



# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

## Sulfuric acid 15-51%

Version number: 6.0  
Replaces version of: 2018-10-11 (5)

Revision: 2020-12-09  
First version: 27.02.2013

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

#### 1.1 Product identifier

<b>Trade name</b>	<u>Sulfuric acid 15-51%</u>
<b>Registration number (REACH)</b>	Not relevant (mixture).
<b>CAS number</b>	not relevant (mixture)

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

<b>Relevant identified uses</b>	Chemicals for various applications
<b>Uses advised against</b>	Do not use for squirting or spraying Do not use for products which come into direct contact with the skin

#### 1.3 Details of the supplier of the safety data sheet

BERGCHEMIE J.C.Bröcking & Co. GmbH  
Rudolfstrasse 14  
42285 Wuppertal  
Germany

Telephone: ++49 (0) 202 - 45 60 60  
Telefax: ++49 (0) 202 / 44 79 32

**e-mail (competent person)** [sdb@csb-online.de](mailto:sdb@csb-online.de)

Please do not use this e-mail address to ask for the latest safety data sheet. For this purpose contact BERGCHEMIE J.C.Bröcking & Co. GmbH.

#### 1.4 Emergency telephone number

As above or nearest toxicological information centre.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008 (CLP)

Classification				
Section	Hazard class	Category	Hazard class and category	Hazard statement
2.16	substance or mixture corrosive to metals	1	Met. Corr. 1	H290
3.2	skin corrosion/irritation	1A	Skin Corr. 1A	H314
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318

# Sulfuric acid 15-51%

For full text of abbreviations: see SECTION 16

## The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

## 2.2 Label elements

### Labelling according to Regulation (EC) No 1272/2008 (CLP)

**Signal word** danger

### Pictograms

**GHS05**



### Hazard statements

**H290** May be corrosive to metals.

**H314** Causes severe skin burns and eye damage.

### Precautionary statements

**P280** Wear protective gloves/protective clothing/eye protection/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/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.

**Hazardous ingredients for labelling** sulfuric acid

## 2.3 Other hazards

There is no additional information.

### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## SECTION 3: Composition/information on ingredients


### 3.1 Substances

Not relevant (mixture).

### 3.2 Mixtures

# Sulfuric acid 15-51%

## Description of the mixture

Hazardous ingredients				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
sulfuric acid	CAS No 7664-93-9  EC No 231-639-5  Index No 016-020-00-8  REACH Reg. No 01-2119458838-20	15 – 51	Met. Corr. 1 / H290 Skin Corr. 1A / H314 Eye Dam. 1 / H318	

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Self-protection of the first aider.

Take off immediately all contaminated clothing.

In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following inhalation

Provide fresh air.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.

Call a physician immediately. Causes poorly healing wounds.

#### Following eye contact

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

#### Following ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Get immediate medical advice/attention.

#### Notes for the doctor

Subsequent observance for pneumonia and pulmonary oedema.

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

Causes poorly healing wounds.

Causes severe skin burns and eye damage.

# Sulfuric acid 15-51%

---

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

None.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Non-combustible.

Co-ordinate firefighting measures to the fire surroundings.

### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

Substance or mixture corrosive to metals.

### 5.3 Advice for firefighters

Keep containers cool with water spray.

In case of fire and/or explosion do not breathe fumes.

Co-ordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

#### Special protective equipment for firefighters

use suitable breathing apparatus

## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Avoid inhaling sprayed product.

Do not get in eyes, on skin, or on clothing.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 Environmental precautions

In case of formation of gases/vapours/mists suppress with water spray

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

### 6.3 Methods and material for containment and cleaning up

#### Advice on how to clean up a spill

Collect spillage.

Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

# Sulfuric acid 15-51%

---

## **Appropriate containment techniques**

Use of adsorbent materials.

## **Other information relating to spills and releases**

Place in appropriate containers for disposal.

Ventilate affected area.

## **6.4 Reference to other sections**

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes.

Do not breathe mist/vapours/spray.

#### **Measures to prevent fire as well as aerosol and dust generation**

Use local and general ventilation.

Never add water to this product.

#### **Specific notes/details**

None.

#### **Handling of incompatible substances or mixtures**

Do not mix with alkali.

Never add water to this product.

#### **Keep away from**

organic absorbing material, pulp/paper, caustic solutions, strong oxidisers, metals, textiles

#### **Measures to protect the environment**

Avoid release to the environment.

#### **Advice on general occupational hygiene**

Do not eat, drink and smoke in work areas.

Wash hands after use.

Preventive skin protection (barrier creams/ointments) is recommended.

Remove contaminated clothing and protective equipment before entering eating areas.

Take off immediately all contaminated clothing.

Wash contaminated clothing before reuse.

### **7.2 Conditions for safe storage, including any incompatibilities**

#### **Corrosive conditions**

Store in corrosive resistant container with a resistant inner liner.

#### **Flammability hazards**

None.

# Sulfuric acid 15-51%

## Incompatible substances or mixtures

Incompatible materials: see section 10.  
Observe hints for combined storage.

## Protect against external exposure, such as

frost

## Consideration of other advice

Keep away from food, drink and animal feeding stuffs.

## Ventilation requirements

Provision of sufficient ventilation.

## Specific designs for storage rooms or vessels

Keep container tightly closed and in a well-ventilated place.

Keep cool.

Store in a dry place.

## Packaging compatibilities

Keep only in original container.

Only packagings which are approved (e.g. acc. to ADR) may be used.

## 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)							
Country	Name of agent	CAS No	Identifier	TWA [mg/m <sup>3</sup> ]	STEL [mg/m <sup>3</sup> ]	Notation	Source
EU	sulfuric acid	7664-93-9	IOELV	0.05		t, mist	2009/161/EU
GB	sulfuric acid	7664-93-9	WEL	0.05		t, mist	EH40/2005

#### Notation

mist as mists

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

t thoracic fraction

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

## Sulfuric acid 15-51%

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
sulfuric acid	7664-93-9	DNEL	0.05 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects

Relevant PNECs of components of the mixture				
Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment
sulfuric acid	7664-93-9	PNEC	0.003 mg/l	freshwater
sulfuric acid	7664-93-9	PNEC	0 mg/l	marine water
sulfuric acid	7664-93-9	PNEC	8.8 mg/l	sewage treatment plant (STP)
sulfuric acid	7664-93-9	PNEC	0.002 mg/kg	freshwater sediment
sulfuric acid	7664-93-9	PNEC	0.002 mg/kg	marine sediment

### 8.2 Exposure controls

#### Appropriate engineering controls

General ventilation.

#### Individual protection measures (personal protective equipment)

##### Eye/face protection

Wear eye/face protection.

##### Hand protection

Protective gloves		
Material	Material thickness	Breakthrough times of the glove material
CR: chloroprene (chlorobutadiene) rubber	≥ 0,5 mm	>480 minutes (permeation: level 6)
NBR: acrylonitrile-butadiene rubber	≥ 0,35 mm	>480 minutes (permeation: level 6)
IIR: isobutene-isoprene (butyl) rubber	≥ 0,5 mm	>480 minutes (permeation: level 6)
FKM: fluoro-elastomer	≥ 0,4 mm	>480 minutes (permeation: level 6)

# Sulfuric acid 15-51%

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

## Respiratory protection

In case of inadequate ventilation wear respiratory protection.

## Environmental exposure controls

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	Liquid
Form	Fluid
Colour	Colourless
Odour	Odourless
Odour threshold	These information are not available

#### Other safety parameters

pH (value)	<1 (20 °C) Acid
Melting point/freezing point	-65 °C
Initial boiling point and boiling range	114 °C
Flash point	Not applicable
Evaporation rate	These information are not available
Flammability (solid, gas)	Not relevant (fluid)

#### Explosive limits

Lower explosion limit (LEL)	These information are not available
Upper explosion limit (UEL)	These information are not available
Vapour pressure	These information are not available
Density	1.28 g/cm <sup>3</sup> at 20 °C
Vapour density	These information are not available



## Sulfuric acid 15-51%

---

Relative density	These information are not available
<b>Solubility(ies)</b>	
<b>Water solubility</b>	Miscible in any proportion
<b>Partition coefficient</b>	
n-octanol/water (log KOW)	These information are not available
Auto-ignition temperature	These information are not available
Relative self-ignition temperature for solids	Not relevant (Fluid)
Decomposition temperature	These information are not available
<b>Viscosity</b>	
<b>Kinematic viscosity</b>	These information are not available
<b>Dynamic viscosity</b>	These information are not available
Explosive properties	Not explosive
Oxidising properties	Shall not be classified as oxidising

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Substance or mixture corrosive to metals.

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

Reacts with water, releasing excess pressure or heat.

Strong exothermic reaction with strong alkalis.

Light metals (due to the release of hydrogen in an acid/alkaline medium).

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

bases, oxidisers

Release of flammable materials with:

light metals (due to the release of hydrogen in an acid/alkaline medium)

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

# Sulfuric acid 15-51%

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Classification procedure

If not otherwise specified the classification is based on:  
Ingredients of the mixture (additivity formula).

#### Classification according to GHS (1272/2008/EC, CLP)

#### Acute toxicity

Test data are not available for the complete mixture.

Acute toxicity of components of the mixture						
Name of substance	CAS No	Exposure route	Endpoint	Value	Species	Source
sulfuric acid	7664-93-9	oral	LD50	2,140 mg/kg	rat	ECHA

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### Classification procedure

The classification is based on an extreme pH value.

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitisation

##### Skin sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

##### Respiratory sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Germ cell mutagenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Carcinogenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

# Sulfuric acid 15-51%

## Specific target organ toxicity - single exposure

Classification could not be established because:  
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Specific target organ toxicity - repeated exposure

Classification could not be established because:  
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity (acute)

Test data are not available for the complete mixture.

#### Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Method	Source	Exposure time
sulfuric acid	7664-93-9	EC50	>100 mg/l	daphnia magna	OECD Guideline 202	ECHA	48 h
sulfuric acid	7664-93-9	ErC50	>100 mg/l	algae (Desmod-esmus sub-spicatus)	OECD Guideline 201	ECHA	72 h
sulfuric acid	7664-93-9	LC50	16 – 28 mg/l	bluegill (Lepomis mac-rochirus)		Lit.	96 h

#### Aquatic toxicity (chronic)

Test data are not available for the complete mixture.

#### Aquatic toxicity (chronic) of components of the mixture

Aquatic toxicity (chronic) of components of the mixture							
Name of substance	CAS No	Endpoint	Value	Species	Source	Exposure time	
sulfuric acid	7664-93-9	NOEC	0.31 mg/l	Salvelinus fontinalis	Lit.	213 d	

### 12.2 Persistence and degradability

#### Persistence

The study does not need to be conducted because the substance is inorganic.

# Sulfuric acid 15-51%

## 12.3 Bioaccumulative potential

Test data are not available for the complete mixture.

## 12.4 Mobility in soil

No data available.

## 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## 12.6 Other adverse effects

Harmful effect on fish, plankton and other organisms due to pH shift possible.

### Remarks

Keep away from drains, surface and ground water.  
Wassergefährdungsklasse, WGK (water hazard class): 1

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

Completely emptied packages can be recycled.  
Handle contaminated packages in the same way as the substance itself.

### Remarks

Please consider the relevant national or regional provisions.

## SECTION 14: Transport information


14.1	UN number	2796
14.2	UN proper shipping name	SULPHURIC ACID
14.3	Transport hazard class(es)	
	Class	8
14.4	Packing group	II
14.5	Environmental hazards	-
14.6	Special precautions for user	-
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	-

# Sulfuric acid 15-51%


---

## 14.8 Information for each of the UN Model Regulations

### Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).


UN number	2796
Proper shipping name	UN2796, SULPHURIC ACID, 8, II, (E)
Class	8
Classification code	C1
Packing group	II
Danger label(s)	8
	
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Hazard identification No	80
Emergency Action Code	2R

### International Maritime Dangerous Goods Code (IMDG)

UN number	2796
Proper shipping name	UN2796, SULPHURIC ACID, 8, II
Class	8
Marine pollutant	-
Packing group	II
Danger label(s)	8
	
Special provisions (SP)	-
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-A, S-B
Stowage category	B
Segregation group	1 - Acids.

# Sulfuric acid 15-51%

## International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	2796
Proper shipping name	UN2796, Sulphuric acid, 8, II
Class	8
Packing group	II
Danger label(s)	8
	
Exempted quantities (EQ)	E2
Limited quantities (LQ)	0,5 L

## SECTION 15: Regulatory information

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

#### Relevant provisions of the European Union (EU)

#### Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions (REACH, Annex XVII)				
Name of substance	Name acc. to inventory	Type of registration	Restriction	No
Sulfuric acid 15-51%	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	1907/2006/EC annex XVII	R3	3

#### Legend

- R3
1. Shall not be used in:
    - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
    - tricks and jokes,
    - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
  2. Articles not complying with paragraph 1 shall not be placed on the market.
  3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
    - can be used as fuel in decorative oil lamps for supply to the general public, and,
    - present an aspiration hazard and are labelled with R65 or H304,
  4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
  5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
    - (a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';
    - (b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung

# Sulfuric acid 15-51%

## Legend

damage';

(c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.

6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.

7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

## List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

## Seveso Directive

Not assigned.

## Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

None of the ingredients are listed.

## Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

## Water Framework Directive (WFD)

None of the ingredients are listed.

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Sulfuric acid 15-51%	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		A)	

## Legend

A) Indicative list of the main pollutants

## Regulation 98/2013/EU on the marketing and use of explosives precursors

Not all ingredients are listed.

## Sulfuric acid 15-51%

<b>Explosives precursors which are subject to restrictions</b>				
<b>Name of substance</b>	<b>CAS No</b>	<b>Type of registration</b>	<b>CN Code 1</b>	<b>CN Code 2</b>
sulfuric acid	7664-93-9	Annex II	2807 00 10	3824 90 97

### Legend

annex II Substances on their own or in mixtures or in substances for which suspicious transactions shall be reported

CN Code 1 Combined Nomenclature (CN) code for a separate chemically defined compound meeting the requirements of Note 1 to Chapter 28 or 29 of the CN, respectively

CN Code 2 Combined Nomenclature (CN) code for a mixture without constituents (e.g. mercury, precious or rare-earth metals or radioactive substances) which would determine classification under another CN code

### Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)

None of the ingredients are listed.

### Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)

None of the ingredients are listed.

## 15.2 Chemical Safety Assessment

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

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### Indication of changes (revised safety data sheet)

Indication of changes: Section 4, 7, 9, 15

### Abbreviations and acronyms

<b>Abbr.</b>	<b>Descriptions of used abbreviations</b>
2009/161/EU	Commission Directive establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CN Code	Combined Nomenclature
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level



## Sulfuric acid 15-51%

Abbr.	Descriptions of used abbreviations
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
Met. Corr.	Substance or mixture corrosive to metals
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin

# Sulfuric acid 15-51%

Abbr.	Descriptions of used abbreviations
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
SVHC	Substance of Very High Concern
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

## Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.  
Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Classification procedure

Physical and chemical properties.

Health hazards.

Environmental hazards.

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

## Responsible for the safety data sheet

C.S.B. GmbH  
Düsseldorfer Str. 113  
47809 Krefeld, Germany

Telephone: +49 (0) 2151 - 652086 - 0  
Telefax: +49 (0) 2151 - 652086 - 9  
e-Mail: [info@csb-online.de](mailto:info@csb-online.de)  
Website: [www.csb-online.de](http://www.csb-online.de)

## Disclaimer

This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.