






1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Product name:** CD4 BIOTIN (ASR)
- **Catalog number:** 340854
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Becton, Dickinson and Company
 BD Biosciences
 2350 Qume Drive
 San Jose, CA 95131
 Tel: (408)232-8995
 bdbiosciences.com
- **Information department:** Technical Services
- **Emergency telephone number:**
 In case of a chemical emergency, spill, fire, or exposure, call BD Biosciences at (877)232-8995, or ChemTrec at (800)424-9300.


2 Composition/information on ingredients

- **Chemical characterization: Substances**
- **Identification number(s):**
- **EC number:** 2317912
- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

CAS NO.	Description	%
26628-22-8	Sodium azide	0.1%

	T+ R28	
	N R50/53	
	R32	
	H300	
	H400; H410	

3 Hazards identification

- **Classification of the substance or mixture**
 The product is not classified according to the Globally Harmonized System (GHS).
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 Xn; Harmful
 R22: Harmful if swallowed.
- **Classification system:**
 The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
 The product has been classified and marked in accordance with regulations on hazardous materials.
- **Code letter and hazard designation of product:**
 Xn Harmful
- **Hazard-determining components of labelling:**
 Sodium azide

Product name: CD4 BIOTIN (ASR)

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- **Risk phrases:**
22 Harmful if swallowed.
- **Safety phrases:**
23 Do not breathe gas/fumes/vapour/spray.
36 Wear suitable protective clothing.
60 This material and its container must be disposed of as hazardous waste.
- **Classification system**
- **NFPA ratings (scale 0-4)**



Health = 2
Flammability = 0
Reactivity = 0

4 First aid measures

- **General information**
Symptoms of poisoning may even occur after several hours; therefore provide medical observation for at least 48 hours after the accident.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Seek immediate medical advice.

5 Firefighting measures

- **Suitable extinguishing agents**
CO₂, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** Nitrogen oxides (NO_x)
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Wipe up with damp sponge or mop.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Dispose contaminated material as waste according to item 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.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.

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- Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** 2-8 C
- **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.
- **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 item 7.
- **Components with limit values that require monitoring at the workplace:**

26628-22-8 Sodium azide

REL ()	Short-term value: C 0.3** mg/m ³ , C 0.1* ppm *as HN ₃ ; **as NaN ₃ ; Skin
TLV ()	Short-term value: C 0.29** mg/m ³ , C 0.11* ppm *as HN ₃ vapor **as NaN ₃

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal Protective Equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Protection of hands:**



Chemical resistant gloves (i.e. nitrile, or equivalent).

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

9 Physical and chemical properties

- **General Information**
- **Appearance:**
 - Form:** Liquid
 - Color:** Colorless
 - Odor:** Characteristic
- **pH-value at 20°C (68 °F):** 7
- **Change in condition**
 - Melting point/Melting range:** 0°C (32 °F)
 - Boiling point/Boiling range:** 100°C (212 °F)
- **Flash point:** Not applicable
- **Auto igniting:** Product is not self igniting.
- **Danger of explosion:** Product does not present an explosion hazard.

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- | | |
|--|--|
| · Vapor pressure at 20°C (68 °F): | 23 hPa (17 mm Hg) |
| · Density at 20°C (68 °F): | 1.001 g/cm ³ (8.353 lbs/gal) |
| · Solubility in / Miscibility with Water: | Soluble |
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| Water: | 99.6 % |
| · Solids content: | 0.1 % |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:**
 Incompatible material: strong oxidizers.
 Incompatible materials: acidic material and metals
- **Hazardous decomposition products:** Nitrogen oxides (NO_x)
- **Additional information:**
 Sodium azide is present in this product. Contact with acidic solutions and metal compounds over time may form potentially explosive metal azides. Should any of this material be introduced into a sanitary sewer system, flush with copious amounts of water.

11 Toxicological information

 · **Acute toxicity:**

 · **LD/LC50 values that are relevant for classification:**

26628-22-8 Sodium azide

Oral	LD50	27 mg/kg (rat)
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 · **Primary irritant effect:**

 · **on the skin:** No irritating effect.

 · **on the eye:** No irritating effect.

 · **Sensitization:** No sensitizing effects known.

 · **Additional toxicological information:**

 The product shows the following dangers according to internally approved calculation methods for preparations:
 Harmful

12 Ecological information

- **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.

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- **Ecotoxicological effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
*Must not be disposed of with solid waste.
 Dispose of material in accordance with federal (40 CFR 261), state and local requirements.
 This product is not considered a RCRA hazardous waste.*
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to state and federal regulations.*
- **Recommended cleansing agent:** *Water, if necessary with cleansing agents.*

14 Transport information

- | | |
|--|-----------------|
| · UN-Number | Void |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | Void |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | Void |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Class | Void |
| · Packing group | Void |
| · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | No |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

15 Regulatory information

- | | |
|--|------------------------------------|
| · SARA Section 355 (extremely hazardous substances) | 26628-22-8 Sodium azide |
| · SARA Section 313 (specific toxic chemical listings) | 26628-22-8 Sodium azide |
| · TSCA (Toxic Substances Control Act) | All ingredients are listed. |
| · California Proposition 65 - Chemicals known to cause cancer | None of the ingredients is listed. |

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· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories
· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

26628-22-8 Sodium azide

A4

· Product related hazard information:

The product has been classified and marked in accordance with regulations on hazardous materials.

· Hazard symbols:

Xn Harmful

· Hazard-determining components of labeling:

Sodium azide

· Risk phrases:

22 Harmful if swallowed.

· Safety phrases:

23 Do not breathe gas/fumes/vapour/spray.

36 Wear suitable protective clothing.

60 This material and its container must be disposed of as hazardous waste.

16 Other information

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

· Department issuing MSDS: Safety and Environment Department
· Contact: Technical Service Representative
· 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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent