# **Aaron Chemistry GmbH**



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.0 Revision Date 25.12.2012 Print Date 11.10.2018 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

#### IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING 1.

1.1 **Product identifiers** 

> Product name *N*-Butylethylenediamine

**Product Number** : 368

: Aaron Chemistry GmbH Brand

CAS-No. 19522-69-1

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

: Laboratory chemicals, Manufacture of substances

Details of the supplier of the safety data sheet 1.3

> Company : Aaron Chemistry GmbH

: Am Fischweiher 41-43 : D-82481 Mittenwald

: Germany

Telephone: : +49-8823-917521 Fax: : +49-8823-917523 : info@aaron-chemistry.de email:

1.4 **Emergency telephone number** :+49-8823-917521

#### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flammable liquids (Category 3) Skin corrosion (Category 1B)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Causes burns.

#### 2.2 Label elements

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

Pictogram

Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

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

protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/ physician.

Supplemental Hazard

Statements

P310

none

# According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

R-phrase(s)

R34 Causes burns.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

S27 Take off immediately all contaminated clothing.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible).

#### 2.3 Other hazards - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Formula :  $C_6H_{16}N_2$  Molecular Weight : 116,2 g/mol

Component		Concentration
N-Butylethylenediamir	ne	
CAS-No.	19522-69-1	-

# 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

Take off contaminated clothing and shoes immediately. 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

Do NOT induce vomiting. 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

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

# 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

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or

spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx)

# 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

# 6. ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### 6.2 Environmental precautions

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

# 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### 6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

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

Store in cool place. 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)

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

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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, Flame retardant antistatic protective clothing, 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).

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Colour: colourless

o) Odour no data available

c) Odour Threshold no data availabled) pH no data available

e) Melting point/freezing no data available

point

f) Initial boiling point and 1

boiling range

171 - 172 °C - lit.

g) Flash point 59 °C - closed cup h) Evaporation rate no data available

i) Flammability (solid, gas) no data available

 Upper/lower flammability or explosive limits no data available

k) Vapour pressure no data available
l) Vapour density no data available
m) Relative density 0,836 g/cm3 at 25 °C
n) Water solubility no data available

o) Partition coefficient: noctanol/water no data available

p) Auto-ignition

temperature

no data available

q) Decomposition temperature

no data available

r) Viscosity no data available
s) Explosive properties no data available
t) 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

no data available

#### 10.3 Possibility of hazardous reactions

no data available

# 10.4 Conditions to avoid

Heat, flames and sparks.

#### 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

no data available

# Specific target organ toxicity - repeated exposure

no data available

# **Aspiration hazard**

no data available

# Potential health effects

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of

the mucous membranes and upper respiratory tract.

**Ingestion** May be harmful if swallowed. Causes burns.

**Skin** May be harmful if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

# Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

#### **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**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

# Contaminated packaging

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

# 14.1 UN number

ADR/RID: 2734 IMDG: 2734 IATA: 2734

# 14.2 UN proper shipping name

ADR/RID: POLYAMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (N-Butylethylenediamine) IMDG: POLYAMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S. (N-Butylethylenediamine)

IATA: Polyamines, liquid, corrosive, flammable, n.o.s. (N-Butylethylenediamine)

14.3 Transport hazard class(es)

ADR/RID: 8 (3) IMDG: 8 (3) IATA: 8 (3)

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

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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