

UnaveraChemLab GmbH

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.0 Revision Date 14.12.2012 Print Date 28.11.2016 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

1.	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING		
1.1	Product identifiers Product name	4'-Hydroxy-4-biphenylcarbonitrile	
	Product Number Brand CAS-No.	: 52116 : Unavera : 19812-93-2	
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	: Laboratory chemicals, Manufacture of substances	
1.3	B Details of the supplier of the safety data sheet		
	Company	: UnaveraChemLab GmbH : Am Ländbach 20 : D-82481 Mittenwald Germany	
	Telefphon: Fax: email:	: +49-8823-1351 : +49-8823-3449 : info@unavera.de	
1.4	Emergency telephone nu	imber :+49-8823-1351	

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Acute toxicity, Inhalation (Category 4) Acute toxicity, Dermal (Category 4) Acute toxicity, Oral (Category 4) Skin irritation (Category 2) Eye irritation (Category 2) Specific target organ toxicity - single exposure (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram



Signal word	Warning
Hazard statement(s)	
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Precautionary statement(s) P261 P280 P305 + P351 + P338	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wear protective gloves/ protective clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
Supplemental Hazard Statements	none	
According to European Directive 67/548/EEC as amended. Hazard symbol(s)		
R-phrase(s) R20/21/22 R36/37/38	Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.	
S-phrase(s) S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.	
S36	Wear suitable protective clothing.	
Other hazards - none		
COMPOSITION/INFORMATION ON INGREDIENTS		

3.1 Substances Formula

2.3

3.

: C₁₃H₉NO : 195,22 g/mol

	, 5	
Component	Concentration	
4'-Hydroxy-4-biphenyl	carbonitrile	
CAS-No.	19812-93-2	-

4. FIRST AID MEASURES

Molecular Weight

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- **4.2** Most important symptoms and effects, both acute and delayed To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
- **4.3** Indication of any immediate medical attention and special treatment needed no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Hydrogen cyanide (hydrocyanic acid)

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s) no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a) Appearance Form: solid b) Odour no data available no data available C) Odour Threshold d) pH no data available Melting point/freezing Melting point/range: 191 - 195 °C - lit. e) point Initial boiling point and no data available f) boiling range g) Flash point no data available h) Evaporation rate no data available i) Flammability (solid, gas) no data available Upper/lower no data available j)

- explosive limits k) Vapour pressure no data available Vapour density no data available I) no data available m) Relative density n) Water solubility no data available o) Partition coefficient: nno data available octanol/water p) Auto-ignition no data available temperature Decomposition no data available q) temperature r) Viscosity no data available
- s) Explosive properties no data availablet) Oxidizing properties no data available
- 9.2 Other safety information no data available

flammability or

10. STABILITY AND REACTIVITY

10.1 Reactivity no data available

- 10.2 Chemical stability no data available
- 10.3 Possibility of hazardous reactions no data available
- **10.4 Conditions to avoid** no data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard

no data available

Potential health effects

Inhalation	Harmful if inhaled. Causes respiratory tract irritation.
Ingestion	Harmful if swallowed.
Skin	Harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes serious eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: Not available

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity no data available
- 12.2 Persistence and degradability no data available
- **12.3 Bioaccumulative potential** no data available
- 12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment no data available

12.6 Other adverse effects no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14.	TRANSPORT INFORMATION			
14.1	UN number ADR/RID: -	IMDG: -	IATA: -	
14.2	UN proper shipping nameADR/RID:Not dangerous goodsIMDG:Not dangerous goodsIATA:Not dangerous goods			
14.3	Transport hazard class(es) ADR/RID: -	IMDG: -	IATA: -	
14.4	Packaging group ADR/RID: -	IMDG: -	IATA: -	
14.5	Environmental hazards ADR/RID: no	IMDG Marine Pollutant: no	IATA: no	
14.6	Special precautions for user no data available			
15.	REGULATORY INFORMATION			
	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.			
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture no data available			
15.2	Chemical Safety Assessment no data available			
16.	OTHER INFORMATION			

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. UnaveraChemLab GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.