

Safety Data Sheet
According to Regulation (EC) No 1907/2006, Annex II,
Amended by COMMISSION REGULATION (EU) 2020/878,
According to REGULATION (EC) No 1272/2008



Resorcinol

Version 2.0

Issue date: 18-10-2012

Revision date: 01-01-2023

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: Resorcinol
Additional identification:
Identification of the product: CAS#108-46-3 EC#203-585-2
Index Number:
REACH registration No.:

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

1.2.1 Identified uses:

F-1: Formulation or Repacking - Exposure scenario 1-A (F): Rubber compounding of Resorcinol (general use)
F-2: Formulation or re-packing - Exposure Scenario 2-A (F): Intermediate applications (general use)
F-3: Exposure Scenario 3-A (F): Manufacture of PRF resins (general use)
F-4: Formulation of a hair dye
F-5: Formulation: Use of Phenol Resorcinol Formaldehyde resin as a wood adhesive
F-6: Industrial uses: Uses of substances as such or in preparations* at industrial sites
IW-1: Use at Industrial Sites - Exposure scenario 1-B (IU): Rubber compounding of Resorcinol (general use)
IW-2: Use at industrial sites - Exposure Scenario 2-B (IU): Intermediate applications (general use)
IW-3: Exposure Scenario 3-B (IU): Manufacture of PRF resins (general use)
IW-4: Exposure Scenario 4-B (IU): Manufacture of RF Resins
IW-5: Industrial use of processing aids in processes and products, not becoming part of articles
IW-6: Preparation of glues / Monomer to build up polymers
IW-7: Industrial use of monomers for manufacture of thermo-plastics
IW-8: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
IW-9: Use of Hair Dyes
C-2: Use at industrial site: Use in manufacturing rubber compounds - tires
C-3: Use at industrial site: Use in manufacture of rubber compounds - other rubber products
C-4: Use at industrial site: Dipping - Use in manufacture of rubber compounds
C-5: Use at industrial site: Use of Phenol Resorcinol Formaldehyde resin as a wood adhesive
C-6: Industrial uses: Uses of substances as such or in preparations* at industrial sites

1.2.2 Uses advised against:

PW-1: Skin Peels
C-1: Skin Peels

1.3 Details of the supplier of the safety data sheet:

Supplier: GÜNDÜZ CHEMICAL KİMYASAL ÇÖZÜMLER SAN. TİC. LTD. ŞTİ.
Address: Çamlık Mah. Gönülden Sok. No: 29A Ümraniye/İSTANBUL
Product name: Resorcinol

1.4 Emergency telephone Number:

+86-21-50306558 (Only available during office hours (9:00a.m.-17:30p.m.)

Available outside office hours?

YES

☐

NO

X

Section 2 Hazards Identification

2.1 Classification of the substance or mixture:

2.1.1 Classification of the substance:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Acute Tox. 4	H302
Skin Irrit. 2	H315
Skin Sens. 1B	H317
Eye Dam. 1	H318
STOT SE 1	H370
STOT SE 2	H371
Aquatic Acute 1	H400
Aquatic Chronic 3	H412

For full text of H- phrases: see section 2.2.

2.2 Label elements:

Hazard pictogram(s):



Signal word:

Danger

Hazard statement(s):

H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H370: Causes damage to organs (Affected Organs: CNS and blood effects)
(Route of exposure: Oral).
H371: May cause damage to organs (Affected Organs: Respiratory effects)
(Route of exposure: Oral).
H400: Very toxic to aquatic life.
H412: Harmful to aquatic life with long lasting effects.
P260: Do not breathe dust/fume/ gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/ protective clothing/eye protection/face protection.

Precautionary statement(s):

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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

P308+P311: IF exposed or concerned: Call a POISON CENTER/ doctor.

P310: Immediately call a POISON CENTER/doctor.

P330: Rinse mouth.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national /international regulations.

Supplemental Hazard information (EU) Not applicable.

2.3 Other hazards:

The substance is not PBT / vPvB.

The substance is identified as having endocrine disrupting properties.

Section 3 Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)
Resorcinol	01-2119480136-40-0003	108-46-3	203-585-2	>99.7 % (w/w)	M=1
Phenol	N/A	108-95-2	203-632-7	<0.1 % (w/w)	N/A
Moisture	N/A	-	-	0.2 % (w/w)	N/A

Section 4 First aid measures

4.1 Description of first aid measures:

As in all cases of potential poisoning, Obtain medical advice immediately.

4.1.1 In case of inhalation:

Remove from exposure. If breathing has stopped or is difficult, administer artificial respiration or oxygen as indicated. Seek medical aid.

4.1.2 In case of skin contact:

Remove contaminated clothing. Wipe material from skin. Immediately flush area with large amounts of water for at least 15 minutes. In any irritation is present seek medical aid. Wash contaminated clothing before reuse.

4.1.3 In case of eyes contact:

Remove contact lenses. Immediately flush eyes and surrounding areas with large amounts of lukewarm water for at least 15 minutes. Seek immediate medical aid.

4.1.4 In case of ingestion:

DO NOT ATTEMPT TO GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Remove any evidence of substance from patient's mouth. If victim is conscious and alert, give 8-12 ounces of water or milk. Immediately seek

medical aid.

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further symptoms are possible.

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

Note to physician: Further treatment may be necessary. Contact local Poison Control Center.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section 5 Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use dry chemical, carbon dioxide, steam or water fog.

Unsuitable extinguishing media: Not available

5.2 Special hazards arising from the substance or mixture

Dust (powder) may form explosive mixture in air. Closed containers may explode or rupture when exposed to extreme heat (fire).

In case of fire, the following can be released: Oxides of carbon.

5.3 Advice for firefighters:

Self-contained breathing apparatus with full-face mask and full protective clothing (standard wear).

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Eliminate all sources of ignition. Wear appropriate protective clothing. Avoid breathing vapours. Keep unnecessary people away; isolate hazard area and deny entry. Consider need for evacuation. Stay up wind and keep out of low areas where vapour may accumulate and ignite.

6.1.2 For emergency responders: Wear suitable protective equipment. Apply the same recommendations as above.

6.2 Environmental Precautions:

Do not discharge directly into drains, air, into soil or into the aquatic environment.

6.3 Methods and material for Containment and Cleaning up:

Stop spill/leak if no risk involved. Stay upwind. Shovel back into original dry container or waste receptacle. Flush area with water. Contain runoff from fire control and dilution water.

6.4 Reference to other sections:

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures: Avoid contact with skin or eyes. Avoid prolonged or repeated breathing of dusts. Minimize generation of dust. Observe good personal hygiene practices and recommended procedures.

7.1.2 Advice on general occupational hygiene: Good personal washing routines should be followed. Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities:

Protect from physical damage. Store in a closed, properly labeled, well-ventilated area away from possible sources of ignition.

Other: Do not take internally: Not for use or storage in or around the home. Do not use until manufacturer's precautions have been read/ understood. Vacuum

or wet down dust as a good housekeeping practice. Provide suitable facilities for quick drenching or flushing of the eyes and body.

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits:

Country	Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
				ppm	mg/m ³	ppm	mg/m ³	Note
Belgium	Resorcinol	203-585-2	108-46-3	10	46	20	91	-
Bulgaria	Resorcinol	203-585-2	108-46-3		4-5	-	-	-
Denmark	Resorcinol	203-585-2	108-46-3	10	45	-	-	-
Finland	Resorcinol	203-585-2	108-46-3	10	46	20	91	-
Germany	Resorcinol	203-585-2	108-46-3	4	20 E	-	-	-
Ireland	Resorcinol	203-585-2	108-46-3	10	45	20	90	Sk, IOELV
Lithuania	Resorcinol	203-585-2	108-46-3	10	45	-	-	-
Spain	Resorcinol	203-585-2	108-46-3	10	46	-	-	VLI,ae
Sweden	Resorcinol	203-585-2	108-46-3	10	45	-	-	-
France	Resorcinol	203-585-2	108-46-3	10	45	-	-	-
Slovakia	Resorcinol	203-585-2	108-46-3	10	45	-	-	-
Europe	Resorcinol	203-585-2	108-46-3	10	45	-	-	skin

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values:

Workers - Hazard via inhalation route	Systemic effects-Long term exposure	DNEL=5.6 mg/m ³
Workers - Hazard via inhalation route	Local effects-Long term exposure	DNEL=132.8 mg/m ³
Workers - Hazard via dermal route	Systemic effects-Long term exposure	DNEL=40 mg/kg bw/day
General Population - Hazard via inhalation route	Systemic effects-Long term exposure	DNEL=1.4 mg/m ³
General Population - Hazard via inhalation route	Local effects-Long term exposure	DNEL=33 mg/m ³
General Population - Hazard via dermal route	Systemic effects-Long term exposure	DNEL=20 mg/kg bw/day
General Population - Hazard via oral route	Systemic effects-Long term exposure	DNEL=0.4 mg/kg bw/day
Hazard for aquatic organisms	Freshwater	PNEC=0.017 mg/L
Hazard for aquatic organisms	Marine water	PNEC=0.002 mg/L
Hazard for aquatic organisms	STP	PNEC=0.79 mg/L
Hazard for aquatic organisms	Sediment (freshwater)	PNEC=0.08 mg/kg sediment dw
Hazard for aquatic organisms	Sediment (marine water)	PNEC=0.008 mg/kg sediment dw
Hazard for terrestrial organisms	Soil	PNEC=10 mg/kg soil dw
Hazard for predators	Secondary poisoning	No potential for bioaccumulation

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Provide local exhaust or general room ventilation to minimize exposure to vapours. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection:

Safety glasses; chemical goggles; face shield, as necessary.

Skin protection**Hand protection:**

Thermal protective and/or rubber gloves as required.

They should be replaced immediately if there is any indication of degradation or chemical breakthrough.

Body protection:

In dusty areas wear necessary resistant protective apparel, including necessary head, hand and footwear protection.

Respiratory protection:

If ventilation is inadequate to maintain personal inhalation exposures below TLV (PEL) (OEL), use appropriate MSHA/NIOSH approved respiratory protection to comply with current standards and manufacturer's "instructions" and "Warnings". If within OSHA protection factor, air purifying organic vapor cartridge/canister with particulate filter is acceptable.

Thermal hazards:

Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment. According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	Solid at 20 °C and 101.3 kPa
Colour:	White-slightly colored flake
Odour:	Phenolic
Odour threshold:	Not available
pH:	4.5 at Conc.: 10 vol%
Melting/freezing point/range (°C):	110 °C at 101.3 kPa
Boiling point/range (°C):	277.5 °C at 101.3 kPa
Flash point (°C):	161.5 °C at 1013 hPa (closed cup)
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability:	Non flammable
Ignition temperature (°C):	Not available
Upper/lower explosive limits:	Not available
Vapour pressure:	0.065 Pa at 25 °C
Vapour density:	Not available
Relative Density:	1.278 at 20 °C
Bulk density (kg/m³):	Not available
Water solubility (mg/L):	717000 mg/L at 25 °C
n-Octanol/Water (log Po/w):	Log Kow (Pow): 0.8 at 20 °C
Auto-ignition temperature:	>= 605 - <= 608 °C
Decomposition temperature:	Not available
Viscosity, dynamic (mPa.s):	31 at 150.0 °C; 38 at 140.0 °C
Explosive properties:	Non explosive
Oxidising properties:	Oxidising: no
Molecular Formula:	C ₆ H ₆ O ₂
Molecular Weight (g/mol):	110.11 g/mol

9.2. Other information:

Fat solubility(solvent-oil to be specified)	Not available
etc:	
Surface tension:	72 mN/m at 20 °C and 1000 mg/L
Dissociation constant in water(pKa):	pKa at 20 °C: 9.8
Oxidation-reduction Potential:	Not available

Section 10 Stability and reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions. Acid/alkaline catalyzed reaction with formaldehyde is exothermic.
10.2 Chemical stability:	Stable under standard storage and handling conditions. Sensitivity to light. Sensitive to air.
10.3 Possibility of hazardous reactions:	No dangerous reaction known under conditions of standard use.
10.4 Conditions to avoid:	Incompatible materials. High temperatures. Proximity to sources of ignition. light, dust generation, exposure to air, exposure to moist air or water, heat.
10.5 Incompatible materials:	Strong oxidizing agents, bases, acid chlorides, iron, ferric salts, acid anhydrides, alkalies, albumin, iron salts, antipyrine, methanol, acetanilide, camphor, urethane, and spirit nitrous ether.
10.6 Hazardous decomposition products:	Oxides of carbon.

Section 11 Toxicological information

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

Acute toxicity:	
LD50(Oral, Rat):	510 mg/kg bw
LD50(Dermal, Rabbit):	2830 mg/kg bw
LC0(Inhalation, Rat):	>7800 mg/m ³ (1h)
Skin corrosion/Irritation:	Causes skin irritation.
Serious eye damage/irritation:	Causes serious eye damage.
Respiratory or skin sensitization:	May cause an allergic skin reaction.
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	Causes damage to organs (Affected Organs: CNS and blood effects) (Route of exposure: Oral). May cause damage to organs (Affected Organs: Respiratory effects) (Route of exposure: Oral).
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified
11.2 Information on other hazards	
Endocrine disrupting properties	The substance is identified as having endocrine disrupting properties.
Other information	Not applicable

Section 12 Ecological information

12.1 Toxicity:
Acute (short-term) toxicity:

LC50(96h, Fish):	26.8 mg/L
EC50(48h, Daphnia magna):	1 mg/L
EC50(72h, Algae/aquatic plants):	>97 mg/L
Chronic (long-term) toxicity:	
LOEC(Fish):	320 mg/L (60d)
NOEC(Daphnia magna):	>=172 µg/L
NOEC(Algae/aquatic plants):	97 mg/L (72h)
12.2 Persistence and degradability:	Readily biodegradable.
12.3 Bioaccumulative potential:	BCF (aquatic species): 3.16 dimensionless. Resorcinol is not expected to bioaccumulate.
12.4 Mobility in soil:	Koc at 20 °C: 10.36
12.5 Results of PBT and vPvB assessment:	The substance is not PBT / vPvB.
12.6 Endocrine disrupting properties:	The substance is identified as having endocrine disrupting properties.
12.7 Other adverse effects:	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
12.8 Additional information	Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods:	Dispose of in accordance with all applicable local and national regulations. Use recovery/recycling where feasible, otherwise incineration is the recommended method of disposal. Empty containers may contain hazardous residues. Do not cut, puncture or weld on or near to the container. Labels should not be removed from containers until they have been cleaned. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.
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Section 14 Transport information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)
14. 1 UN number or ID number	2876	2876	2876	2876
14.2 UN Proper shipping name	RESORCINOL	RESORCINOL	RESORCINOL	RESORCINOL
14.3 Transport hazard Class(es)	6.1	6.1	6.1	6.1
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes	Yes	Yes	Yes
14.6 Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2

14.7 Maritime transport in bulk according to IMO instruments	IBC08	IBC08	IBC08	IBC08
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Section 15 Regulatory information

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

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical safety assessment YES ☒ NO ☐

Section 16 Other information

16.1 Indication of changes:

Version 2.0 Amended by (EU) 2020/878

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation for rail International transportation of Dangerous goods

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization

IATA: International Air Transport Association

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

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

Classification according to Regulation (EC) No. 1272/2008		Classification procedure
Acute Tox. 4	H302	On basis of test data
Skin Irrit. 2	H315	On basis of test data
Skin Sens. 1B	H317	On basis of test data
Eye Dam. 1	H318	On basis of test data
STOT SE 1	H370	On basis of test data
STOT SE 2	H371	On basis of test data
Aquatic Acute 1	H400	On basis of test data
Aquatic Chronic 3	H412	On basis of test data

16.5 Relevant H-statements (number and full text):

H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H370: Causes damage to organs (Affected Organs: CNS and blood effects) (Route of exposure: Oral).

H371: May cause damage to organs (Affected Organs: Respiratory effects) (Route of exposure: Oral).

H400: Very toxic to aquatic life.

H412: Harmful to aquatic life with long lasting effects.

16.6 Training instructions:

Not applicable.

16.7 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.8 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.