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

1.1. Product identifier
Alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor® 488

1.2. Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: Laboratory use
Uses advised against: Other

1.3. Details of the supplier of the safety data sheet
Manufacturer
ChromoTek GmbH
Am Klopferspitz 19
D 82152 Planegg-Martinsried
Telephone: +49 89 124 148 80
Telefax: +49 89 124 148 811

Supplier (manufacturer/importer/only representative/downstream user/distributor)
ChromoTek GmbH
Am Klopferspitz 19
D 82152 Planegg-Martinsried
Telephone: +49 89 124 148 80
Telefax: +49 89 124 148 811

Information contact
ChromoTek GmbH
Information telephone: +49 89 124 148 80
Information telefax: +49 89 124 148 811
E-mail (competent person): info@chromotek.com
Website: http://www.chromotek.com/

1.4. Emergency telephone number
Giftnotrufzentrale München
Telephone: +49 89 19 240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Regulation (EC) No 1272/2008: -

2.2. Label elements
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms: -
Signal word: -
Hazard statements: -
Precautionary statements: -

Labeling
Hazardous component(s) for labelling
-

Special labelling of particular preparations
Safety data sheet available for professional user on request.

2.3. Other hazards
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition / information on ingredients

3.1. Substances
not applicable

3.2. Mixtures
Alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor® 488 is a mixture.

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance:</th>
<th>EC-no.:</th>
<th>CAS-No.:</th>
<th>INDEX no.:</th>
<th>REACH-no.:</th>
<th>Concentration:</th>
<th>Classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>247-852-1</td>
<td>28628-22-8</td>
<td>011-004-00-7</td>
<td>01-2119457019-37-0000</td>
<td>&lt; 0.1 % (v/v)</td>
<td>Acute Tox. 2; H300 Acute Tox. 2; H310 STOT RE 2; H373 Aqu. Acute 1; H400 Aqu. Chron. 1; H410 -: EUH032</td>
</tr>
</tbody>
</table>

(Full text of H- and EUH-phrases: see section 16.)

Additional information
none

SECTION 4: First aid measures

4.1. Description of first aid measures
General information: In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Following inhalation: No special measures are necessary. Seek medical attention if problems persist.
Following skin contact: After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.
After eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Seek medical attention if problems persist.
After ingestion: Rinse mouth immediately and drink plenty of water. Seek medical attention if problems persist.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms: No known symptoms to date.
4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor: No special measures are necessary.
Special treatment: No special measures are necessary.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: Water fog. alcohol resistant foam. dry extinguishing powder. Carbon dioxide (CO2).
Unsuitable extinguishing media: High power water jet.

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters
General information
Co-ordinate fire-fighting measures to the fire surroundings.

Special protective equipment for firefighters:
In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment. Remove persons to safety. Provide adequate ventilation.

6.2. Environmental precautions
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Avoid generation of dust. Clear contaminated areas thoroughly. Wash with plenty of water.

6.4. Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Avoid contact with skin and eyes.

Precautions against fire and explosion
Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep container tightly closed in a cool, well-ventilated place.

**Hints on joint storage**
Keep away from food, drink and animal feedingstuffs.

**Storage class:** 10-13

### 7.3. Specific end use(s)
Observe instructions for use.

---

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

**Occupational exposure limit value**

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.:</th>
<th>Source:</th>
<th>Occupational exposure limit value:</th>
<th>Limitation of exposure peaks:</th>
<th>Remark:</th>
</tr>
</thead>
</table>

**Substance with a common (EC) occupational exposure limit value**

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.:</th>
<th>Source:</th>
<th>Occupational exposure limit value:</th>
<th>Limitation of exposure peaks:</th>
<th>Remark:</th>
</tr>
</thead>
</table>

**DNEL-/PNEC-values**

**DNEL value**

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.:</th>
<th>DNEL/DMEL</th>
<th>Industry</th>
<th>Professional</th>
<th>Consumer</th>
</tr>
</thead>
</table>

**PNEC Value**

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.:</th>
<th>PNEC</th>
<th>Worker, industry</th>
<th>Worker, professional</th>
<th>Consumer</th>
</tr>
</thead>
</table>

**Risk management measures according to used control banding approach**

none

**Additional information**

none

#### 8.2. Exposure controls

**Occupational exposure controls**
Technical measures and the application of suitable work processes have priority over personal protection equipment.

**General protection and hygiene measures**
When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

**Personal protection equipment**
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

**Respiratory protection**
Respiratory protection not required.

**Hand protection**
Tested protective gloves are to be worn: DIN-/EN-Norms: DIN EN 374

**Eye/face protection**
Tightly sealed safety glasses.

**Body protection**
For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes). Only wear fitting, comfortable and clean protective clothing. Barrier creams are not substitutes for body protection.

Environmental exposure controls
refer to chapter 7. No further action is necessary.

Consumer exposure controls
refer to chapter 7. No further action is necessary.

Exposure Scenario
none

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical state:</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>clear</td>
<td></td>
</tr>
<tr>
<td>Odour:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

Safety relevant basis data

<table>
<thead>
<tr>
<th>parameter</th>
<th>unit</th>
<th>remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density:</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Bulk density:</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>pH:</td>
<td>7,5</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flash point:</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Explosivity:</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing potential:</td>
<td>Combustible.</td>
<td></td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td></td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapour density:</td>
<td></td>
<td>not applicable</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td></td>
<td>not applicable</td>
</tr>
<tr>
<td>Water solubility:</td>
<td></td>
<td>soluble</td>
</tr>
<tr>
<td>Fat solubility:</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Soluble in:</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Viscosity:</td>
<td></td>
<td>not applicable</td>
</tr>
<tr>
<td>Solvent separation test:</td>
<td>not applicable</td>
<td></td>
</tr>
<tr>
<td>Solvent content:</td>
<td></td>
<td>not applicable</td>
</tr>
</tbody>
</table>

9.2. Other information

There are no data available on the mixture itself.

SECTION 10: Stability and reactivity
10.1. Reactivity
none

10.2. Chemical stability
The substance is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions
No data available

10.4. Conditions to avoid
heat. UV-radiation/sunlight.

10.5. Incompatible materials

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
There are no data available on the mixture itself.

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Substance:</th>
<th>CAS-No.:</th>
<th>Toxicological information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td></td>
<td>Acute toxicity, oral LD50: 27 mg/kg (Rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute toxicity, dermal LD50: 20 mg/kg (Rabbit)</td>
</tr>
</tbody>
</table>

Irritation and etching
Irritant effect on the skin
slightly irritant but not relevant for classification.
Irritant effect on the eye
slightly irritant but not relevant for classification.

Sensitization
not sensitising.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Carcinogenicity
No indications of human carcinogenicity exist.
Germ cell mutagenicity
No indications of human germ cell mutagenicity exist.
Reproductive toxicity
No indications of human reproductive toxicity exist.

STOT-single exposure
No information available.

STOT-repeated exposure
none

Aspiration hazard
Not an irritant.

SECTION 12: Ecological information

12.1. Toxicity
There are no data available on the mixture itself.

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.</th>
<th>Ecotoxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>Acute fish toxicity LC50: 2.8 mg/l/96 h</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity EC50: 0.48 mg/l/96 h</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Product is biodegradable.

12.3. Bioaccumulative potential
No indication of bioaccumulation potential.

12.4. Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment
This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Appropriate disposal/Product
Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions. May be disposed of in household waste landfill.

Appropriate disposal / Package
Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

List of proposed waste codes/waste designations in accordance with EWC
According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

<table>
<thead>
<tr>
<th>Waste code product</th>
<th>Waste code packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 02 05</td>
<td>15 01 10</td>
</tr>
<tr>
<td>chemicals consisting of or containing dangerous substances</td>
<td>packaging containing residues of or contaminated by dangerous substances</td>
</tr>
</tbody>
</table>

SECTION 14: Transport information

14.1. UN number
UN No.: -

14.2. UN proper shipping name
ADR / RID
-

IMDG / ICAO-TI / IATA-DGR
-

14.3. Transport hazard class(es)
Hazard label(s): - Classification code: -

14.4. Packing group
Packing group: -

14.5. Environmental hazards
Environmental hazards: none

14.6. Special precautions for user
Land transport (ADR/RID)
Transport category: - Tunnel restriction code: -
Special provisions: - Limited quantity (LQ): --

Sea transport (IMDG)
EmS-No: -
Special provisions: - Limited quantity (LQ): --

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Remark: none

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
EU legislation
Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

none

Regulation (EC) No 2037/2000 concerning materials, which cause damage to the ozone layer.

none

Regulation (EC) No. 648/2004 (Detergents regulation)

none

National regulations
Observe in addition any national regulations!

Restrictions of occupation
none

Storage class
10-13
Water hazard class (WGK)
0  not a water pollutant

Other regulations, restrictions and prohibition regulations
none

15.2. Chemical Safety Assessment
For this preparation a chemical safety assessment has been carried out:
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Relevant H- and EUH-phrases (Number and full text)

Hazard statements
EUH032  Contact with acids liberates very toxic gas.
H300  Fatal if swallowed.
H310  Fatal in contact with skin.
H373  May cause damage to organs through prolonged or repeated exposure.
H400  Very toxic to aquatic life.
H410  Very toxic to aquatic life with long lasting effects.

Training advice
none

Recommended restrictions of use
refer to chapter 1.

Further remarks
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Documentation of changes
none

Key literature references and sources for data
Data arise from reference works and literature.

Abbreviations and acronyms
none