# Chemical Safety Data Sheet MSDS / SDS

# Benzamide

Revision Date: 2024-12-21 Revision Number: 1

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

#### **Product identifier**

 Product name
 : Benzamide

 CBnumber
 : CB6853808

 CAS
 : 55-21-0

 EINECS Number
 : 200-227-7

Synonyms : benzamide,Benzamid

#### 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

Symbol(GHS)



Signal word Warning

#### Precautionary statements

P201 Obtain special instructions before use.

P264 Wash hands thoroughly after handling.

P264 Wash skin thouroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P281 Use personal protective equipment as required.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container to.....

# Hazard statements

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : Benzamide

Synonyms : benzamide,Benzamid

CAS : 55-21-0
EC number : 200-227-7
MF : C7H7NO
MW : 121.14

### SECTION 4: First aid measures

#### **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

Flush eyes with water as a precaution.

#### If swallowed

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

### 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, Nitrogen oxides (NOx)

#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

#### **NFPA 704**



Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. diethyl

HEALTH 2

ether, ammonium phosphate, iodine)

1 can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. mineral oil, ammonia)

Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion

REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, N2)

SPEC.

FIRE

## SECTION 6: Accidental release measures

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

# **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### 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.

#### Reference to other sections

For disposal see section 13.

# SECTION 7: Handling and storage

#### 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. For precautions see section 2.2.

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

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

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 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 CE 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** 

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

Where risk assessment shows air-purifying respirators are appropriate use a full- face particle respirator type N100 (US) or type P3 (EN 143)

Chemical Book

respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and

approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# SECTION 9: Physical and chemical properties

### Information on basic physicochemical properties

Odour         No data available           Odour Threshold         No data available           pH         6,9           Melting point/freezing point         Melting point/range: 125 - 128 °C - lit.           Initial boiling point and boiling range         228°C           Flash point         180 °C - closed cup           Evaporation rate         No data available           Flammability (solid, gas)         No data available           Upper/lower flammability or explosive         No data available           limits         Vapour pressure           Vapour density         No data available           Relative density         1,340 g/cm3 at 20 °C           Water solubility         ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow           Partition coefficient: n-octanol/water         log Pow 0,64           Autoignition temperature         No data available           Decomposition temperature         No data available           Viscosity         No data available           Explosive properties         No data available           Oxidizing properties         No data available	Appearance	beige powder
PH 6,9  Melting point/freezing point Melting point/range: 125 - 128 °C - lit.  Initial boiling point and boiling range 228°C  Flash point 180 °C - closed cup  Evaporation rate No data available  Flammability (solid, gas) No data available  Upper/lower flammability or explosive No data available  limits  Vapour pressure < 0,001 hPa at 50 °C  Vapour density No data available  Relative density 1,340 g/cm3 at 20 °C  Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow. 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Explosive properties No data available  Explosive properties No data available	Odour	No data available
Melting point/freezing point Melting point/range: 125 - 128 °C - lit.  Initial boiling point and boiling range 228°C  Flash point 180 °C - closed cup  Evaporation rate No data available  Flammability (solid, gas) No data available  Upper/lower flammability or explosive No data available  limits  Vapour pressure < 0,001 hPa at 50 °C  Vapour density No data available  Relative density 1,340 g/cm3 at 20 °C  Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow. 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Explosive properties No data available  Explosive properties No data available	Odour Threshold	No data available
Initial boiling point and boiling range 228°C  Flash point 180 °C - closed cup  Evaporation rate No data available  Flammability (solid, gas) No data available  Upper/lower flammability or explosive No data available  limits  Vapour pressure < 0,001 hPa at 50 °C  Vapour density No data available  Relative density 1,340 g/cm3 at 20 °C  Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow. 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available	рН	6,9
Flash point 180 °C - closed cup  Evaporation rate No data available  Flammability (solid, gas) No data available  Upper/lower flammability or explosive Ilimits  Vapour pressure < 0,001 hPa at 50 °C  Vapour density No data available  Relative density 1,340 g/cm3 at 20 °C  Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow: 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available	Melting point/freezing point	Melting point/range: 125 - 128 °C - lit.
Evaporation rate No data available Flammability (solid, gas) No data available Upper/lower flammability or explosive Ilmits Vapour pressure < 0,001 hPa at 50 °C Vapour density No data available Relative density 1,340 g/cm3 at 20 °C Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow Partition coefficient: n-octanol/water log Pow: 0,64 Autoignition temperature No data available Decomposition temperature No data available Viscosity No data available Explosive properties No data available	Initial boiling point and boiling range	228°C
Flammability (solid, gas)  No data available  Upper/lower flammability or explosive Ilimits  Vapour pressure  < 0,001 hPa at 50 °C  Vapour density  No data available  Relative density  1,340 g/cm3 at 20 °C  Water solubility  ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water  log Pow: 0,64  Autoignition temperature  No data available  Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available	Flash point	180 °C - closed cup
Upper/lower flammability or explosive limits  Vapour pressure < 0,001 hPa at 50 °C  Vapour density No data available  Relative density 1,340 g/cm3 at 20 °C  Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow: 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available	Evaporation rate	No data available
Vapour pressure < 0,001 hPa at 50 °C  Vapour density No data available  Relative density 1,340 g/cm3 at 20 °C  Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow: 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available	Flammability (solid, gas)	No data available
Vapour pressure < 0,001 hPa at 50 °C  Vapour density No data available  Relative density 1,340 g/cm3 at 20 °C  Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow: 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available	Upper/lower flammability or explosive	No data available
Vapour density  Relative density  1,340 g/cm3 at 20 °C  Water solubility  ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow. 0,64  Autoignition temperature  No data available  Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available	limits	
Relative density 1,340 g/cm3 at 20 °C  Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow: 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available	Vapour pressure	< 0,001 hPa at 50 °C
Water solubility ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow  Partition coefficient: n-octanol/water log Pow: 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available	Vapour density	No data available
Partition coefficient: n-octanol/water log Pow: 0,64  Autoignition temperature No data available  Decomposition temperature No data available  Viscosity No data available  Explosive properties No data available	Relative density	1,340 g/cm3 at 20 °C
Autoignition temperature  No data available  Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available	Water solubility	ethanol: soluble50mg/mL, clear to very slightly hazy, colorless to light yellow
Decomposition temperature  No data available  Viscosity  No data available  Explosive properties  No data available	Partition coefficient: n-octanol/water	log Pow: 0,64
Viscosity No data available  Explosive properties No data available	Autoignition temperature	No data available
Explosive properties No data available	Decomposition temperature	No data available
	Viscosity	No data available
Oxidizing properties No data available	Explosive properties	No data available
	Oxidizing properties	No data available

# Other safety information

Bulk density 0,55 g/l

# 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, Strong bases

#### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products - No data available In the event of fire: see section 5

# **SECTION 11: Toxicological information**

### Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Mouse - 1.160 mg/kg

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

In vitro tests showed mutagenic effects Mouse

leukocyte

Sister chromatid exchange Human

lymphocyte

Sister chromatid exchange Mammal

Kidney

Cytogenetic analysis Mammal

Kidney Micronucleus test Mammal

Kidney

Other mutation test systems Hamster

ovary

Sister chromatid exchange

Mouse Micronucleus test

#### 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

No data available

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available

#### **Additional Information**

RTECS: Not available

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

#### **Toxicity**

LD50 orally in Rabbit: 1125 mg/kg

# **SECTION 12: Ecological information**

#### **Toxicity**

#### Toxicity to fish

LC50 - Pimephales promelas (fathead minnow) - 661 mg/l - 96 h

#### 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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

# **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

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

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

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

EC Inventory:Listed.

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

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

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/

# **SECTION 16: Other information**

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

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

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/

#### 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.