

according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 1 of 11

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

1.1. Product identifier

Resorcinol for analysis, Reag. Ph. Eur.

CAS No: 108-46-3 Index No: 604-010-00-1 EC No: 203-585-2

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

Company name: AnalytiChem GmbH Street: Stempelstraße 6 Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

Further Information

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Acute 1; H400

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:







Safety Data Sheet

according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 2 of 11

Hazard statements

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

Precautionary statements

P273 Avoid release to the environment.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: C6H4(OH)2
Molecular weight: 110,11 g/mol

Hazardous components

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	Classification (Regulation (EC) No 1272/2008)				
108-46-3	resorcinol				
	203-585-2 604-010-00-1				
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1; H302 H315 H319 H400				

Full text of H and EUH statements: see section 16.

Specific Conc. Limits. M-factors and ATE

оросии ост							
CAS No	EC No	Chemical name	Quantity				
	Specific Conc. I	pecific Conc. Limits, M-factors and ATE					
108-46-3	203-585-2 resorcinol		100 %				
dermal: LD50 = 2830 mg/kg; oral: LD50 = 510 mg/kg							

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.

Call a doctor if you feel unwell.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.



according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 3 of 11

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

Consult an ophthalmologist.

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, Methaemoglobin formation

Headache, Cardiac arrhythmias

Blood pressure drop, Dyspnoea

Spasms, Cyanosis (blue coloured blood)

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

Water, to which activated charcoal may be added

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

Combustible solids

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Danger of dust explosion.

Hazardous combustion products

5.3. Advice for firefighters

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

Avoid contact with skin, eyes and clothes.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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 containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Take up carefully when dry. Take up dust-free and set down dust-free.



according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 4 of 11

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

Keep container tightly closed.

Do not breathe dust.

Avoid contact with skin, eyes and clothes.

Read label before use.

Use extractor hood (laboratory).

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Wash contaminated clothing prior to re-use.

Avoid contact with skin, eyes and clothes.

Further information on handling

Wash contaminated clothing before reuse.

Wash hands before breaks and after work.

Draw up and observe skin protection programme.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Store in a place accessible by authorized persons only.

Protect against: Light

Further information on storage conditions

Store in a dry place.

storage temperature: +15°C - +25°C

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
108-46-3	Resorcinol	10	45		TWA (8 h)	



according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 5 of 11

DNEL/DMEL values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
108-46-3	resorcinol					
Worker DNEL,	long-term	inhalation	systemic	5,6 mg/m³		
Worker DNEL, long-term		inhalation	local	132,8 mg/m³		
Worker DNEL, long-term		dermal	systemic	40 mg/kg bw/day		
Consumer DNE	EL, long-term	inhalation	systemic	1,394 mg/m³		
Consumer DNE	EL, long-term	inhalation	local	33 mg/m³		
Consumer DNEL, long-term		dermal	systemic	20 mg/kg bw/day		
Consumer DNEL, long-term		oral	systemic	0,4 mg/kg bw/day		

PNEC values

CAS No	Substance		
Environmental compartment Value			
108-46-3	resorcinol		
Freshwater 0,017 mg/l			
Marine water		0,002 mg/l	
Freshwater sediment (0,08 mg/kg	
Marine sediment		0,008 mg/kg	
Micro-organisms in sewage treatment plants (STP)		0,79 mg/l	
Soil		10 mg/kg	

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

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

Trade name/designation: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: 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).



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 6 of 11

Skin protection

Wear suitable protective clothing.

Wash hands before breaks and after work.

Respiratory protection

Respiratory protection necessary at: dust formation

Filtering device with filter or ventilator filtering device of type:: A-(P2)

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: solid Colour: white

Odour: characteristic
Odour threshold: No data available

Melting point/freezing point:

109-111 °C

Boiling point or initial boiling point and

281 °C

boiling range:

Flammability: No data available 1,4 vol. % Lower explosion limits: Upper explosion limits: No data available 127 °C Flash point: Auto-ignition temperature: 605 °C No data available Decomposition temperature: pH-Value (at 20 °C): 4-6 (100 g/l) Viscosity / kinematic: No data available Water solubility: 1000 g/L

(at 20 °C)

Solubility in other solvents

No data available

Dissolution rate:

Partition coefficient n-octanol/water:

Dispersion stability:

Vapour pressure:

No data available

No data available

No data available

No data available

(at 20 °C)

Vapour pressure:No data availableDensity (at 20 °C):1,28 g/cm³Relative density:No data availableBulk density:600-700 kg/m³Relative vapour density:No data availableParticle characteristics:No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

Danger of dust explosion.

Sustaining combustion:

No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties

No data available



according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 7 of 11

Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available
Solvent content:

No data available
Solid content:

100%
Sublimation point:

No data available
Softening point:

No data available
Pour point:

No data available

No data available:

Viscosity / dynamic:

Flow time:

No data available

No data available

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Danger of dust explosion.

In case of warming: Vapours are heavier than air, spread along floors and form explosive mixtures with air.

10.2. Chemical stability

Protect against: Light, Air

10.3. Possibility of hazardous reactions

Danger of explosion: Nitric acid

Exothermic reaction with: Ammonia (NH3), Amines, Oxidising agent, strong

Violent reaction with:

Alkali (Iye), Anhydrides, Acid chlorides, Iron.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available

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

No data available

Acute toxicity

Harmful if swallowed.

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
108-46-3	resorcinol						
	oral	LD50 mg/kg	510		Food Chem. Toxic. 28:469-482. Reprinted	OECD Guideline 401	
	dermal	LD50 mg/kg	2830	Rabbit	Study report (1962)	other:	



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 8 of 11

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

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.

Information on likely routes of exposure

No data available

Specific effects in experiment on an animal

No data available

Additional information on tests

No data available

Practical experience

No data available

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information

Causes damage to organs. Organs affected:

thyroid gland

Liver and kidney damage

heart

Further information

Irritant, Methaemoglobin formation

Headache, Cardiac arrhythmias

Blood pressure drop, Dyspnoea

Spasms, Cyanosis (blue coloured blood)

SECTION 12: Ecological information

12.1. Toxicity



according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 9 of 11

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
108-46-3	resorcinol						
	Acute fish toxicity	LC50 mg/l	29,5	96 h	Pimephales promelas	Study report (1981)	other: EPA-660/3/75-00 9
	Acute algae toxicity	ErC50 mg/l	> 97	72 h	Pseudokirchneriella subcapitata	Study report (2006)	OECD Guideline 201
	Acute crustacea toxicity	EC50	1 mg/l	48 h	Daphnia magna	Study report (2010)	OECD Guideline 202
	Crustacea toxicity	NOEC mg/l	>= 0,172	21 d	Daphnia magna	Study report (2004)	OECD Guideline 211
	Acute bacteria toxicity	(EC50	79 mg/l)	1	activated sludge of a predominantly domestic sewag	Study report (2010)	OECD Guideline 209

12.2. Persistence and degradability

66,7 %; 14 d OECD- 301C

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
108-46-3	resorcinol	0,8

BCF

CAS No	Chemical name	BCF	Species	Source
108-46-3	resorcinol	3,16		EPISuite v 3.12 (Oct

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Discharge into the environment must be avoided.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

Send to a physico-chemical treatment facility under observation of official regulations.

Do not mix with other wastes.

Do not empty into drains.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 10 of 11

to the industry and process.

SECTION 14: Transport information

14.1. UN number or ID number:UN 287614.2. UN proper shipping name:RESORCINOL

14.3. Transport hazard class(es): 6.1 Ш 14.4. Packing group: Hazard label: 6.1 Classification code: T2 Limited quantity: 5 ka Excepted quantity: E1 Transport category: 2 Hazard No: 60 Tunnel restriction code: Ε

Inland waterways transport (ADN)

14.1. UN number or ID number:UN 287614.2. UN proper shipping name:RESORCINOL

14.3. Transport hazard class(es):6.114.4. Packing group:IIIHazard label:6.1Classification code:T2Special Provisions:802Limited quantity:5 kgExcepted quantity:E1

Marine transport (IMDG)

14.1. UN number or ID number:UN 287614.2. UN proper shipping name:RESORCINOL

14.3. Transport hazard class(es):6.114.4. Packing group:IIIHazard label:6.1Special Provisions:-Limited quantity:5 kgExcepted quantity:E1EmS:F-A, S-A

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:UN 287614.2. UN proper shipping name:RESORCINOL

14.3. Transport hazard class(es):6.114.4. Packing group:IIIHazard label:6.1Limited quantity Passenger:10 kgPassenger LQ:Y645Excepted quantity:E1

IATA-packing instructions - Passenger:670IATA-max. quantity - Passenger:100 kgIATA-packing instructions - Cargo:677IATA-max. quantity - Cargo:200 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance: resorcinol

14.6. Special precautions for user



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Resorcinol for analysis, Reag. Ph. Eur.

Revision date: 22.09.2023 Product code: 27663 Page 11 of 11

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

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 E1 Hazardous to the Aquatic Environment

(SEVESO III):

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

SECTION 16: Other information

Changes

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

Abbreviations and acronyms

Acute Tox: Acute toxicity Skin Irrit: Skin irritation Eye Irrit: Eye irritation

Aquatic Acute: Acute aquatic hazard

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H400 Very toxic to aquatic life.

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.