

**Safety Data Sheet dated 12/10/2021, version 3**

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## **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

### **1.1. Product identifier**

Identification of the substance

Trade name: Z034 - ACIDO SOLFORICO  
Trade code: Z034  
CAS number: 7664-93-9  
EC number: 231-639-5

### **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

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## **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.

Specific Concentration Limits

C >= 15%: Skin Corr. 1A H314  
5% <= C < 15%: Skin Irrit. 2 H315  
5% <= C < 15%: Eye Irrit. 2 H319

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:

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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 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

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	Ident. Number	Classification
>= 90%	sulphuric acid ... %	Index number: 016-020-00-8 CAS: 7664-93-9 EC: 231-639-5 REACH No.: 01-2119458838-20	⚠ 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

## 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 ophthalmologist immediately.  
Protect uninjured eye.

In case of Ingestion:

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

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## **SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

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.

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## **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.

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

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## **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.

Advice on general occupational hygiene:

Contaminated 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

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

**8.1. Control parameters**

Z034 - ACIDO SOLFORICO - CAS: 7664-93-9

EU - TWA(8h): 0.05 mg/m<sup>3</sup> - Notes: thoracic fraction

ACGIH - TWA(8h): 0.2 mg/m<sup>3</sup> - Notes: (T), A2(M) - Pulm func

sulphuric acid ... % - CAS: 7664-93-9

EU - TWA(8h): 0.05 mg/m<sup>3</sup> - Notes: thoracic fraction

ACGIH - TWA(8h): 0.2 mg/m<sup>3</sup> - 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

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**SECTION 9: Physical and chemical properties**

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

Properties	Value	Method:	Notes
Appearance and colour:	Liquid, Colourless	--	--
Odour:	Characteristic	--	--
Odour threshold:	N.A.	--	--
pH:	<1	--	--
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

- 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.

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## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

Toxicological information of the product:

Z034 - ACIDO SOLFORICO - CAS: 7664-93-9

- 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  
Not classified  
Based on available data, the classification criteria are not met
- 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

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## **SECTION 12: Ecological information**

### **12.1. Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Z034 - ACIDO SOLFORICO - CAS: 7664-93-9

Not classified for environmental hazards

Based on available data, the classification criteria are not met

- 12.2. Persistence and degradability  
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

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### 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.

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### SECTION 14: Transport information



#### 14.1. UN number

ADR-UN Number: 1830  
IATA-UN Number: 1830  
IMDG-UN Number: 1830

#### 14.2. UN proper shipping name

ADR-Shipping Name: SULPHURIC ACID with more than 51% acid  
IATA-Shipping Name: SULPHURIC ACID with more than 51% acid  
IMDG-Shipping Name: SULPHURIC ACID with more than 51% acid

#### 14.3. Transport hazard class(es)

ADR-Class: 8  
ADR - Hazard identification number: 80  
IATA-Class: 8  
IATA-Label: 8  
IMDG-Class: 8

#### 14.4. Packing group

ADR-Packing Group: II  
IATA-Packing group: II  
IMDG-Packing group: II

#### 14.5. Environmental hazards

ADR-Environmental Pollutant: No  
IMDG-Marine pollutant: No

#### 14.6. Special precautions for user

ADR-Subsidiary hazards: -  
ADR-S.P.: -  
ADR-Transport category (Tunnel restriction code): 2 (E)  
IATA-Passenger Aircraft: 851  
IATA-Subsidiary hazards: -  
IATA-Cargo Aircraft: 855  
IATA-S.P.: -  
IATA-ERG: 8L  
IMDG-EmS: F-A,  
S-B

IMDG-Subsidiary hazards: -  
IMDG-Stowage and handling: Category C SW15  
IMDG-Segregation: -

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

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## **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:

Restriction 75

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.

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## **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.



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**Z034 - ACIDO SOLFORICO**



<b>Hazard class and hazard category</b>	<b>Code</b>	<b>Description</b>
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

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

<b>Classification according to Regulation (EC) Nr. 1272/2008</b>	<b>Classification procedure</b>
Skin Corr. 1A, H314	Calculation method

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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