2,3-Butanediol, 2-oxime (CAS 57-71-6) MSDS

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
   1.1 Product identifiers
      Product name: 2,3-butanedione monoxime
      Product Number: B0753
      Brand: 
      CAS-No.: 57-71-6
   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
      Not a dangerous substance according to GHS.
      This substance is not classified as dangerous according to Directive 67/548/EEC.
   2.2 Label elements
      The product does not need to be labelled in accordance with EC directives or respective national laws.
   2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS
   3.1 Substances
      Synonyms: Biacetyl monoxime
diacetyl monoxime
      Formula: C4H7NO2
      Molecular Weight: 101,10 g/mol
      Component
      2,3-Butanediol monoxime
      CAS-No.: 57-71-6
      EC-No.: 200-348-5

4. FIRST AID MEASURES
   4.1 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.
   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. FIRE-FIGHTING 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)

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
Avoid dust formation. Avoid breathing vapors, mist or gas.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
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
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 uses
no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control parameters
Components with workplace control parameters

8.2 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 EU Directive 89/686/EEC and the standard EN 374 derived from it.

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).

9. PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties
a) Appearance
Form: crystalline
Colour: light brown

b) Odour
no data available
c) Odour Threshold
no data available
d) pH
no data available
e) Melting point/freezing point
   Melting point/range: 75 - 78 °C - lit.

f) Initial boiling point and boiling range
   185 - 186 °C - lit.

g) Flash point
   no data available

h) Evaporation rate
   no data available

i) Flammability (solid, gas)
   no data available

j) Upper/lower flammability or explosive limits
   no data available

k) Vapour pressure
   no data available

l) Vapour density
   no data available

m) Relative density
   no data available

n) Water solubility
   no data available

o) Partition coefficient: n-octanol/water
   no data available

p) Autoignition 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
   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
   LD50 Intraperitoneal - mouse - 51 mg/kg

   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. May cause respiratory tract irritation.
- **Ingestion**: May be harmful if swallowed.
- **Skin**: May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes**: May cause 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: EK3150000

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.

Contaminated packaging
Dispose of as unused product.

14. **TRANSPORT INFORMATION**
14.1 **UN number**
ADR/RID: -  IMDG: -  IATA: -
14.2 **UN proper shipping name**
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: 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**
16. OTHER INFORMATION

Further information
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 this document is based on the resent 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. guidechem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.