

## CD300e antibody (APC)

**Cat#: orb179877 (SDS)**

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

#### 1.1 Product identifier Monoclonal/Polyclonal antibody

Substance / mixture mixture

Catalog number see product label

Other names of the mixture

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

Intended use of the mixture Monoclonal or polyclonal antibody, single antibody labeled with fluorochrome or cocktail of fluorescently labeled antibodies containing sodium azide as a preservative.

#### The use descriptors

SU 20 Health services

SU 24 Scientific research and development

PC 21 Laboratory chemicals

PROC 15 Use as laboratory reagent

Not recommended use of the mixture The product should not be used in ways other than those referred in Section 1.

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

Company: Biorbyt Ltd.

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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008

##### The most serious adverse physico-chemical effects

Unknown

##### The most serious adverse effects on human health and the environment

Unknown

#### 2.2 Label elements

none

### 2.3. Other hazards

Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No 1272/2008.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Mixture of substances specified below and non-hazardous additives.

#### Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Name of the substance	Content in % weight	Classification according to Regulation (EC) No 1272/2008
Index:011-004-00-7 CAS: 26628-22-8 ES: 247-852-1	Sodium azide	<0,099	Acute Tox. 2, H300 Acute Tox. 1, H310 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of all classifications and H-phrases is given in the section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this Safety Data Sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

#### Inhalation

In case of problems following the vapours/aerosols inhalation, remove the affected persons to a fresh air. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation. Call immediately medical emergency.

#### Skin contact

Immediately remove all soiled or stained clothing. Wash the affected area immediately and repeatedly with soap and water. Use appropriate regenerating cream. Seek medical advice if the skin irritation persists.

**Eye contact**

Keep eyelids open and rinse immediately and repeatedly with copious amount of water for at least 10 - 15 minutes. Remove contact lenses, if present and easy to do. Seek medical advice if the eye irritation persists.

**Ingestion**

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting! In case of spontaneous vomiting avoid aspiration of the vomits. Get medical attention immediately and show product package or label!

**4.2. Most important symptoms and effects, both acute and delayed****Inhalation**

Possible irritation of airways, cough, headache.

**Skin contact**

Not expected.

**Eye contact**

Not expected.

**Ingestion**

Not expected.

**4.3. Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist

**Unsuitable extinguishing media**

water - full jet

**5.2. Special hazards arising from the substance or mixture**

Non-flammable - aqueous solution. After evaporation of water, harmful gases / smoke (carbon dioxide, aldehydes, carbon black, other decomposition products) can be produced during thermal decomposition at high temperatures or with insufficient combustion.

**5.3. Advice for firefighters**

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Provide sufficient ventilation. Use gloves in case of prolonged contact. Follow the instructions in Sections 7 and 8.

### **6.2. Environmental precautions**

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

### **6.3. Methods and material for containment and cleaning up**

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per Section 13. Collected material should be disposed of in accordance with locally valid regulations. Upon an escape of large quantities of the product, inform the Fire Department and the Environmental Department of the Municipal Authority with extended scope of competencies. After removal of the product, wash the contaminated site with plenty of water or another suitable cleaning material. Do not use solvents.

### **6.4. Reference to other sections**

7., 8. and 13.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

Observe all user considerations, safety measures and exposure limits. Avoid contact with skin, eyes and mucous membranes. See Section 8 for advice on the minimum requirements for personal protective equipment. Avoid breathing decomposition products or mists/aerosols. Use only with adequate ventilation.

Keep away from contamination with heavy metals. Sodium azide has been reported to form lead or copper azide in laboratory plumbing (heavy metals) which may explode on percussion. Treatment of sodium azide with strong acids gives hydrazoic acid, which is also extremely toxic.

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

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight.

### **The specific requirements or rules relating to the substance/mixture**

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

### **7.3. Specific end use(s)**

Monoclonal or polyclonal antibody.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Czech Republic

Name of the substance (komponent)	Type	Value	Source
Sodium azide (CAS:26628-22-8)	PEL	0,1 mg/m <sup>3</sup>	9/2013
	PEL	0,0376 ppm	
	NPK-P	0,3 mg/m <sup>3</sup>	
	NPK-P	0,1128 ppm	

#### European union

Name of the substance (komponent)	Type	Time of exposure	Value	Source
Sodium azide (CAS:26628-22-8)	OEL	8 hours	0,1 mg/m <sup>3</sup>	EU limits
	OEL	Short-term	0,3 mg/m <sup>3</sup>	

### 8.2. Exposure controls

Follow usual measures for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

#### Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

#### Skin protection

Hand protection: Protective gloves resistant against the product. Observe recommendations of the particular manufacturer of the gloves in the choice of their appropriate thickness, material and permeability. Use barrier creams for skin protection, they should however not be applied once exposure has occurred. Observe other recommendations of the manufacturer. Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant against elevated temperatures. Contaminated skin should be washed thoroughly.

#### Respiratory protection

Mask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of toxic substances are exceeded or in a poorly ventilated environment.

#### Thermal hazard

not available

#### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	liquid at 20°C
Physical	state liquid
Color data	not available
odour	no odour
odour treshhold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	100°C
Flash point	data not available
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	data not available
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	cca 1 g/cm <sup>3</sup>
Solubility(ies)	data not available
solubility in water	data not available
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

### 9.2. Další informace

Density data not available  
 auto-ignition temperature data not available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Not reactive under normal conditions of storage and manipulation. Sodium azide has been reported to form lead or copper azide in laboratory plumbing (heavy metals) which may explode on percussion. Treatment of sodium azide with strong acids gives hydrazoic acid, which is also extremely toxic.

### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Sodium azide has been reported to form lead or copper azide in laboratory plumbing (heavy metals) which may explode on percussion.

### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents. Thereby a dangerous exothermic reaction will be prevented.

### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous products are formed at high temperature and in fire, such as carbon monoxide and carbon dioxide, heavy smoke and nitrogen oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

No toxicological data is available for the mixture

#### Acute toxicity

Sodium azide

Route of exposure	Parameter	Value	Species
Inhalation	LD50	37 mg/m <sup>3</sup>	Rat ( <i>Rattus norvegicus</i> )
Oral	LD50	27 mg/kg	Rat
Dermal	LD50	20 mg/kg	Rabbit

Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

Based on available data the classification criteria are not met.

#### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

Based on available data the classification criteria are not met.

#### Carcinogenicity

Based on available data the classification criteria are not met.

### Reproductive toxicity

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

### Aspiration hazard

Based on available data the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute toxicity

Sodium azide

Parameter	Value	Time of exposure	Species
EC50	4,2 mg/l	48 hod	aquatic invertebrates

### 12.2. Persistence and degradability

Methods for determining biodegradability do not apply to inorganic substances.

### 12.3. Bioaccumulative potential

Insignificant.

### 12.4. Mobility in soil

The product is soluble and mobile in water and soil. Contamination of water courses may occur in case of rain.

### 12.5. Results of PBT and vPvB assessment

The product is not classified as PBT or vPvB.

### 12.6. Other adverse effects

not available

## SECTION 13: Disposal considerations

Hazard of environmental contamination; remove waste in accordance with local and/or national regulations.

### 13.1. Waste treatment methods



Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to an authorised person for waste removal (specialized company) authorised for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

### Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Council Directive 91/689/EEC on hazardous waste, as amended. Decision 94/3/EC establishing a list of wastes, as amended.

## SECTION 14: Transport information

The mixture **is not** classified as dangerous for transport according to ADR/RID/IMDG/ICAO/IATA.

### 14.1. UN number

Not subject to ADR.

### 14.2. UN proper shipping name

not available

### 14.3. Transport hazard class(es)

not available

### 14.4. Packing group

not available

### 14.5. Environmental hazards

not available

### 14.6. Special precautions for user

Reference in Sections 4 to 8.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available