

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

1.1 Product identifier	Antibodies [PBS with Glycerol Based Buffer] Product Catalog Number: 67028-1-Ig
1.2 Relevant identified uses of the substance or mixture and uses advised against	For laboratory research use only. Uses advised against: not available.
1.3 Details of the supplier of the safety data sheet	Proteintech Germany GmbH, Am Klopferspitz 19, 82152, Martinsried, Deutschland; Tel 0049 3222 109 3333; Fax 0049 8912 4148811; germany@ptglab.com.
1.4 Emergency telephone number	+1-888-478-4522 (USA (CDT) business hours). UK: 111 (public NHS number for less urgent medical problems). Medical professionals can contact the National Poisons Information Service (NPIS): 0344 892 0111. Austria: Tel +43 1 406 43 43 (Vergiftungsinformationszentrale, VIZ; emergency 24 h) (non-emergency: Tel +43 1 406 68 98; office hours, Monday to Friday, 8 am until 4 pm). Belgium: 070 245 245 (Centre Antipoisons/Antigifcentrum). Czech Republic: Czech Republic: +420 224 91 92 93, +420 224 915 402 (Toxikologické informační středisko, TIS; Na Bojišti 1, 120 00 Praha 2; www.tis-cz.cz. Denmark: +45 8212 1212 [Danish Poison Center (Giftlinjen)]. Finland: 0800 147 111 (free of charge); 09 471 977 (Poison Information Centre). France: +33 (0)1 45 42 59 59 numéro ORFILA (INRS). Hungary: (+36-80) 20 11 99 (24 h, free of charge) (ETTSZ). Italy: Regional poison information centres, see: https://preparatipericolosi.iss.it/cav.aspx Lithuania: +370 (85) 2362052. Netherlands: +31 (0)88 755 8000 (NVIC) (medical personnel). Norway: 22 59 13 00: Norwegian Poisons Information Centre (Giftinformasjonen). Spain: +34 91 562 04 20 (24 h/365 days) (only toxicological emergencies) [Instituto Nacional de Toxicología y Ciencias Forenses (INTCF)]. Sweden: 112 (Begär Giftinformation). Switzerland: 145 (Tox Info Suisse; www.toxi.ch).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture	
Classification according to CLP Regulation (1272/2008).	This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No. 1272/2008, and it is not mandatory to supply a safety data sheet, but this document contains information and advice concerning safe handling of the product.
2.2 Label elements	
Pictograms	None.
Signal word	None.
Hazard statements	None.
Precautionary statements	None.
Supplemental information	Not available.
2.3 Other hazards	This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.2 Mixtures^a

Declarable components	Conc. (wt%)	EC No.	CAS No.	REACH Reg. No.	Classification, supplemental hazards, ATE, M-factor, and SCL
None					
Other components					
Sodium Azide	< 0.09	247-852-1	26628-22-8	NA	Acute Tox. 2 (H300) Acute Tox. 1 (H310) Acute Tox. 2 (H330) STOT RE 2 (H373) Aquatic Acute 1 (H400) (M = 1) Aquatic Chronic 1 (H410) (M = 1) EUH032
Water	40–50	231-791-2	7732-18-5	NA	Not classified
Ca. 50	40–50	200-289-5	56-81-5	NA	Not classified

^a NA: not available.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation	Remove exposed person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin	Remove contaminated clothing and wash affected area with soap and water.
Eye	In case of contact with eyes, irrigate with room-temperature water or eyewash solution for several minutes, occasionally lifting eyelids.
Ingestion	If swallowed, rinse mouth thoroughly and give water to drink.

4.2 Most important symptoms and effects, both acute and delayed
No adverse effects have been identified.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptoms as they occur.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable	Use extinguishing media appropriate to cause of the fire, and the surroundings. Water spray, carbon dioxide and dry-chemical powder are suitable.
Unsuitable	Not available.

5.2 Special hazards arising from the substance or mixture
The product is an aqueous solution, and is not classified as flammable.

5.3 Advice for firefighters
Firefighters should wear an approved self-contained breathing apparatus and full protective clothing.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	Wear personal protection (see Section 8). Product is supplied very small volumes (< 1 mL) in a plastic vial, and does not pose a health or environmental hazard during foreseeable use. Follow prescribed procedures for responding to large spills.
6.2 Environmental precautions	No environmental hazard from foreseen use. For large spills, prevent product from entering water courses or drainage system by absorption with inert material.
6.3 Methods and material for containment and cleaning up	Clean up spill as soon as possible. Collect plastic vials. For small quantities of spilt product, wipe off with cloth or paper. For larger quantities, absorb with an inert material such as cloth, or sand. Wash contaminated surfaces with water and detergent, and collect waste, washings, and contaminated materials for safe disposal.

6.4 Reference to other sections For recommended personal protective equipment, see Section 8.
For disposal considerations, see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Avoid skin and eye contact. Use protective measures described in Section 8. Use only in a well-ventilated area.
Wash hands after use.

7.2 Conditions for safe storage, including any incompatibilities Store at -20 °C. Keep container tightly closed, and in well-ventilated area.

7.3 Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

EU limit values None.

National limit values

UK: Glycerol, mist: 8 h TWA, 10 mg/m³.

Belgium: Glycerol, mist: 8 h TWA, 10 mg/m³.

Finland: Glycerol, mist: 8 h TWA, 20 mg/m³.

France: Glycerol, mist: 8 h TWA, 10 mg/m³.

Germany (inhalable fraction): Glycerol, mist: 8 h TWA, 200 mg/m³; 15 min, 400 mg/m³ (AGS and DFG).

Netherlands: Glycerol, mist: 8 h TWA, 10 mg/m³.

Poland: Glycerol, mist: 8 h TWA, 10 mg/m³.

Spain: Glycerol, mist: 8 h TWA, 10 mg/m³.

Belgium: Glycerol, mist: 8 h TWA, 10 mg/m³.

Austria, Czech Republic, Denmark, Hungary, Italy, Lithuania, Norway, Slovakia, Sweden, Switzerland: not available.

Monitoring procedure BS EN 14042:2003; Workplace Atmospheres; Guide for the Application and Use of Procedures for the Assessment of Exposure to Chemical and Biological Agents, or other national equivalent.

Other: human health (DNELs, DMELs) Sodium azide: DNELs: workers, long-term exposure, systemic effects, dermal, 46.7 µg/kg bw/day; DNEL: workers, long-term exposure, systemic effects, inhalation, 0.164 mg/m³.

Glycerol: DNEL: workers, long-term exposure, local effects, inhalation, 56 mg/m³.

Other: environmental (PNEC) Sodium azide: PNEC: freshwater, 0.35 µg/L; sewage treatment plant, 30 µg/L; freshwater sediment, 16.7 µg/kg sediment dw; water intermittent, 3.5 µg/L.

Glycerol: PNEC: freshwater, 0.885 mg/L; sewage treatment plant, 1000 mg/L; freshwater sediment, 3.3 mg/kg dry sediment; soil, 0.141 mg/kg dry soil.

8.2 Exposure controls

Engineering controls Use in a fume hood or in areas with good general ventilation.

Personal protective equipment The need for personal protective equipment should be based on a workplace risk assessment for the particular use. Follow good laboratory hygiene practices when handling this product.
Wear chemical resistant glasses, chemical resistant gloves (eg rubber or PVC), and protective clothing (eg laboratory coat).
PPE should be to European (EN) standards. Consult manufacturers concerning breakthrough times.

Environmental exposure controls Not available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Physical state	Liquid
(b) Colour	Pale gold, clear
(c) Odour	Odorless
(d) Melting/freezing point	0 °C for water; 18 °C for glycerol
(e) Boiling point or initial boiling point and boiling range	100 °C for water; 290 °C for glycerol
(f) Flammability	Water-based liquid not classified as flammable
(g) Lower and upper explosion limit	Not available;
(h) Flash point	Not available; 204 °C (Cleveland open cup) for glycerol
(i) Auto-ignition temp.	Not available; 370 °C for glycerol
(j) Decomposition temp.	Not available
(k) pH	Not available
(l) Kinematic viscosity	Not available
(m) Solubility	Freely soluble in water
(n) Partition coeff. n-octanol/water (log value)	Not available; -1.75 for glycerol
(o) Vapour pressure	2310 Pa at 20 °C for water; below 0.001 mmHg at room temperature and below 0.2 mmHg at 100 °C for glycerol
(p) Density or rel. density	Ca. 1.1
(q) Relative vapour density	Not available
(r) Particle characteristics	Not available
9.2 Other information	Not expected to meet the criteria for classification as explosive or oxidising

SECTION 10: Stability and reactivity

10.1 Reactivity	Not available
10.2 Chemical stability	Stable under ambient conditions.
10.3 Possibility of hazardous reactions	Not available
10.4 Conditions to avoid	Avoid storage at temperatures above -20 °C.
10.5 Incompatible materials	Not available
10.6 Hazardous decomposition products	Not available

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) Acute toxicity	Based on available data, the classification criteria are not met. ATE _{mix} (oral) > 2000 mg/kg; ATE _{mix} (dermal) > 2000 mg/kg; ATE _{mix} (inhalation, mist) > 5 mg/L. Sodium azide: LD ₅₀ (oral; rat), 27 mg/kg; LC ₅₀ (inhalation; rat; 1 h), 0.052–0.54 mg/L; LD ₅₀ (dermal; guinea pig), 20 mg/kg. Glycerol: LD ₅₀ (oral; rat), 27 200 mg/kg; LC ₅₀ (inhalation; rat; 1 h), > 11 mg/L; LD ₅₀ (dermal; guinea pig), 56 750 mg/kg.
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(b)Skin corrosion/irritation	Based on available data, the classification criteria are not met. Glycerol: not irritating (rabbit test).
(c)Serious eye damage/irritation	Based on available data, the classification criteria are not met. Glycerol: not irritating (rabbit test).
(d)Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
(e)Germ cell mutagenicity	Based on available data, the classification criteria are not met.
(f) Carcinogenicity	Based on available data, the classification criteria are not met.
(g)Reproductive toxicity	Based on available data, the classification criteria are not met.
(h)STOT-single exposure	Based on available data, the classification criteria are not met.
(i) STOT-repeated exposure	Based on available data, the classification criteria are not met.
(j) Aspiration hazard	Based on available data, the classification criteria are not met.
11.2Information on other hazards	This product does not contain any known or suspected endocrine disruptors.

SECTION 12: Ecological information

12.1Toxicity	Based on available data, the classification criteria are not met. Sodium azide: LC ₅₀ (Lepomis macrochirus, 96 h), 0.7 mg/L; EC ₅₀ (Oncorhynchus mykiss, 96 h), 0.8 mg/L).
12.2Persistence and degradability	Glycerol: readily biodegradable.
12.3Bioaccumulative potential	Not available
12.4Mobility in soil	Not available.
12.5Results of PBT and vPvB assessment	No ingredient classified as PBT or vPvB.
12.6Endocrine disrupting properties	No ingredient classified for endocrine disrupting properties.
12.7Other adverse effects	Not classified as hazardous to the ozone layer.

SECTION 13: Disposal considerations

13.1Waste treatment methods	Incineration is recommended for large quantities of this product. Disposal via the drains or landfill may be suitable for small amounts. Disposal must be in accordance with current national and local regulations. Chemical residues generally count as special waste. General EU requirements are given in Directive 2008/98/EC.
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SECTION 14: Transport information

14.1UN Number	Not classified as dangerous goods for transport.
14.2UN proper shipping name	Not applicable.
14.3Transport hazard class(es)	Not applicable.
14.4Packing group	Not applicable.
14.5Environmental hazards	Not classified as marine pollutant/environmentally hazardous.
14.6Special precautions for user	Not available.
14.7Maritime transport in bulk according to IMO instruments	Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

UK: Control of Substances Hazardous to Health Regulations 2002 (COSHH), as amended (also implementing 90/394/EEC on carcinogens at work). Workplace Exposure Limits EH40/2005 (Second edition, with 2013 amendments); Health and Safety Executive.

EU: Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended). EU Indicative Occupational Exposure Limit Values (IOELVs); Commission Directive 2000/39/EC (as amended).

Austria: Occupational exposure limits: Verordnung des Bundesministers für Wirtschaft und Arbeit über Grenzwerte für Arbeitsstoffe und über krebserzeugende Arbeitsstoffe (Grenzwerteverordnung 2007 - GKV 2007).

Belgium: Occupational exposure limits: Valeurs Limites d'Exposition Professionnelle (VLEP); or Grenswaarden voor Beroepsmatige Blootstelling (GWBB).

Czech Republic: List of Chemical Substances and their Permissible Exposure Limits (PELs) and Maximum Allowable Concentrations (NPK-P).

Denmark: Occupational exposure limits: Bekendtgørelse om grænseværdier for stoffer og materialer.

Finland: Occupational exposure limits: HTP-ARVOT 2018; Haitallisiksi tunnetut pitoisuudet.

France: Occupational exposure limits: Valeurs limites d'exposition professionnelle aux agents chimiques en France; Document ED 984.

Germany: Germany: WGK (Wassergefährdungsklassen) Regulation: Verwaltungsvorschrift wassergefährdende Stoffe (VwVwS), designating water hazard classes. Product WGK, 1 (self-classification).

Occupational exposure limits: Technische Regeln für Gefahrstoffe (TRGS) 900; Arbeitsplatzgrenzwerte (AGW); revision 4 November 2016. List of MAK and BAT Values 2019; Report 55; Deutsche Forschungsgemeinschaft.

Hungary: Occupational exposure limits: 5/2020. (II. 6.) ITM rendelet a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről.

Italy: Occupational exposure limits: Decreto Ministeriale 26/02/04. Definizione di una prima lista di valori limite indicativi di esposizione professionale agli agenti chimici.

Lithuania: Occupational exposure limits: Hygiene Norm HN 23:2011.

Netherlands: Occupational exposure limits, see: <https://www.ser.nl/nl/thema/arbeidsomstandigheden/Grenswaarden-gevaarlijke-stoffen/Grenswaarden>

Norway: Occupational exposure limits: Regulations concerning Action and Limit values; 11/2/22; Norwegian Labour Inspection Authority (Arbeidstilsynet).

Poland: Act of 11.01.2001 on chemical substances and preparations (Journal of Laws No. 11 p. 84), as amended. Occupational exposure limits: The Ordinance of the Minister of Labour and Social Policy on the Maximum Admissible Concentrations and Intensities of Harmful to Health Agents in the Working Environment. DZIENNIK USTAW 2002, NO 217, ITEM 1833.

Slovakia: Act No 124/2006 on health and safety at work and amending certain acts (o bezpečnosti a ochrane zdravia pri práci a o zmene a doplnení niektorých zákonov).

Spain: Occupational exposure limits: Límites de Exposición Profesional Para Agentes Químicos En España 2016; Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT).

Sweden: Occupational exposure limits: AFS 2018:1; Hygieniska gränsvärden; Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden; 13 februari 2018.

Switzerland: Occupational exposure limits: Verordnung über die Verhütung von Unfällen und Berufskrankheiten (VUV)", Art. 50 Abs. 3.

15.2 Chemical safety assessment

Not available.

SECTION 16: Other information

Revisions

This version 1.0 is formatted according to EU Regulation 2020/878.

References

Search for chemicals; available at the European Chemicals Agency website: <http://echa.europa.eu/>.

Basis of classification	The mixture is classified on the basis of available information on the ingredients.
List of hazard statements	<p>H300 - Fatal if swallowed</p> <p>H310 - Fatal in contact with skin</p> <p>H330 - Fatal if inhaled</p> <p>H373 - May cause damage to organs through prolonged or repeated exposure</p> <p>H400 - Very toxic to aquatic life</p> <p>H410 - Very toxic to aquatic life with long lasting effects</p> <p>EUH032 - Contact with acids liberates very toxic gas</p>

Disclaimer: The above information is believed to be correct but is only to be used as a guide for experienced personnel. Proteintech Group, Inc. shall not be liable for any damage resulting from the handling of or contact with the above product.