# Chemical Safety Data Sheet MSDS / SDS

## Benzoin

Revision Date: 2024-11-16 Revision Number: 1

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

#### **Product identifier**

 Product name
 : Benzoin

 CBnumber
 : CB1359956

 CAS
 : 119-53-9

 EINECS Number
 : 204-331-3

Synonyms : 2-hydroxy-1,2-diphenylethanone,BENZOIN SUMATRA

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

## **Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 400-158-6606

## SECTION 2: Hazards identification

## GHS Label elements, including precautionary statements

Signal word No signal word

Hazard statement(s)

none

Prevention

none

Response

none

Storage

none

Disposal

none

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : Benzoin

Synonyms : 2-hydroxy-1,2-diphenylethanone,BENZOIN SUMATRA

CAS : 119-53-9
EC number : 204-331-3
MF : C14H12O2
MW : 212.24

## SECTION 4: First aid measures

#### Description of first aid measures

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

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

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

# **SECTION 5: Firefighting measures**

## **Extinguishing media**

#### Suitable extinguishing media

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

## Special hazards arising from the substance or mixture

Carbon oxides Combustible.

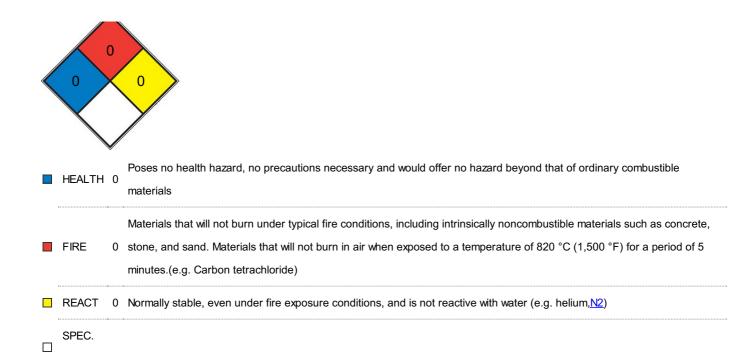
## Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### **Further information**

No data available

#### **NFPA 704**



## SECTION 6: Accidental release measures

## Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection see section 8.

## **Environmental precautions**

HAZ.

No special environmental precautions required.

#### Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Reference to other sections

For disposal see section 13.

# SECTION 7: Handling and storage

## Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

## Conditions for safe storage, including any incompatibilities

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

## Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

#### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

#### **Exposure controls**

#### Appropriate engineering controls

General industrial hygiene practice.

#### Personal protective equipment

Eye/face protection

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 Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: Dermatril? (KCL 740 / Aldrich Z677272, Size M) Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection** 

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

# SECTION 9: Physical and chemical properties

#### Information on basic physicochemical properties

Appearance	light yellow powder
Odour	slight, camphor-like
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: 134 - 138 °C - lit.
Initial boiling point and boiling range	194 °C at 16 hPa - lit.
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	No data available
limits	
Vapour pressure	1.3 hPa (136 °C)
Vapour density	No data available
Relative density	ca.1,3 g/cm3 at 20 °C
Water solubility	0,3 g/l at 25 °C - (Lit.)
Partition coefficient: n-octanol/water	log Pow. 2,13 at 25 °C - (Lit.), Bioaccumulation is not expected.
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## Other safety information

Bulk density ca.500 kg/m3 at 20  $^{\circ}\text{C}$ 

# SECTION 10: Stability and reactivity

## Reactivity

No data available

## **Chemical stability**

Stable under recommended storage conditions.

## Possibility of hazardous reactions

No data available

## **Conditions to avoid**

No data available

## Incompatible materials

Strong oxidizing agents

## Hazardous decomposition products

# **SECTION 11: Toxicological information**

## Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - > 6.400 mg/kg

LD50 Dermal - Rabbit - 8.870 mg/kg Remarks: (RTECS)

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

## Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

Ames test

Salmonella typhimurium Result: negative

(National Toxicology Program)

#### Carcinogenicity

IARC: No ingredient 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

No data available

## Specific target organ toxicity - repeated exposure

No data available

## Aspiration hazard

No data available

#### **Additional Information**

RTECS: DI1590000

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

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

## Toxicity

LD50 orally in Rabbit: 10000 mg/kg LD50 dermal Rabbit 8870 mg/kg

# SECTION 12: Ecological information

#### **Toxicity**

No data available

## Persistence and degradability

No data available

## **Bioaccumulative potential**

No data available

#### Mobility in soil

No data available

#### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

## Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

## **UN** number

ADR/RID: - IMDG: - IATA: -

## UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

## Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

## **Packaging group**

ADR/RID: - IMDG: - IATA: -

#### **Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

## Special precautions for user

No data available

# **SECTION 15: Regulatory information**

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

#### Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

EC Inventory:Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

## SECTION 16: Other information

## Abbreviations and acronyms

CAS: Chemical Abstracts Service

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

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

#### References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[3] ECHA - European Chemicals Agency, website: https://echa.europa.eu/

[4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

 $http://www.echemportal.org/echemportal/index?pageID=0\&request\_locale=en$ 

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/

[9] IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

【10】 Sigma-Aldrich, website: https://www.sigmaaldrich.com/

#### Other Information

The substance is combustible but no flash point is available in literature.

#### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.