1 Identification

- Product identifier
- Trade name: Sodium Azide
- Article number: 102891
- CAS Number: 26628-22-8
- Molecular Weight 65
- Application of the substance / the mixture For Research Use Only

2 Hazard(s) identification

- Classification of the substance or mixture
  - GHS06 Skull and crossbones
  - Acute Tox. 2 H300 Fatal if swallowed.
  - GHS08 Health hazard
  - STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- Label elements
- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms
  - GHS06
  - GHS08

- Signal word Danger
- Hazard-determining components of labeling:
  - Sodium Azide
- Hazard statements
  - Fatal if swallowed.
  - May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements
  - Do not breathe dust/fume/gas/mist/vapors/spray.
  - Wash thoroughly after handling.
  - Do not eat, drink or smoke when using this product.
  - If swallowed: Immediately call a poison center/doctor.
  - Specific treatment (see on this label).
  - Rinse mouth.
Trade name: Sodium Azide

Get medical advice/attention if you feel unwell.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
· NFPA ratings (scale 0 - 4)
  Health = 4
  Fire = 0
  Reactivity = 0

· HMIS-ratings (scale 0 - 4)
  HEALTH 4
  FIRE 0
  REACTIVITY 0

· Other hazards
  · Results of PBT and vPvB assessment
    · PBT: Not applicable.
    · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Substances
· CAS No. Description
  26628-22-8 Sodium Azide

4 First-aid measures

· Description of first aid measures
· General information:
  Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.
  In case of irregular breathing or respiratory arrest provide artificial respiration.
· After inhalation: If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.
· After skin contact: Wash off with soap and plenty of water. Consult a Doctor.
· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
· After swallowing: Do not induce vomiting; immediately call for medical help.
· Information for doctor
  · Most important symptoms and effects, both acute and delayed No further relevant information available.
  · Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
· Suitable extinguishing agents: Use fire fighting measures that suit the environment.
· Special hazards arising from the substance or mixture
  During heating or in case of fire poisonous gases are produced.
· Advice for firefighters
· Protective equipment: Mouth respiratory protective device.
6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Mount respiratory protective device.
- Environmental precautions: Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up:
  Pick up mechanically, dispose contaminated material as waste according to Section 13.
  Ensure adequate ventilation.
- Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.
- Protective Action Criteria for Chemicals
  - PAC-1: 0.026 mg/m³
  - PAC-2: 0.29 mg/m³
  - PAC-3: 5.3 mg/m³

7 Handling and storage

- Handling:
  - Precautions for safe handling
    Thorough dedusting.
    Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes.
  - Information about protection against explosions and fires: Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
  - Storage: 15-30°C
  - Requirements to be met by storerooms and receptacles: No special requirements.
- Further information about storage conditions:
  - Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see Section 7.
- Control parameters
  - Components with limit values that require monitoring at the workplace:
    26628-22-8 Sodium Azide
    REL Ceiling limit value: 0.3** mg/m³, 0.1* ppm
    *as HN3; **as NaN3; Skin
    TLV Ceiling limit value: 0.29** mg/m³, 0.11* ppm
    *as HN3 vapor **as NaN3
- Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    Keep away from foodstuffs, beverages and feed.
Trade name: Sodium Azide

Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately.

- **Breathing equipment:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**
  Protective gloves

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**
  Tightly sealed goggles

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9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  **General Information**
  **Appearance:**
  - Form: Crystalline powder
  - Color: White
  - Odor: Indeterminate
  - Odor threshold: Not determined.

- **pH-value:**
  Not applicable.

- **Change in condition**
  **Boiling point/Boiling range:** Undetermined.

- **Flash point:**
  Not applicable.

- **Flammability (solid, gaseous):**
  Product is not flammable.

- **Decomposition temperature:**
  Not determined.

- **Auto igniting:**
  Not determined.

- **Danger of explosion:**
  See section 10

- **Explosion limits:**
  - Lower: Not Applicable
  - Upper: Not Applicable
### 10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**
  - **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
  - **LD/LC50 values that are relevant for classification**
    - **ATE (Acute Toxicity Estimate)**
      - **Oral** LD50 5 mg/kg
    - **26628-22-8 Sodium Azide**
      - **Oral** LD50 5 mg/kg (ATE)
- **Primary irritant effect**
  - **on the skin**: No irritant effect.
  - **on the eye**: Irritant and potentially harmful
- **Sensitization**: No sensitizing effects known.
- **Additional toxicological information**
- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - Substance is not listed.
  - **NTP (National Toxicology Program)**
    - Substance is not listed.
Trade name: Sodium Azide

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 2 (Assessment by list): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Danger to drinking water if even small quantities leak into the ground.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Can not be disposed together with household garbage. Do not allow product to reach sewage system.
  - Uncleaned packagings:
    - Recommendation: Discard must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT, ADR, IMDG, IATA: UN1687
- UN proper shipping name
  - DOT: Sodium azide
  - ADR: 1687 Sodium azide, ENVIRONMENTALLY HAZARDOUS
  - IMDG: SODIUM AZIDE, MARINE POLLUTANT
  - IATA: SODIUM AZIDE
- Transport hazard class(es)
  - DOT
    - Class: 6.1 Toxic substances

(Contd. on page 7)
Trade name: Sodium Azide

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<th>· Label</th>
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<td>· Special marking (ADR):</td>
<td>Symbol (fish and tree)</td>
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<td>· Special precautions for user</td>
<td>Warning: Toxic substances</td>
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<td>F-A,S-A</td>
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<td>· Segregation groups</td>
<td>Azides</td>
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<tr>
<td>· Stowage Category</td>
<td>A</td>
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<tr>
<td>· Segregation Code</td>
<td>SG15 Stow &quot;separated from&quot; class 3</td>
</tr>
<tr>
<td></td>
<td>SG30 Stow &quot;away from&quot; heavy metals and their salts</td>
</tr>
<tr>
<td></td>
<td>SG35 Stow &quot;separated from&quot; acids</td>
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<td>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
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<td>· Transport/Additional information:</td>
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<td>· DOT</td>
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<tr>
<td>· Quantity limitations</td>
<td>On passenger aircraft/rail: 25 kg</td>
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<td>On cargo aircraft only: 100 kg</td>
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<td>· IMDG</td>
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</table>
Trade name: Sodium Azide

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      Substance is not listed.
    - Section 313 (Specific toxic chemical listings):
      Substance is not listed.
    - TSCA (Toxic Substances Control Act):
      Substance is listed.
    - Proposition 65
      - Chemicals known to cause cancer:
        Substance is not listed.
      - Chemicals known to cause reproductive toxicity for females:
        Substance is not listed.
      - Chemicals known to cause reproductive toxicity for males:
        Substance is not listed.
      - Chemicals known to cause developmental toxicity:
        Substance is not listed.
  - Carcinogenic categories
    - EPA (Environmental Protection Agency)
      Substance is not listed.
    - TLV (Threshold Limit Value established by ACGIH)
      Substance is not listed.
    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      Substance is not listed.
  - GHS label elements
    The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    GHS06  GHS08
  - Signal word
    Danger
  - Hazard-determining components of labeling:
    Sodium Azide
  - Hazard statements
    Fatal if swallowed.
    May cause damage to organs through prolonged or repeated exposure.
  - Precautionary statements
    Do not breathe dust/fume/gas/mist/vapors/spray.
Trade name: Sodium Azide

Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Immediately call a poison center/doctor.
Specific treatment (see on this label).
Rinse mouth.
Get medical advice/attention if you feel unwell.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Quality Control Dept.
Date of preparation / last revision: 07/05/2018 / -
Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 2: Acute toxicity – Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2