# **SAFETY DATA SHEET**

# 1. PRODUCT

### 1.1 Product identifiers

Name: N-Butylbenzenesulfonamide

CAS-No.: 3622-84-2

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

Identified uses: Laboratory chemicals, Manufacture of substances

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Specific target organ toxicity - repeated exposure (Category 2), H373

Acute aquatic toxicity (Category 3), H402

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P273 Avoid release to the environment. P314 Get medical advice/ attention if you feel unwell. P501 Dispose of contents/ container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Formula:  $C_{10}H_{15}NO_2S$  CAS-No.: 3622-84-2 EC-No.: 222-823-6

# **Hazardous components**

Component	Classification	Concentration
N-Butylbenzenesulfonamide		
0	STOT RE 2; Aquatic Acute 3; Aquatic Chronic 3; H373, H412	90 -100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 4. FIRST AID MEASURES

### 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

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.

### 4.2 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

### 4.2 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), Sulphur oxides

# 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 breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

# 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

# 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. 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 inhalation of vapour or mist.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

# 7.3 Specific end use(s)

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

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

# Components with workplace control parameters

Contains no substances with occupational exposure limit values.

# 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	Face shield and safety glasses 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.
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 respirator with multi- purpose combination (US) or type ABEK (EN 14387) 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).
	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Appearance	Form: viscous liquid Colour: colourless
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/freezing point	no data available
Initial boiling point and boiling range	314 °C (597 °F) - lit.
Flash point	113 °C (235 °F) - closed cup
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Vapour density	no data available
Relative density	1.15 g/cm3 at 25 °C (77 °F)
Water solubility	0.45 g/l at 20 °C (68 °F) - OECD Test Guideline 105 - soluble

Partition coefficient: n-octanol/water	log Pow: 2.01 at 20 °C (68 °F)
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available

# 9.2 Other safety information

no data available

# 10. STABILITY AND REACTIVITY

# 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

# 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

In the event of fire: see section 5

# 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

### **Acute toxicity**

LD50 Oral - rat - male and female - 2,070 mg/kg

LC50 Inhalation - rat - male and female - 4 h - > 4.06 mg/l

(OECD Test Guideline 403)

LD50 Dermal - rat - male and female - > 2,000 mg/kg

no data available

# Skin corrosion/irritation

Skin - rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - rabbit

Result: No eye irritation - 24 h (OECD Test Guideline 405)

# Respiratory or skin sensitisation

- mouse

Result: Does not cause skin sensitisation.

(OECD Test Guideline 429)

# Germ cell mutagenicity

Ames test S. typhimurium Result: negative

# 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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

no data available

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**

Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 50 mg/kg RTECS: DB1283000

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

#### 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish	semi-static test LC50 - Danio rerio (zebra fish) - 36.7 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 56 mg/l - 48 h
Toxicity to algae	Growth inhibition EC50 - Pseudokirchneriella subcapitata (Selenastrum capricornutum) - 49 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	Respiration inhibition EC50 - Sludge Treatment - > 6,000 mg/l - 3 h (OECD Test Guideline 209)

# 12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d	Į.
Diodogradability		· ·
	Result: 18 % - Not readily biodegradable.	

### 12.3 Bioaccumulative potential

no data available

# 12.4 Mobility in soil

no data available

# 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

# 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

# 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

#### **Product**

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

# Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

# DOT (US)

Not dangerous goods

### **IMDG**

Not dangerous goods

### **IATA**

Not dangerous goods

### 15. REGULATORY INFORMATION

### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

# **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

# Pennsylvania Right To Know Components

Component	CAS-No.	Revision Date
N-Butylbenzenesulfonamide	3622-84-2	

# **New Jersey Right To Know Components**

Component	CAS-No.	Revision Date
N-Butylbenzenesulfonamide	3622-84-2	

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# **16. OTHER INFORMATION**

# Full text of H-Statements referred to under sections 2 and 3.

Aquatic Acute Acute aquatic toxicity

Aquatic Chronic Chronic aquatic toxicity

H373 May cause damage to organs through prolonged or repeated exposure.

H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

# **HMIS Rating**

Health hazard: 1

Chronic Health Hazard:

Flammability: 1

Physical Hazard 0

# **NFPA** Rating

Health hazard: 0

Fire Hazard: 1

Reactivity Hazard: 0