# Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.



**Lactate Dehydrogenase (Liquid) R1**

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

### 1.1 Product identifier

**Product Name:** Lactate Dehydrogenase (Liquid) R1
**Product code:** L7572-R1

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

**Relevant identified uses:** For the quantitative determination of lactate dehydrogenase activity in serum.
**Uses advised against:** Not determined or not applicable.
**Reasons why uses advised against:** Not determined or not applicable.

### 1.3 Details of the manufacturer/supplier of the safety data sheet

**Manufacturer:**
**United States**
HORIBA Instruments Incorporated
5449 Research Drive
Canton, MI 48188
734-487-8300
horiba.com

### 1.4 Emergency telephone number:

**United States**
HORIBA Instruments Incorporated
1-800-445-9853 (24 hours per day)

**France**
Organisme de conseil/centre antipoison national
+33 1 45 42 59 59 (24 hours per day)

**Portugal**
Órgão consultor nacional/Centro Antivenenos
+351 800 250 250 (24 hours per day)

**Spain**
Centro de información toxicológica/organismo asesor nacional
+34 91 562 04 20 (24 hours per day)

**Czech Republic**
Národní poradní orgán/toxikologické středisko
+420 224 919 293 (24 hours per day)

**Greece**
Εθνικό συμβουλευτικό όργανο/Κέντρο Δηλητηριάσεων
+30 210 779 3777 (24 hours per day)

**Italy**
Organismo ufficiale di consultazione nazionale/Centro antiveleni
+39 06 305 4343 (24 hours per day)

**Romania**
Organism consultativ național/Centru pentru otrăviri
+40 21 3183606 (24 hours per day)

**Poland**
Krajowa instytucja doradcza/Ośrodek zatruć
+48 22 619 66 54 (24 hours per day)

## SECTION 2: Hazard(s) identification

**2.1 Classification of the substance or mixture:**

**Classification according to Regulation (EC) No. 1272/2008 (CLP):** The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

**Hazard-determining components of labeling:**
Sodium azide

**Additional Information:** None

**2.2 Label elements**

**Labelling according to Regulation (EC) No 1272/2008 (CLP)**
**Hazard pictograms:** None
**Signal Word:** None
**Hazard statements:** None
**Precautionary statements:** None

**2.3 Other hazards:** None known

## SECTION 3: Composition/information on ingredients

**3.1 Substance:** Not applicable.

**3.2 Mixture:**

| Identification | EU REACH Registration No. | Name | Classification according to Regulation (EC) No. 1272/2008 (CLP) | Weight % |
|---|---|---|---|---|
| CAS number: 26628-22-8<br>EC number: 247-852-1 | - | Sodium azide | Acute Tox. 2 (Oral); H300<br>Aquatic Acute 1; H400<br>Acute Tox. 1 (Dermal); H310<br>Acute Tox. 2 (Inh); H330<br>Aquatic Chronic 1; H410<br>STOT RE 2; H373<br>M-Factor: 1<br>EUH032 | 0.1 |

**Additional information:** None
**Full Text of H and EUH statements:** See section 16

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

**General notes:**

Show this Safety Data Sheet to the doctor in attendance.

**Following inhalation:**

If inhaled, remove person to fresh air and place in a position comfortable for breathing. If respiratory symptoms develop or persist, seek medical advice/attention.

**Following skin contact:**

Wash affected area with plenty of soap and water. Remove contaminated clothing and launder before reuse. If skin irritation develops or persists, seek medical advice/attention.

**Following eye contact:**

Immediately rinse eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. If eye irritation develops or persists, seek medical advice/attention.

**Following ingestion:**

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

**Self-Protection of the first aider:**

Not determined or not available.

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

**Acute symptoms and effects:** Not determined or not available.

**Delayed symptoms and effects:**

Not determined or not available.

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

**Specific treatment:**

Not determined or not available.

**Notes for the doctor:**

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media:**

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

**Unsuitable extinguishing media:**

Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture:

Thermal decomposition may produce irritating/toxic fumes/gases.

### 5.3 Advice for firefighters

**Personal protection equipment:**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA).

**Special precautions:**

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

## SECTION 6: Accidental release measures

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

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

**6.2 Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

**6.3 Methods and material for containment and cleaning up:**

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

**6.4 Reference to other sections:**

For personal protective equipment see Section 8. For disposal see Section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling:**

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

**7.2 Conditions for safe storage, including any incompatibilities:**

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).
Store between 2-8 °C

**7.3 Specific end use(s):**

Refer to Section 1 (Recommended Use).

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

Only those substances with limit values have been included below.

**Occupational Exposure limit values:**

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|---|---|---|---|
| Austria | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | STEL: 0.3 mg/m³ (4 x 15 min) |
| Belgium | Sodium azide | 26628-22-8 | Ceiling Limit: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Bulgaria | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | TWA: 0.1 mg/m³ |
| Croatia | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|---|---|---|---|
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Czech Republic | Sodium azide | 26628-22-8 | Ceiling Limit: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Estonia | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| European Union | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ ([SCOEL]) |
| France | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Germany (MAK) | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.2 mg/m³ (inhalable fraction) |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.4 mg/m³ (inhalable fraction) |
| Greece | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ (0.1 ppm) |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.3 mg/m³ (0.1 ppm) |
| Hungary | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Italy | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Latvia | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Lithuania | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Luxembourg | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | TWA: 0.1 mg/m³ |
| Poland | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Portugal | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|---|---|---|---|
| Romania | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Slovakia | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Slovenia | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Spain | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Sweden | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | Ceiling Limit: 0.3 mg/m³ |
| The Netherlands | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| United Kingdom | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Cyprus | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Malta | Sodium azide | 26628-22-8 | TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Denmark | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | STEL: 0.3 mg/m³ |
| Finland | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Germany (TRGS 900) | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.2 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.4 mg/m³ |
| Ireland | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |

**Biological limit values:**

No biological exposure limits noted for the ingredient(s).

**Derived No Effect Level (DNEL):**

**Ingredient Name:** Sodium azide

**CAS #:** 26628-22-8

| | | |
|---|---|---|
| Workers - Systemic Effects | Acute - Oral | Not determined or not applicable. |
| | Acute - Inhalation | Hazard identified but no DNEL available |
| | Acute - Dermal | Hazard identified but no DNEL available |
| | Chronic - Oral | Not determined or not applicable. |
| | Chronic - Inhalation | 0.493 mg/m³ |
| | Chronic - Dermal | 0.14 mg/kg bw/day |
| Workers - Local Effects | Acute - Oral | Not determined or not applicable. |
| | Acute - Inhalation | No hazard identified |
| | Acute - Dermal | No hazard identified |
| | Chronic - Oral | Not determined or not applicable. |
| | Chronic - Inhalation | No hazard identified |
| | Chronic - Dermal | No hazard identified |
| General Population - Systemic Effects | Acute - Oral | Hazard identified but no DNEL available |
| | Acute - Inhalation | Hazard identified but no DNEL available |
| | Acute - Dermal | Hazard identified but no DNEL available |
| | Chronic - Oral | 0.05 mg/kg bw/day |
| | Chronic - Inhalation | 0.087 mg/m³ |
| | Chronic - Dermal | 0.05 mg/kg bw/day |
| General Population - Local Effect | Acute - Oral | Not determined or not applicable. |
| | Acute - Inhalation | No hazard identified |
| | Acute - Dermal | No hazard identified |
| | Chronic - Oral | Not determined or not applicable. |
| | Chronic - Inhalation | No hazard identified |
| | Chronic - Dermal | No hazard identified |

**Predicted No Effect Concentration (PNEC):**

**Ingredient Name:** Sodium azide

**CAS #:** 26628-22-8

| Environmental Protection Target | PNEC |
|---|---|
| Fresh water | 0.35 µg/L |
| Freshwater sediments | 0.0167 mg/kg sediment dw |
| Marine water | 0.015 µg/L |
| Marine sediments | 0.00072 mg/kg sediment dw |
| Microorganisms in sewage treatment | 30 µg/L |
| Soil (agricultural) | No hazard identified |
| Air | No hazard identified |
| Food chain | No exposure expected |

**Information on monitoring procedures:**

Not determined or not applicable.

**8.2 Exposure controls**

**Appropriate engineering controls:**

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

**Personal protection equipment**

**Eye and face protection:**

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

**Skin and body protection:**

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

**Respiratory protection:**

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

**General hygienic measures:**

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

**Environmental exposure controls:**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

| | |
|---|---|
| Product (substance / mixture) related measures to prevent exposure: | Not determined or not applicable. |
| Instruction measures to prevent exposure: | Not determined or not applicable. |
| Organisational measures to prevent exposure: | Not determined or not applicable. |
| Technical measures to prevent exposure: | Not determined or not applicable. |

**Risk management measures to control exposure:**

Not determined or not applicable.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Physical State** | Reagent is provided as a two part liquid. |
| **Color** | Clear and colorless |
| **Odor/Odor threshold** | Odorless |
| **pH** | Combined Reagent = 9.00 |
| **Melting point/freezing point** | Not Available |
| **Initial boiling point/range** | Not Available |
| **Flash point (closed cup)** | Not determined or not available. |
| **Flammability** | Not determined or not available. |
| **Upper flammability/explosive limit** | Not determined or not available. |

| | |
|---|---|
| **Lower flammability/explosive limit** | Not Available |
| **Vapor pressure** | Not Available |
| **Relative vapor density** | Not Available |
| **Density** | Not Available |
| **Relative density** | Not determined or not available. |
| **Solubilities** | Not Applicable |
| **Partition coefficient (n-octanol/water)** | Not Available |
| **Auto/Self-ignition temperature** | Not determined or not available. |
| **Decomposition temperature** | Not determined or not available. |
| **Kinematic viscosity** | Not Available |
| **Particle characteristics** | Not determined or not available. |

### 9.2 Other information

#### 9.2.1 Information with regard to physical hazard classes

| | |
|---|---|
| **Explosives** | No data available/Not applicable |
| **Flammable gases** | No data available/Not applicable |
| **Aerosols** | No data available/Not applicable |
| **Oxidizing gases** | No data available/Not applicable |
| **Gases under pressure** | No data available/Not applicable |
| **Flammable liquids** | No data available/Not applicable |
| **Flammable solids** | No data available/Not applicable |
| **Self-reactive substances and mixtures** | No data available/Not applicable |
| **Pyrophoric liquids** | No data available/Not applicable |
| **Pyrophoric solids** | No data available/Not applicable |
| **Self-heating substances and mixtures** | No data available/Not applicable |
| **Substances and mixtures, which emit flammable gases in contact with water** | No data available/Not applicable |
| **Oxidizing liquids** | No data available/Not applicable |
| **Oxidizing solids** | No data available/Not applicable |
| **Organic peroxides** | No data available/Not applicable |
| **Corrosive to metals** | No data available/Not applicable |
| **Desensitized explosives** | No data available/Not applicable |

#### 9.2.2 Other safety characteristics

None.

## SECTION 10: Stability and reactivity

**10.1 Reactivity:**

Not reactive under recommended handling and storage conditions.

**10.2 Chemical stability:**

Stable under recommended handling and storage conditions.

**10.3 Possibility of hazardous reactions:**

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

**10.4 Conditions to avoid:**

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

**10.5 Incompatible materials:**

Caution, both reagents contain Sodium Azides, in contact with heavy metals, may form explosive metal azides

**10.6 Hazardous decomposition products:**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

| Name | Route | Result |
|---|---|---|
| Sodium azide | oral | LD50 Rat: 42 mg/kg |
| | dermal | LD50 Rabbit: 5 mg/kg |
| | inhalation | LC50 Rat: >0.054 mg/L (4 hr [Dust]) |

**Skin corrosion/irritation**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Serious eye damage/irritation**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Respiratory or skin sensitization**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Carcinogenicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):**

| Name | Classification |
|---|---|
| Sodium azide | Not Applicable |

**Germ cell mutagenicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Reproductive Toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Specific target organ toxicity (single exposure)**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Specific target organ toxicity (repeated exposure)**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:**

| Name | Result |
|---|---|
| Sodium azide | May cause damage to the brain through prolonged or repeated exposure. |

**Aspiration toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:**

No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:**

No data available.

**11.2 Information on other hazards**

**Endocrine disrupting properties:**

**Substance data:** No data available.

**Other information:**

No data available.

## SECTION 12: Ecological information

**12.1 Toxicity**

**Acute (short-term) toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

| Name | Result |
|---|---|
| Sodium azide | Fish LC50 Gasterosteus aculeatus: 0.8 mg/L (96 hr) |
| | Aquatic Plants EC50 Pseudokirchneriella subcapitata: 0.35 mg/L (96 hr [cell number]) |

**Chronic (long-term) toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**12.2 Persistence and degradability**

**Product data:** No data available.

**Substance data:**

| Name | Result |
|---|---|
| Sodium azide | Biodegradation studies do not apply to inorganic substances. |

### 12.3 Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### 12.4 Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

### 12.5 Results of PBT and vPvB assessment

**Product data:**

**PBT assessment:** This product does not contain any substances that are assessed to be a PBT.
**vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

**Substance data:**

**PBT assessment:**

| | |
|---|---|
| Sodium azide | PBT assessment does not apply to inorganic substance. |

**vPvB assessment:**

| | |
|---|---|
| Sodium azide | vPvB assessment does not apply to inorganic substances. |

### 12.6 Endocrine disrupting properties

**Substance data:** No data available.

**12.7 Other adverse effects:** No data available.

### 12.8 Hazard to the ozone layer

**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**13.1.1 Product / Packaging disposal:**
Dilute with large volumes of water and dispose of into sewer system, in accordance with local regulations.

**Waste codes / waste designations according to LoW:** Not determined or not available.

**13.1.2 Waste treatment-relevant information:** Not determined or not available.

**13.1.3 Sewage disposal-relevant information:** Not determined or not available.

**13.1.4 Other disposal recommendations:** It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

## SECTION 14: Transport information

**International Carriage of Dangerous Goods by Road/Rail (ADR/RID)**

| | |
|---|---|
| **UN number or ID number** | Not regulated |
| **UN proper shipping name** | Not regulated |
| **UN transport hazard class(es)** | None |
| **Packing group** | None |

| | |
|---|---|
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**International Carriage of Dangerous Goods by Inland Waterways (ADN)**

| | |
|---|---|
| **UN number or ID number** | Not regulated |
| **UN proper shipping name** | Not regulated |
| **UN transport hazard class(es)** | None |
| **Packing group** | None |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**International Maritime Dangerous Goods (IMDG)**

| | |
|---|---|
| **UN number or ID number** | Not regulated |
| **UN proper shipping name** | Not regulated |
| **UN transport hazard class(es)** | None |
| **Packing group** | None |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**International Air Transport Association Dangerous Goods Regulations (IATA-DGR)**

| | |
|---|---|
| **UN number or ID number** | Not regulated |
| **UN proper shipping name** | Not regulated |
| **UN transport hazard class(es)** | None |
| **Packing group** | None |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**Maritime Transport in Bulk according to IMO Instruments**

| | |
|---|---|
| **Bulk Name** | None |
| **Ship type** | None |
| **Pollution category** | None |
| **IMO hazard class** | None |
| **Environmental hazards** | None |
| **Material hazardous only in bulk** | None |
| **Cargo Group** | None |

## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.**

**European regulations**

**Inventory listing (EINECS):** All ingredients are listed or exempt.

**REACH SVHC candidate list:** None of the ingredients are listed.

**REACH SVHC Authorizations:** None of the ingredients are listed.

**REACH Restriction:** None of the ingredients are listed.

**Water hazard class (WGK) (Product):** Not determined.

**Water hazard class (WGK) (Substance):**

| Ingredient Name | CAS | Class |
|---|---|---|
| Sodium azide | 26628-22-8 | Water hazard class 2: obviously hazardous to water |

**Other regulations**

**Germany TA Luft:** None of the ingredients are listed.

**Additional information:** Not determined.

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: Other information

**Abbreviations and Acronyms:** None

**Summary of classification(s) in section 3:**

| | |
|---|---|
| Acute Tox. 2 (Oral) | Acute toxicity (oral), category 2 |
| Aquatic Acute 1 | Acute aquatic hazard, category 1 |
| Acute Tox. 1 (Dermal) | Acute toxicity (dermal), category 1 |
| Acute Tox. 2 (Inh) | Acute toxicity (inhalation), category 2 |
| Aquatic Chronic 1 | Chronic aquatic hazard, category 1 |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |

**Summary of hazard statements in section 3:**

| | |
|---|---|
| H300 | Fatal if swallowed |
| H400 | Very toxic to aquatic life |
| H310 | Fatal in contact with skin |
| H330 | Fatal if inhaled |
| H410 | Very toxic to aquatic life with long lasting effects |
| H373 | May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard) |

**Summary of EUH Statement(s) in section 3:**

| | |
|---|---|
| EUH032 | Contact with acids liberates very toxic gas |

**Disclaimer:**

This product has been classified in accordance with EC No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and EC No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation, and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**Initial preparation date:** 2023-11-16

**End of Safety Data Sheet**

# Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.



**Lactate Dehydrogenase (Liquid) R2**

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

### 1.1 Product identifier

**Product Name:** Lactate Dehydrogenase (Liquid) R2
**Product code:** L7572-R2

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

**Relevant identified uses:** For the quantitative determination of lactate dehydrogenase activity in serum.
**Uses advised against:** Not determined or not applicable.
**Reasons why uses advised against:** Not determined or not applicable.

### 1.3 Details of the manufacturer/supplier of the safety data sheet

**Manufacturer:**
**United States**
HORIBA Instruments Incorporated
5449 Research Drive
Canton, MI 48188
734-487-8300
horiba.com

### 1.4 Emergency telephone number:

**United States**
HORIBA Instruments Incorporated
1-800-445-9853 (24 hours per day)

**France**
Organisme de conseil/centre antipoison national
+33 1 45 42 59 59 (24 hours per day)

**Portugal**
Órgão consultor nacional/Centro Antivenenos
+351 800 250 250 (24 hours per day)

**Spain**
Centro de información toxicológica/organismo asesor nacional
+34 91 562 04 20 (24 hours per day)

**Czech Republic**
Národní poradní orgán/toxikologické středisko
+420 224 919 293 (24 hours per day)

**Greece**
Εθνικό συμβουλευτικό όργανο/Κέντρο Δηλητηριάσεων
+30 210 779 3777 (24 hours per day)

**Italy**
Organismo ufficiale di consultazione nazionale/Centro antiveleni
+39 06 305 4343 (24 hours per day)

**Romania**
Organism consultativ național/Centru pentru otrăviri
+40 21 3183606 (24 hours per day)

**Poland**
Krajowa instytucja doradcza/Ośrodek zatruć
+48 22 619 66 54 (24 hours per day)

## SECTION 2: Hazard(s) identification

**2.1 Classification of the substance or mixture:**

**Classification according to Regulation (EC) No. 1272/2008 (CLP):** The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

**Hazard-determining components of labeling:**

Sodium azide

**Additional Information:** None

**2.2 Label elements**

**Labelling according to Regulation (EC) No 1272/2008 (CLP)**

**Hazard pictograms:** None

**Signal Word:** None

**Hazard statements:** None

**Precautionary statements:** None

**2.3 Other hazards:** None known

## SECTION 3: Composition/information on ingredients

**3.1 Substance:** Not applicable.

**3.2 Mixture:**

| Identification | EU REACH Registration No. | Name | Classification according to Regulation (EC) No. 1272/2008 (CLP) | Weight % |
|---|---|---|---|---|
| CAS number: 26628-22-8<br>EC number: 247-852-1 | - | Sodium azide | Acute Tox. 2 (Oral); H300<br>Aquatic Acute 1; H400<br>Acute Tox. 1 (Dermal); H310<br>Acute Tox. 2 (Inh); H330<br>Aquatic Chronic 1; H410<br>STOT RE 2; H373<br>M-Factor: 1<br>EUH032 | 0.1 |

**Additional information:** None

**Full Text of H and EUH statements:** See section 16

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

**General notes:**

Show this Safety Data Sheet to the doctor in attendance.

**Following inhalation:**

If inhaled, remove person to fresh air and place in a position comfortable for breathing. If respiratory symptoms develop or persist, seek medical advice/attention.

**Following skin contact:**

Wash affected area with plenty of soap and water. Remove contaminated clothing and launder before reuse. If skin irritation develops or persists, seek medical advice/attention.

**Following eye contact:**

Immediately rinse eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. If eye irritation develops or persists, seek medical advice/attention.

**Following ingestion:**

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

**Self-Protection of the first aider:**

Not determined or not available.

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

**Acute symptoms and effects:** Not determined or not available.

**Delayed symptoms and effects:**

Not determined or not available.

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

**Specific treatment:**

Not determined or not available.

**Notes for the doctor:**

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media:**

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

**Unsuitable extinguishing media:**

Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture:

Thermal decomposition may produce irritating/toxic fumes/gases.

### 5.3 Advice for firefighters

**Personal protection equipment:**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA).

**Special precautions:**

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

## SECTION 6: Accidental release measures

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

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

**6.2 Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

**6.3 Methods and material for containment and cleaning up:**

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

**6.4 Reference to other sections:**

For personal protective equipment see Section 8. For disposal see Section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling:**

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

**7.2 Conditions for safe storage, including any incompatibilities:**

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).
Store between 2-8 °C

**7.3 Specific end use(s):**

Refer to Section 1 (Recommended Use).

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

Only those substances with limit values have been included below.

**Occupational Exposure limit values:**

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|---|---|---|---|
| Austria | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | STEL: 0.3 mg/m³ (4 x 15 min) |
| Belgium | Sodium azide | 26628-22-8 | Ceiling Limit: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Bulgaria | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | TWA: 0.1 mg/m³ |
| Croatia | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|---|---|---|---|
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Czech Republic | Sodium azide | 26628-22-8 | Ceiling Limit: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Estonia | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| European Union | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ ([SCOEL]) |
| France | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Germany (MAK) | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.2 mg/m³ (inhalable fraction) |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.4 mg/m³ (inhalable fraction) |
| Greece | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ (0.1 ppm) |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.3 mg/m³ (0.1 ppm) |
| Hungary | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Italy | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Latvia | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Lithuania | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Luxembourg | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | TWA: 0.1 mg/m³ |
| Poland | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Portugal | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|---|---|---|---|
| Romania | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Slovakia | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Slovenia | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Spain | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| Sweden | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | Ceiling Limit: 0.3 mg/m³ |
| The Netherlands | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| United Kingdom | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Cyprus | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Malta | Sodium azide | 26628-22-8 | TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Denmark | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | STEL: 0.3 mg/m³ |
| Finland | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |
| Germany (TRGS 900) | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.2 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.4 mg/m³ |
| Ireland | Sodium azide | 26628-22-8 | 8-Hour TWA: 0.1 mg/m³ |
| | Sodium azide | 26628-22-8 | 15-Minute STEL: 0.3 mg/m³ |

**Biological limit values:**

No biological exposure limits noted for the ingredient(s).

**Derived No Effect Level (DNEL):**

**Ingredient Name:** Sodium azide

**CAS #:** 26628-22-8

| | | |
|---|---|---|
| Workers - Systemic Effects | Acute - Oral | Not determined or not applicable. |
| | Acute - Inhalation | Hazard identified but no DNEL available |
| | Acute - Dermal | Hazard identified but no DNEL available |
| | Chronic - Oral | Not determined or not applicable. |
| | Chronic - Inhalation | 0.493 mg/m³ |
| | Chronic - Dermal | 0.14 mg/kg bw/day |
| Workers - Local Effects | Acute - Oral | Not determined or not applicable. |
| | Acute - Inhalation | No hazard identified |
| | Acute - Dermal | No hazard identified |
| | Chronic - Oral | Not determined or not applicable. |
| | Chronic - Inhalation | No hazard identified |
| | Chronic - Dermal | No hazard identified |
| General Population - Systemic Effects | Acute - Oral | Hazard identified but no DNEL available |
| | Acute - Inhalation | Hazard identified but no DNEL available |
| | Acute - Dermal | Hazard identified but no DNEL available |
| | Chronic - Oral | 0.05 mg/kg bw/day |
| | Chronic - Inhalation | 0.087 mg/m³ |
| | Chronic - Dermal | 0.05 mg/kg bw/day |
| General Population - Local Effect | Acute - Oral | Not determined or not applicable. |
| | Acute - Inhalation | No hazard identified |
| | Acute - Dermal | No hazard identified |
| | Chronic - Oral | Not determined or not applicable. |
| | Chronic - Inhalation | No hazard identified |
| | Chronic - Dermal | No hazard identified |

**Predicted No Effect Concentration (PNEC):**

**Ingredient Name:** Sodium azide

**CAS #:** 26628-22-8

| Environmental Protection Target | PNEC |
|---|---|
| Fresh water | 0.35 µg/L |
| Freshwater sediments | 0.0167 mg/kg sediment dw |
| Marine water | 0.015 µg/L |
| Marine sediments | 0.00072 mg/kg sediment dw |
| Microorganisms in sewage treatment | 30 µg/L |
| Soil (agricultural) | No hazard identified |
| Air | No hazard identified |
| Food chain | No exposure expected |

**Information on monitoring procedures:**

Not determined or not applicable.

**8.2 Exposure controls**

**Appropriate engineering controls:**

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

**Personal protection equipment**

**Eye and face protection:**

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

**Skin and body protection:**

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

**Respiratory protection:**

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

**General hygienic measures:**

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

**Environmental exposure controls:**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

| | |
|---|---|
| Product (substance / mixture) related measures to prevent exposure: | Not determined or not applicable. |
| Instruction measures to prevent exposure: | Not determined or not applicable. |
| Organisational measures to prevent exposure: | Not determined or not applicable. |
| Technical measures to prevent exposure: | Not determined or not applicable. |

**Risk management measures to control exposure:**

Not determined or not applicable.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Physical State** | Reagent provided as a two part liquid. |
| **Color** | Clear and colorless |
| **Odor/Odor threshold** | Odorless |
| **pH** | Combined Reagent = 9.00 |
| **Melting point/freezing point** | Not Available |
| **Initial boiling point/range** | Not Available |
| **Flash point (closed cup)** | Not Available |
| **Flammability** | Not determined or not available. |
| **Upper flammability/explosive limit** | Not Available |

| | |
|---|---|
| **Lower flammability/explosive limit** | Not determined or not available. |
| **Vapor pressure** | Not Available |
| **Relative vapor density** | Not determined or not available. |
| **Density** | Not determined or not available. |
| **Relative density** | Not determined or not available. |
| **Solubilities** | Not Applicable |
| **Partition coefficient (n-octanol/water)** | Not Available |
| **Auto/Self-ignition temperature** | Not Available |
| **Decomposition temperature** | Not Available |
| **Kinematic viscosity** | Not Available |
| **Particle characteristics** | Not Available |

### 9.2 Other information

#### 9.2.1 Information with regard to physical hazard classes

| | |
|---|---|
| **Explosives** | No data available/Not applicable |
| **Flammable gases** | No data available/Not applicable |
| **Aerosols** | No data available/Not applicable |
| **Oxidizing gases** | No data available/Not applicable |
| **Gases under pressure** | No data available/Not applicable |
| **Flammable liquids** | No data available/Not applicable |
| **Flammable solids** | No data available/Not applicable |
| **Self-reactive substances and mixtures** | No data available/Not applicable |
| **Pyrophoric liquids** | No data available/Not applicable |
| **Pyrophoric solids** | No data available/Not applicable |
| **Self-heating substances and mixtures** | No data available/Not applicable |
| **Substances and mixtures, which emit flammable gases in contact with water** | No data available/Not applicable |
| **Oxidizing liquids** | No data available/Not applicable |
| **Oxidizing solids** | No data available/Not applicable |
| **Organic peroxides** | No data available/Not applicable |
| **Corrosive to metals** | No data available/Not applicable |
| **Desensitized explosives** | No data available/Not applicable |

#### 9.2.2 Other safety characteristics

None.

## SECTION 10: Stability and reactivity

**10.1 Reactivity:**

Not reactive under recommended handling and storage conditions.

**10.2 Chemical stability:**

Stable under recommended handling and storage conditions.

**10.3 Possibility of hazardous reactions:**

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

**10.4 Conditions to avoid:**

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

**10.5 Incompatible materials:**

Caution, both reagents contain Sodium Azides, in contact with heavy metals, may form explosive metal azides

**10.6 Hazardous decomposition products:**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

| Name | Route | Result |
|---|---|---|
| Sodium azide | oral | LD50 Rat: 42 mg/kg |
| | dermal | LD50 Rabbit: 5 mg/kg |
| | inhalation | LC50 Rat: >0.054 mg/L (4 hr [Dust]) |

**Skin corrosion/irritation**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Serious eye damage/irritation**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Respiratory or skin sensitization**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Carcinogenicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):**

| Name | Classification |
|---|---|
| Sodium azide | Not Applicable |

**Germ cell mutagenicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Reproductive Toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Specific target organ toxicity (single exposure)**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Specific target organ toxicity (repeated exposure)**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:**

| Name | Result |
|---|---|
| Sodium azide | May cause damage to the brain through prolonged or repeated exposure. |

**Aspiration toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**

No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:**

No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:**

No data available.

**11.2 Information on other hazards**

**Endocrine disrupting properties:**

**Substance data:** No data available.

**Other information:**

No data available.

## SECTION 12: Ecological information

**12.1 Toxicity**

**Acute (short-term) toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

| Name | Result |
|---|---|
| Sodium azide | Fish LC50 Gasterosteus aculeatus: 0.8 mg/L (96 hr) |
| | Aquatic Plants EC50 Pseudokirchneriella subcapitata: 0.35 mg/L (96 hr [cell number]) |

**Chronic (long-term) toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**12.2 Persistence and degradability**

**Product data:** No data available.

**Substance data:**

| Name | Result |
|---|---|
| Sodium azide | Biodegradation studies do not apply to inorganic substances. |

### 12.3 Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### 12.4 Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

### 12.5 Results of PBT and vPvB assessment

**Product data:**

**PBT assessment:** This product does not contain any substances that are assessed to be a PBT.
**vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

**Substance data:**

**PBT assessment:**

| | |
|---|---|
| Sodium azide | PBT assessment does not apply to inorganic substance. |

**vPvB assessment:**

| | |
|---|---|
| Sodium azide | vPvB assessment does not apply to inorganic substances. |

### 12.6 Endocrine disrupting properties

**Substance data:** No data available.

**12.7 Other adverse effects:** No data available.

### 12.8 Hazard to the ozone layer

**Assessment:** Based on available data, the classification criteria are not met.
**Product data:** No data available.
**Substance data:** No data available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**13.1.1 Product / Packaging disposal:**
Dilute with large volumes of water and dispose of into sewer system, in accordance with local regulations.

**Waste codes / waste designations according to LoW:** Not determined or not available.

**13.1.2 Waste treatment-relevant information:** Not determined or not available.

**13.1.3 Sewage disposal-relevant information:** Not determined or not available.

**13.1.4 Other disposal recommendations:** It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

## SECTION 14: Transport information

**International Carriage of Dangerous Goods by Road/Rail (ADR/RID)**

| | |
|---|---|
| **UN number or ID number** | Not regulated |
| **UN proper shipping name** | Not regulated |
| **UN transport hazard class(es)** | None |
| **Packing group** | None |

| | |
|---|---|
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**International Carriage of Dangerous Goods by Inland Waterways (ADN)**

| | |
|---|---|
| **UN number or ID number** | Not regulated |
| **UN proper shipping name** | Not regulated |
| **UN transport hazard class(es)** | None |
| **Packing group** | None |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**International Maritime Dangerous Goods (IMDG)**

| | |
|---|---|
| **UN number or ID number** | Not regulated |
| **UN proper shipping name** | Not regulated |
| **UN transport hazard class(es)** | None |
| **Packing group** | None |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**International Air Transport Association Dangerous Goods Regulations (IATA-DGR)**

| | |
|---|---|
| **UN number or ID number** | Not regulated |
| **UN proper shipping name** | Not regulated |
| **UN transport hazard class(es)** | None |
| **Packing group** | None |
| **Environmental hazards** | None |
| **Special precautions for user** | None |

**Maritime Transport in Bulk according to IMO Instruments**

| | |
|---|---|
| **Bulk Name** | None |
| **Ship type** | None |
| **Pollution category** | None |
| **IMO hazard class** | None |
| **Environmental hazards** | None |
| **Material hazardous only in bulk** | None |
| **Cargo Group** | None |

## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.**

**European regulations**

**Inventory listing (EINECS):** All ingredients are listed or exempt.

**REACH SVHC candidate list:** None of the ingredients are listed.

**REACH SVHC Authorizations:** None of the ingredients are listed.

**REACH Restriction:** None of the ingredients are listed.

**Water hazard class (WGK) (Product):** Not determined.

**Water hazard class (WGK) (Substance):**

| Ingredient Name | CAS | Class |
|---|---|---|
| Sodium azide | 26628-22-8 | Water hazard class 2: obviously hazardous to water |

**Other regulations**

**Germany TA Luft:** None of the ingredients are listed.

**Additional information:** Not determined.

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: Other information

**Abbreviations and Acronyms:** None

**Summary of classification(s) in section 3:**

| | |
|---|---|
| Acute Tox. 2 (Oral) | Acute toxicity (oral), category 2 |
| Aquatic Acute 1 | Acute aquatic hazard, category 1 |
| Acute Tox. 1 (Dermal) | Acute toxicity (dermal), category 1 |
| Acute Tox. 2 (Inh) | Acute toxicity (inhalation), category 2 |
| Aquatic Chronic 1 | Chronic aquatic hazard, category 1 |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |

**Summary of hazard statements in section 3:**

| | |
|---|---|
| H300 | Fatal if swallowed |
| H400 | Very toxic to aquatic life |
| H310 | Fatal in contact with skin |
| H330 | Fatal if inhaled |
| H410 | Very toxic to aquatic life with long lasting effects |
| H373 | May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard) |

**Summary of EUH Statement(s) in section 3:**

| | |
|---|---|
| EUH032 | Contact with acids liberates very toxic gas |

**Disclaimer:**

This product has been classified in accordance with EC No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and EC No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation, and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**Initial preparation date:** 2023-11-16

**End of Safety Data Sheet**