None - PBT Substances: None Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

- 3.1. Substances
 - N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	ldent. Numb	er	Classification
>= 30% - < 40%	sulphuric acid %	Index number: CAS: EC: REACH No.:	7664-93-9 231-639-5	 ♦ 3.2/1A Skin Corr. 1A H314 Specific Concentration Limits: 5% <= C < 15%: Skin Irrit. 2 H315 5% <= C < 15%: Eye Irrit. 2 H319 C >= 15%: Skin Corr. 1A H314
>= 3% - < 5%	Rhodium sulfate	CAS: EC:	10489-46-0 234-014-5	 ^① 3.3/2 Eye Irrit. 2 H319 ^① 3.8/3 STOT SE 3 H335 ^① 3.2/2 Skin Irrit. 2 H315

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

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Do NOT induce vomiting. Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY. In case of Inhalation: Remove casualty to fresh air and keep warm and at rest. 4.2. Most important symptoms and effects, both acute and delayed None 4.3. Indication of any immediate medical attention and special treatment needed In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Treatment: None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2). Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale combustion gases

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures For non emergency personnel: Wear personal protection equipment.

Remove persons to safety.

Remove persons to salety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

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Advice on general occupational hygiene: Contamined clothing should be changed before entering eating areas. Do not eat or drink while working. 7.2. Conditions for safe storage, including any incompatibilities Keep away from food, drink and feed. Incompatible materials: None in particular. Instructions as regards storage premises: Adequately ventilated premises. 7.3. Specific end use(s) None in particular **SECTION 8: Exposure controls/personal protection** 8.1. Control parameters sulphuric acid ... % - CAS: 7664-93-9 EU - TWA(8h): 0.05 mg/m3 - Notes: thoracic fraction ACGIH - TWA(8h): 0.2 mg/m3 - Notes: (T), A2(M) - Pulm func **DNEL Exposure Limit Values** N.A. **PNEC Exposure Limit Values** N.A. 8.2. Exposure controls Eye protection: Use close fitting safety goggles, don't use eye lens. Protection for skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. Protection for hands: Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. Respiratory protection: Not needed for normal use. Thermal Hazards: None Environmental exposure controls: None Appropriate engineering controls: None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Appearance and colour:	Liquid,light orange		
Odour:	odorless		
Odour threshold:	N.A.		
pH:	<2		
Melting point / freezing point:	N.A.		

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Initial boiling point and boiling range:	N.A.	
Flash point:	N.A.	
Evaporation rate:	N.A.	
Solid/gas flammability:	N.A.	
Upper/lower flammability or explosive limits:	N.A.	
Vapour pressure:	N.A.	
Vapour density:	N.A.	
Relative density:	N.A.	
Solubility in water:	Soluble	
Solubility in oil:	N.A.	
Partition coefficient (n- octanol/water):	N.A.	
Auto-ignition temperature:	N.A.	
Decomposition temperature:	N.A.	
Viscosity:	N.A.	
Explosive properties:	N.A.	
Oxidizing properties:	N.A.	

9.2. Other information

Properties	Value	Method:	Notes	
Miscibility:	N.A.			
Fat Solubility:	N.A.			
Conductivity:	N.A.			
Substance Groups relevant properties	N.A.			

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions 10.2. Chemical stability Stable under normal conditions

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10.3. Possibility of hazardous reactions	
None	
10.4. Conditions to avoid	
Stable under normal conditions.	
10.5. Incompatible materials	
None in particular.	
10.6. Hazardous decomposition products	
None.	
SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Toxicological information of the product:	
EŤ08 - SOLUZIONE PENNINO - CAS: 10489-46-0	
a) acute toxicity	
Not classified	
Based on available data, the classification criteria are not met	
b) skin corrosion/irritation	
The product is classified: Skin Corr. 1A H314	
c) serious eye damage/irritation	
The product is classified: Eye Dam. 1 H318	
d) respiratory or skin sensitisation	
Not classified	
Based on available data, the classification criteria are not met	
e) germ cell mutagenicity	
Not classified	
Based on available data, the classification criteria are not met	
f) carcinogenicity	
Not classified	
Based on available data, the classification criteria are not met	
g) reproductive toxicity	
Not classified	
Based on available data, the classification criteria are not met	
h) STOT-single exposure	
Not classified	
Based on available data, the classification criteria are not met	
i) STOT-repeated exposure	
Not classified	
Based on available data, the classification criteria are not met	
j) aspiration hazard	
Not classified	
Based on available data, the classification criteria are not met	
Toxicological information of the main substances found in the product:	
sulphuric acid % - CAS: 7664-93-9	
a) acute toxicity:	
Test: LD50 - Route: Oral - Species: Rat = 2140 mg/kg	
Test: LC50 - Route: Inhalation Vapour - Species: Rat = 0.375 mg/l - Duration: 4h	

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. E108 - SOLUZIONE PENNINO - CAS: 10489-46-0 Not classified for environmental hazards Based on available data, the classification criteria are not met 12.2. Persistence and degradability E108/5 Page n. 6 of 9



N.A. 12.3. Bioaccumulative potential N.A. 12.4. Mobility in soil N.A. 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None 12.6. Other adverse effects None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



14.1. UN number	
ADR-UN Number:	3264
IATA-UN Number:	3264
IMDG-UN Number:	3264
14.2. UN proper shipping name	
ADR-Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric
	acid %)
IATA-Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric
	acid %)
IMDG-Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric
	acid %)
14.3. Transport hazard class(es)	
ADR-Class:	8
ADR - Hazard identification nu	mber: 80
IATA-Class:	8
	8
IMDG-Class:	8
14.4. Packing group	
ADR-Packing Group:	
IATA-Packing group:	
IMDG-Packing group:	11
14.5. Environmental hazards	
ADR-Enviromental Pollutant:	No
IMDG-Marine pollutant:	No
14.6. Special precautions for user	
ADR-Subsidiary hazards:	-
ADR-S.P.:	274
ADR-Transport category (Tunr	nel restriction code): 2 (E)
IATA-Passenger Aircraft:	851
IATA-Subsidiary hazards:	-
IATA-Cargo Aircraft:	855
IATA-S.P.:	A3 A803
IATA-ERG:	8L

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 IMDG-EmS:
 F-A,

 S-B

 IMDG-Subsidiary hazards:

 IMDG-Stowage and handling:
 Category B SW2

 IMDG-Segregation:
 SGG1 SG36 SG49

 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

 N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) 2015/830 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: **Restriction 3** Restrictions related to the substances contained: No restriction. Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive) Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 None 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

- H314 Causes severe skin burns and eye damage.
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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Hazard class and hazard category	Code	Description
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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