



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 23-Nov-2021

Previous revision date 18-Sep-2020

Revision Number 1

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

### 1.1. Product identifier

**Product Name** GI Tumor Ag, MoAb, CC, HP, 4C11  
**Catalogue Number(s)** 42508250, 12011811, 12011812, 12011813, 12011814, 12011815  
**Pure substance/mixture** Mixture

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

**Recommended use** Intermediate  
**Uses advised against** No information available

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

#### Corporate Headquarters

Bio-Rad Laboratories Inc.  
1000 Alfred Nobel Drive  
Hercules, CA 94547  
USA

#### Manufacturer

Bio-Rad Laboratories Inc.  
9500 Jeronimo Road  
Irvine, California 92618  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories Ltd  
The Junction  
Station Road  
Watford, WD17 1ET  
UK

For further information, please contact

**Technical Service** 00800 00246 723  
Techsupport.UK@bio-rad.com

### 1.4. Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC UK: 44-870-8200418

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

|                                 |                     |
|---------------------------------|---------------------|
| <b>Chronic aquatic toxicity</b> | Category 3 - (H412) |
|---------------------------------|---------------------|

### 2.2. Label elements

#### Hazard statements

H412 - Harmful to aquatic life with long lasting effects

#### Precautionary Statements - EU (§28, 1272/2008)

P273 - Avoid release to the environment

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

### 2.3. Other hazards

Harmful to aquatic life. Contains animal source material. (Mouse). (Cattle).

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

| Chemical name              | Weight-%       | REACH registration number | EC No     | Classification according to Regulation (EC) No. 1272/2008 [CLP]  | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|----------------------------|----------------|---------------------------|-----------|--|------------------------------------|----------|----------------------|
| Sodium azide<br>26628-22-8 | 0.1 -<br>0.299 | No data available         | 247-852-1 | Acute Tox. 2 (H300)<br>Acute Tox. 1 (H310)<br>(EUH032)<br>Aquatic Acute 1<br>(H400)<br>Aquatic Chronic 1<br>(H410) | -                                  | -        | -                    |

**Full text of H- and EUH-phrases: see section 16**

### Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Remove to fresh air.   |
| <b>Eye contact</b>  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| <b>Skin contact</b> | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.                 |
| <b>Ingestion</b>    | Rinse mouth.   |

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

**Symptoms** No information available.

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

**Note to physicians** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                     |   |
|-------------------------------------|---|
| <b>Suitable Extinguishing Media</b> | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| <b>Large Fire</b>                   | CAUTION: Use of water spray when fighting fire may be inefficient.                                      |

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

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

**Specific hazards arising from the chemical** No information available.

#### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

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

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

**Personal precautions** Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

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

**Reference to other sections** See section 8 for more information. See section 13 for more information.

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

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

**Advice on safe handling** Ensure adequate ventilation.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Store according to product and label instructions.

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

**Identified uses**  
**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

**Exposure Limits**

| Chemical name              | European Union   | Austria   | Belgium  | Bulgaria   | Croatia   |
|----------------------------|--|---|--|--|---|
| Sodium azide<br>26628-22-8 | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>*                                     | TWA: 0.1 mg/m <sup>3</sup><br>STEL 0.3 mg/m <sup>3</sup><br>H*      | -  | STEL: 0.3 mg/m <sup>3</sup><br>TWA: 0.1 mg/m <sup>3</sup><br>K*  | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>K*           |
| Chemical name              | Cyprus   | Czech Republic  | Denmark  | Estonia  | Finland   |
| Sodium azide<br>26628-22-8 | -  | -   | TWA: 0.1 mg/m <sup>3</sup><br>H*                                       | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>A*  | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>iho*         |
| Chemical name              | France   | Germany   | Germany MAK  | Greece   | Hungary   |
| Sodium azide<br>26628-22-8 | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>*                                     | TWA: 0.2 mg/m <sup>3</sup>  | TWA: 0.2 mg/m <sup>3</sup><br>Ceiling / Peak: 0.4<br>mg/m <sup>3</sup> | -  | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup>                 |
| Chemical name              | Ireland  | Italy   | Italy REL  | Latvia   | Lithuania   |
| Sodium azide<br>26628-22-8 | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>Sk*                                   | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>pelle* | -  | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>*   | -   |
| Chemical name              | Luxembourg   | Malta   | Netherlands  | Norway   | Poland  |
| Sodium azide<br>26628-22-8 | -  | -   | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>H*        | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup>        | STEL: 0.3 mg/m <sup>3</sup><br>TWA: 0.1 mg/m <sup>3</sup>                 |
| Chemical name              | Portugal   | Romania   | Slovakia   | Slovenia   | Spain   |
| Sodium azide<br>26628-22-8 | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>Ceiling: 0.29 mg/m <sup>3</sup><br>P* | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>P*     | TWA: 0.1 mg/m <sup>3</sup><br>K*                                       | TWA: 0.1 mg/m <sup>3</sup><br>STEL: STEL mg/m <sup>3</sup><br>K* | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>vía dérmica* |
| Chemical name              | Sweden   |   | Switzerland  |  | United Kingdom  |
| Sodium azide<br>26628-22-8 | -  |   | TWA: 0.2 mg/m <sup>3</sup><br>STEL: 0.4 mg/m <sup>3</sup>              |  | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.3 mg/m <sup>3</sup><br>Sk*          |

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls****Personal protective equipment**

**Eye/face protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

**SECTION 9: Physical and chemical properties**

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

|                 |                          |
|-----------------|--------------------------|
| Physical state  | Liquid                   |
| Appearance      | Clear                    |
| Colour          | colourless               |
| Odour           | Odourless.               |
| Odour threshold | No information available |

| <u>Property</u>                        | <u>Values</u>            | <u>Remarks • Method</u>  |
|--|--------------------------|--------------------------|
| Melting point / freezing point         | No data available        | None known               |
| Boiling point / boiling range          | No data available        |                          |
| Flammability (solid, gas)              | No data available        | None known               |
| Flammability Limit in Air              |                          | None known               |
| Upper flammability or explosive limits | No data available        |                          |
| Lower flammability or explosive limits | No data available        |                          |
| Flash point                            | No data available        | None known               |
| Autoignition temperature               | No data available        | None known               |
| Decomposition temperature              |                          | None known               |
| pH                                     | 7.3-7.5                  |                          |
| pH (as aqueous solution)               | No data available        | No information available |
| Kinematic viscosity                    | No data available        | None known               |
| Dynamic viscosity                      | No data available        | None known               |
| Water solubility                       | Miscible in water        |                          |
| Solubility(ies)                        | No data available        | None known               |
| Partition coefficient                  | No data available        | None known               |
| Vapour pressure                        | No data available        | None known               |
| Relative density                       | No data available        | None known               |
| Bulk density                           | No data available        |                          |
| Liquid Density                         | No data available        |                          |
| Vapour density                         | No data available        | None known               |
| Particle characteristics               |                          |                          |
| Particle Size                          | No information available |                          |
| Particle Size Distribution             | No information available |                          |

**9.2. Other information****9.2.1. Information with regard to physical hazard classes**

Not applicable

**9.2.2. Other safety characteristics**

No information available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

|            |                           |
|------------|---------------------------|
| Reactivity | No information available. |
|------------|---------------------------|

**10.2. Chemical stability**

|           |                                 |
|-----------|---------------------------------|
| Stability | Stable under normal conditions. |
|-----------|---------------------------------|

**Explosion data**

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

**10.3. Possibility of hazardous reactions**

|                                    |   |
|------------------------------------|---|
| Possibility of hazardous reactions | Avoid contact with metals. This product contains Sodium azide. Sodium azide can react with Copper, Brass, Lead, and solder in piping systems to form explosive compounds and toxic gases. |
|------------------------------------|---|

**10.4. Conditions to avoid**

Conditions to avoid None known based on information supplied.

**10.5. Incompatible materials**

Incompatible materials Metals.

**10.6. Hazardous decomposition products**

Hazardous decomposition products None known based on information supplied.

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. |

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

Symptoms No information available.

**Acute toxicity****Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

|                 |                 |
|-----------------|-----------------|
| ATEmix (oral)   | 27,000.00 mg/kg |
| ATEmix (dermal) | 20,000.00 mg/kg |

**Component Information**

| Chemical name | Oral LD50          | Dermal LD50                                 | Inhalation LC50 |
|---------------|--------------------|---|-----------------|
| Sodium azide  | = 27 mg/kg ( Rat ) | = 20 mg/kg ( Rabbit )<br>= 50 mg/kg ( Rat ) | -               |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

## **11.2. Information on other hazards**

### **11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

### **11.2.2. Other information**

**Other adverse effects** No information available.

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea |
|---------------|----------------------|--|----------------------------|-----------|
| Sodium azide  | -                    | LC50: =0.7mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: =0.8mg/L (96h, <i>Oncorhynchus mykiss</i> )<br>LC50: =5.46mg/L (96h, <i>Pimephales promelas</i> ) | -                          | -         |

### **12.2. Persistence and degradability**

**Persistence and degradability** No information available.

### **12.3. Bioaccumulative potential**

**Bioaccumulation** There is no data for this product.

### **12.4. Mobility in soil**

**Mobility in soil** No information available.

### **12.5. Results of PBT and vPvB assessment**

#### **PBT and vPvB assessment**

| Chemical name | PBT and vPvB assessment       |
|---------------|-------------------------------|
| Sodium azide  | PBT assessment does not apply |

### **12.6. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Flush pipes with water frequently if discarding solutions containing Sodium azide into metal piping systems.

**Contaminated packaging**

Do not reuse empty containers.

**SECTION 14: Transport information****IATA**

|   |                |
|---|----------------|
| <b>14.1 UN number or ID number</b>        | Not regulated  |
| <b>14.2 UN proper shipping name</b>       | Not regulated  |
| <b>14.3 Transport hazard class(es)</b>    | Not regulated  |
| <b>14.4 Packing group</b>                 | Not regulated  |
| <b>14.5 Environmental hazards</b>         | Not applicable |
| <b>14.6 Special Precautions for Users</b> |                |
| <b>Special Provisions</b>                 | None           |

**IMDG**

|   |                          |
|---|--------------------------|
| <b>14.1 UN number or ID number</b>                                  | Not regulated            |
| <b>14.2 UN proper shipping name</b>                                 | Not regulated            |
| <b>14.3 Transport hazard class(es)</b>                              | Not regulated            |
| <b>14.4 Packing group</b>   | Not regulated            |
| <b>14.5 Environmental hazards</b>                                   | Not applicable           |
| <b>14.6 Special Precautions for Users</b>                           |                          |
| <b>Special Provisions</b>   | None                     |
| <b>14.7 Maritime transport in bulk according to IMO instruments</b> | No information available |

**RID**

|   |                |
|---|----------------|
| <b>14.1 UN number</b>                     | Not regulated  |
| <b>14.2 UN proper shipping name</b>       | Not regulated  |
| <b>14.3 Transport hazard class(es)</b>    | Not regulated  |
| <b>14.4 Packing group</b>                 | Not regulated  |
| <b>14.5 Environmental hazards</b>         | Not applicable |
| <b>14.6 Special Precautions for Users</b> |                |
| <b>Special Provisions</b>                 | None           |

**ADR**

|   |                |
|---|----------------|
| <b>14.1 UN number or ID number</b>        | Not regulated  |
| <b>14.2 UN proper shipping name</b>       | Not regulated  |
| <b>14.3 Transport hazard class(es)</b>    | Not regulated  |
| <b>14.4 Packing group</b>                 | Not regulated  |
| <b>14.5 Environmental hazards</b>         | Not applicable |
| <b>14.6 Special Precautions for Users</b> |                |
| <b>Special Provisions</b>                 | None           |

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**



**Water hazard class (WGK)** non-hazardous to water (nwg)

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

#### Persistent Organic Pollutants

Not applicable

#### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

#### International Inventories

Contact supplier for inventory compliance status

#### 15.2. Chemical safety assessment

##### Chemical Safety Report

No information available

### SECTION 16: Other information

#### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under section 3

EUH032 - Contact with acids liberates very toxic gas

H300 - Fatal if swallowed

H310 - Fatal in contact with skin

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

\*

Skin designation

| Classification procedure  |                    |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used        |
| Acute oral toxicity   | Calculation method |
| Acute dermal toxicity   | Calculation method |
| Acute inhalation toxicity - gas                                 | Calculation method |
| Acute inhalation toxicity - Vapour                              | Calculation method |
| Acute inhalation toxicity - dust/mist                           | Calculation method |
| Skin corrosion/irritation                                       | Calculation method |
| Serious eye damage/eye irritation                               | Calculation method |
| Respiratory sensitisation                                       | Calculation method |
| Skin sensitisation  | Calculation method |

|                          |                    |
|--------------------------|--------------------|
| Mutagenicity             | Calculation method |
| Carcinogenicity          | Calculation method |
| Reproductive toxicity    | Calculation method |
| STOT - single exposure   | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity   | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard        | Calculation method |
| Ozone                    | Calculation method |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
European Chemicals Agency (ECHA) (ECHA\_API)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AELG(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision Note** Significant changes throughout SDS. Review all sections

**Revision date** 23-Nov-2021

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

**End of Safety Data Sheet**