

#### "Reagent R2 ""sulfuric acid N/20" for TAC determination with Polymetron 8810" Revision date: 10.03.2022 Product code: 17379 Page 1 of 9 SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier "Reagent R2 ""sulfuric acid N/20" for TAC determination with Polymetron 8810" UFI: E24J-A163-900K-UXQE 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the substance/mixture Laboratory chemicals Industrial uses: Uses of substances as such or in preparations at industrial sites Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Uses advised against Do not use for private purposes (household). 1.3. Details of the supplier of the safety data sheet Fa. Bernd Kraft GmbH Company name: Street: Stempelstraße 6 Place: D-47167 Duisburg Telephone: 0203/5194-0 Telefax: 0203/5194-290 info@berndkraft.de e-mail: Abteilung Produktsicherheit Contact person: Telephone: 0203/5194-107/117 e-mail: produktsicherheit@berndkraft.de www.berndkraft.de Internet: Responsible Department: Abteilung Produktsicherheit 1.4. Emergency telephone For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: number: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted) **Further Information**

This product is a mixture. REACH Registration Number see section 3.

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008 Met. Corr. 1; H290

Full text of hazard statements: see SECTION 16.

# 2.2. Label elements

### Regulation (EC) No 1272/2008

# Hazard components for labelling sulphuric acid 0,25 %

Signal word: Warning

orginal mora.

Pictograms:



# Hazard statements

H290

P234

May be corrosive to metals.

# **Precautionary statements**

Keep only in original packaging



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P390 P406 Absorb spillage to prevent material damage. Store in a corrosion-resistant container with a resistant inner liner.

# 2.3. Other hazards

No data available

# **SECTION 3: Composition/information on ingredients**

# 3.2. Mixtures

#### Chemical characterization

Mixtures in aqueous solution

#### Hazardous components

none (according to Regulation (EC) No 1907/2006 (REACH))

### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

# **General information**

No data available

# After inhalation

Provide fresh air.

#### After contact with skin

Wash immediately with: Water Take off immediately all contaminated clothing and wash it before reuse.

### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

### After ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

# 4.2. Most important symptoms and effects, both acute and delayed

Irritant

### 4.3. Indication of any immediate medical attention and special treatment needed

No data available

### **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

# Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

### Unsuitable extinguishing media

no restriction

# 5.2. Special hazards arising from the substance or mixture

Non-combustible liquids Hazardous combustion products In case of fire may be liberated: Sulphur oxides



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# 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

# Additional information

Suppress gases/vapours/mists with water spray jet.

# **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Corrosive to metals.

# For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment. Avoid contact with skin, eyes and clothes. Remove persons to safety. Emergency procedures Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

# 6.3. Methods and material for containment and cleaning up

# For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

### Other information

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

# 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

# Advice on safe handling

Read label before use.

# Advice on protection against fire and explosion

Usual measures for fire prevention.

### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

### Further information on handling

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. Take off immediately all contaminated clothing and wash it before reuse.

# 7.2. Conditions for safe storage, including any incompatibilities



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# Requirements for storage rooms and vessels

Corrosive to metals.

Unsuitable container/equipment material: Metal, Light metal

The product develops hydrogen in an aqueous solution in contact with metals.

### Further information on storage conditions

Keep container tightly closed.

# 7.3. Specific end use(s)

Laboratory chemicals

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# 8.2. Exposure controls

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

# Individual protection measures, such as personal protective equipment

#### Eye/face protection

goggles Wear eye/face protection.

#### Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

# Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing. Wash hands before breaks and after work.

# **Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation

# **Environmental exposure controls**

Do not allow to enter into surface water or drains.

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state:

Liquid



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Colour: c	colourless	
Odour: o	odourless	
Odour threshold: N	No data available	
Changes in the physical state		
Melting point/freezing point:	No data available	
Boiling point or initial boiling point and boiling range:	No data available	
Sublimation point:	No data available	
Softening point:	No data available	
Pour point: No data available:	No data available	
Flash point:	No data available	
Flammability	No data availabla	
Solid/liquid: Gas:	No data available No data available	
Explosive properties No data available		
Lower explosion limits:	No data available	
Upper explosion limits:	No data available	
Auto-ignition temperature:	No data available	
Self-ignition temperature		
Solid:	No data available	
Gas:	No data available	
Decomposition temperature:	No data available	
pH-Value:	acidic	
Viscosity / dynamic:	No data available	
Viscosity / kinematic:	No data available	
Flow time:	No data available	
Water solubility:	completely miscible	
Solubility in other solvents No data available		
Dissolution rate:	No data available	
Partition coefficient n-octanol/water:	No data available	
Dispersion stability:	No data available	
Vapour pressure:	No data available	
Vapour pressure:	No data available	
Density:	~1 g/cm³	
Relative density:	No data available	
Bulk density:	No data available	
Relative vapour density:	No data available	
Particle characteristics:	No data available	
9.2. Other information		
Information with regard to physical hazard Sustaining combustion:	d classes No data available	
Oxidizing properties		
No data available		

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No data available

No data available

No data available

No data available

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# Other safety characteristics

Solvent separation test: Solvent content: Solid content:

Evaporation rate:

# **Further Information**

Corrosive to metals.

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

Corrosive to metals.

# 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

# 10.3. Possibility of hazardous reactions

Metal

The product develops hydrogen in an aqueous solution in contact with metals.

# 10.4. Conditions to avoid

No data available

# 10.5. Incompatible materials

Cellulose

Metal

The product develops hydrogen in an aqueous solution in contact with metals.

### 10.6. Hazardous decomposition products

In case of fire may be liberated: SECTION 5: Firefighting measures

# Further information

No data available

# **SECTION 11: Toxicological information**

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

### Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

### Acute toxicity

Based on available data, the classification criteria are not met.

# Irritation and corrosivity

Based on available data, the classification criteria are not met.

### Sensitising effects

Based on available data, the classification criteria are not met.

### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

# STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

# Aspiration hazard

Based on available data, the classification criteria are not met.



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# according to Regulation (EC) No 1907/2006

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#### Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

### Additional information on tests

There are no data available on the preparation/mixture itself.

#### Practical experience

There are no data available on the preparation/mixture itself.

# 11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the preparation/mixture itself.

#### Other information

There are no data available on the preparation/mixture itself.

#### Further information

There are no data available on the preparation/mixture itself.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

There are no data available on the mixture itself.

# 12.2. Persistence and degradability

There are no data available on the mixture itself.

# 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

# 12.4. Mobility in soil

There are no data available on the mixture itself.

# 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. There are no data available on the mixture itself.

# 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

There are no data available on the mixture itself.

# 12.7. Other adverse effects

Discharge into the environment must be avoided.

# **Further information**

There are no data available on the mixture itself.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

# **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

# Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

# **SECTION 14: Transport information**

#### Land transport (ADR/RID)

14.1. UN number or ID number:	UN 3264
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid)
14.3. Transport hazard class(es):	8



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14.4. Packing group:	III	
Hazard label:	8	
Classification code:	C1	
Special Provisions:	274	
Limited quantity:	5 L	
Excepted quantity:	E1	
Transport category:	3	
Hazard No:	80	
Tunnel restriction code:	E	
Inland waterways transport (ADN)		
14.1. UN number or ID number:	UN 3264	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid)	
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
Classification code:	C1	
Special Provisions:	274	
Limited quantity:	5 L	
Excepted quantity:	E1	
Marine transport (IMDG)		
14.1. UN number or ID number:	UN 3264	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid)	
14.3. Transport hazard class(es):		
14.4. Packing group:		
Hazard label:	8	
Special Provisions:	223, 274	
Limited quantity:	5 L E1	
Excepted quantity: EmS:		
	F-A, S-B	
Air transport (ICAO-TI/IATA-DGR)		
<u>14.1. UN number or ID number:</u>	UN 3264	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid)	
<u>14.3. Transport hazard class(es):</u>	8	
14.4. Packing group:	III	
Hazard label:	8	
Special Provisions:	A3 A803	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	852	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	856	
IATA-max. quantity - Cargo:	60 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	No	
SECTION 15: Regulatory information		

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

EU regulatory information Information according to 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)



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National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).	
Water hazard class (D):	non-hazardous to water	

### **SECTION 16: Other information**

# Changes

This data sheet contains changes from the previous version in section(s): 1,9,11,12.

### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data

# Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.

# **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)