

Printing date 01/12/2022

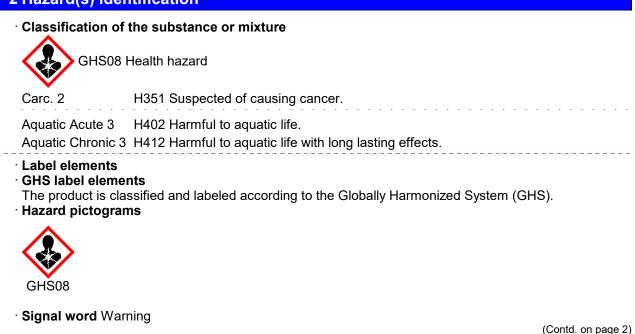
Revision date 01/12/2022

Page 1/8

### **1** Identification

- Product identifier
- · Trade name: Trypan Blue (10X)
- · Article number: 400292
- **Application of the substance / the mixture** This product is for research use - Not for human or veterinary diagnostic or therapeutic use. It is the responsibility of the purchaser to determine suitability for other applications.
- Details of the supplier of the safety data sheet
   Manufacturer/Supplier: Cayman Chemical Co.
   1180 E. Ellsworth Rd. Ann Arbor, MI 48108 USA
- · Information department: Product safety department
- Emergency telephone number: During normal opening times: +1 (734) 971-3335 US/CANADA: 800-424-9300 Outside US/CANADA: 703-741-5970

# 2 Hazard(s) identification



Printing date 01/12/2022

Revision date 01/12/2022

### Trade name: Trypan Blue (10X)

	(Contd. from page 1)
Hazard sta	
	ected of causing cancer.
	ful to aquatic life.
	ful to aquatic life with long lasting effects.
	ary statements
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
	B IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Classificat	ion system:
	igs (scale 0 - 4)
	Health = 0
	Fire = 0
	Reactivity = 0
UMIS_ratio	gs (scale 0 - 4)
nwii5-ratin	ys (scale 0 - 4)
HEALTH (	<sup>0</sup> Health = 0
FIRE	Fire = $0$
REACTIVITY	
Other haza	Irds
<b>Results of</b>	PBT and vPvB assessment
PBT: Not a	pplicable.
vPvB: Not	
Composi	ition/information on ingredients
Chemical o	characterization: Mixtures
	<b>n:</b> Mixture of the substances listed below with nonhazardous additions.
•	s components:

· Dangerous components:			
CAS: 72-57-1 RTECS: QJ6475000	Trypan blue reagent	0.4%	
· Other ingredients			
CAS: 7732-18-5 RTECS: ZC0110000	Water	98.75%	
CAS: 7647-14-5 RTECS: VZ4725000	Sodium chloride	0.85%	

# 4 First-aid measures

### · Description of first aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

(Contd. on page 3)

Printing date 01/12/2022

Revision date 01/12/2022

(Contd. from page 2)

Trade name: Trypan Blue (10X)

- Information for doctor:
   Most important symptoms and effects, both acute and delayed May cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects. No further relevant information available.
   Indication of any immediate medical attention and special treatment needed
  - No further relevant information available.

## **5 Fire-fighting measures**

- · Extinguishing media
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment. A solid water stream may be inefficient.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions:
   Do not allow product to reach sewage system or any water course.
   Inform respective authorities in case of seepage into water course or sewage system.
   Dilute with plenty of water.
   Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.
- **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.
- · Protective Action Criteria for Chemicals
- · PAC-1:

None of the ingredients is listed.

· PAC-2:

None of the ingredients is listed.

· PAC-3:

None of the ingredients is listed.

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.

(Contd. on page 4)

<sup>&</sup>lt;del>-</del> ປະ

Printing date 01/12/2022

#### Revision date 01/12/2022

Trade name: Trypan Blue (10X)

- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- 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.

- · Control parameters
- Components with limit values that require monitoring at the workplace:
  The product does not contain any relevant quantities of materials with critical values

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- · 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. Store protective clothing separately.
- · Breathing equipment: Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

Information on basic physica General Information	al and chemical properties	
Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Structural Formula	H2 O	
Molecular Weight	18 g/mol	

Printing date 01/12/2022

Revision date 01/12/2022

## Trade name: Trypan Blue (10X)

	(Contd. from page 4)
<ul> <li>Odor threshold:</li> <li>Formulation</li> </ul>	Not determined. This vial contains 500 $\mu I$ of Trypan Blue at 0.4% in normal saline
· pH-value:	Not determined.
<ul> <li>Change in condition</li> <li>Melting point/Melting range:</li> <li>Boiling point/Boiling range:</li> </ul>	0 °C (32 °F) 100 °C (212 °F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits: Lower: Upper:	Not determined. Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
<ul> <li>Density at 20 °C (68 °F):</li> <li>Relative density</li> <li>Vapor density</li> <li>Evaporation rate</li> </ul>	0.9904–1.00969 g/cm³ (8.26489–8.42586 lbs/gal) Not determined. Not determined. Not determined.
<ul> <li>Solubility in / Miscibility with Water:</li> </ul>	Fully miscible.
· Partition coefficient (n-octanol/water):	: Not determined.
<sup>·</sup> Viscosity: Dynamic at 20 °C (68 °F): Kinematic:	0.952 mPas Not determined.
<ul> <li>Solvent content:</li> <li>Water:</li> <li>VOC content:</li> </ul>	98.8 % 0.00 % 0.0 g/l / 0.00 lb/gal
Solids content:	1.3 %
· Other information	No further relevant information available.

# **10 Stability and reactivity**

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: strong oxidizing agents

(Contd. on page 6)

<sup>-</sup> US

Revision date 01/12/2022

Trade name: Trypan Blue (10X)

Printing date 01/12/2022

(Contd. from page 5) • Hazardous decomposition products: No dangerous decomposition products known.

## **11 Toxicological information**

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

#### 72-57-1 Trypan blue reagent

Oral LD50 6,200 mg/kg (rat)

Interperitoneal LDLO 300 mg/kg (rat)

- Subcutaneous LD50 267 mg/kg (mouse)
- Subcutaneous LDLO 300 mg/kg (rat)

#### Primary irritant effect:

- on the skin: No irritant 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:

· Carcinogenic categories

<ul> <li>IARC (International Agency for Research on Cancer)</li> </ul>	
72-57-1 Trypan blue reagent	2B
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

# **12 Ecological information**

· Toxicity

- · 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.
- Mobility in soil No further relevant information available.
- Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- General notes: Not hazardous for water.
- Harmful to aquatic organisms
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

(Contd. on page 7)

Printing date 01/12/2022

Revision date 01/12/2022

#### Trade name: Trypan Blue (10X)

(Contd. from page 6)

### 13 Disposal considerations

· Waste treatment methods

#### · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

A A		
14 Irans	nort into	ormation
14 Hane		sination

i i i i i i i i i i i i i i i i i i i	
· UN-Number · DOT, IMDG, IATA	not regulated
<ul> <li>UN proper shipping name</li> <li>DOT, IMDG, IATA</li> </ul>	not regulated
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA · Class	not regulated
<ul> <li>Packing group</li> <li>DOT, IMDG, IATA</li> </ul>	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
<ul> <li>Transport in bulk according to Annex II MARPOL73/78 and the IBC Code</li> </ul>	l of Not applicable.
· UN "Model Regulation":	not regulated

# 15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

72-57-1 Trypan blue reagent

• TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

### · Proposition 65

· Chemicals known to cause cancer:

72-57-1 Trypan blue reagent

(Contd. on page 8)

<sup>-</sup> US

Printing date 01/12/2022

Revision date 01/12/2022

Trade name: Trypan Blue (10X)

	(Contd. from page 7)
• 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

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **16 Other information**

All chemicals may pose unknown hazards and should be used with caution. This SDS applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. Cayman Chemical Company assumes no responsibility for incidental or consequential damages, including lost profits, arising from the use of these data. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Cayman Chemical Company assumes no responsibility for the completeness or accuracy of the information contained herein.

- · Department issuing SDS: Environment protection department.
- · Contact: -
- · Date of preparation / last revision 01/12/2022 / -

#### • Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety **OSHA: Occupational Safety & Health** TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL: Recommended Exposure Limit** Carc. 2: Carcinogenicity - Category 2 Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard - Category 3 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3



Printing date 05/23/2022

Revision date 05/23/2022

Page 1/9

## **1** Identification

- · Product identifier
- · Trade name: Latex Beads-Rabbit IgG-PE Complex
- · Article number: 600541
- **Application of the substance / the mixture** This product is for research use - Not for human or veterinary diagnostic or therapeutic use.
- · Details of the supplier of the safety data sheet

• **Manufacturer/Supplier:** Cayman Chemical Co. 1180 E. Ellsworth Rd. Ann Arbor, MI 48108 USA

 Information department: Product safety department
 Emergency telephone number: During normal opening times: +1 (734) 971-3335 US/CANADA: 800-424-9300 Outside US/CANADA: 703-741-5970

# 2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- · Label elements
- · GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Signal word Warning
- **Hazard-determining components of labeling:** Sodium chloride
- · Hazard statements

H373 May cause damage to organs through prolonged or repeated exposure.

(Contd. on page 2)

Printing date 05/23/2022

Revision date 05/23/2022

(Contd. from page 1)

#### Trade name: Latex Beads-Rabbit IgG-PE Complex

#### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
- NFPA ratings (scale 0 4)



Health = 0 Fire = 0 Reactivity = 0

#### · HMIS-ratings (scale 0 - 4)

HEALTH 0	Health = 0
	Fire = 0
REACTIVITY 0	Reactivity = 0

#### · Other hazards

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

## **3 Composition/information on ingredients**

#### · Chemical characterization: Mixtures

• **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous compone	ents:	
CAS: 7647-14-5 RTECS: VZ4725000	Sodium chloride	1.0%
· Other ingredients		
CAS: 7732-18-5 RTECS: ZC0110000	Water	98.705%
CAS: 7558-79-4 RTECS: WC4500000	Sodium phosphate, Dibasic	0.18%
	Latex Beads-Rabbit IgG-PE Complex	0.04%
CAS: 7778-77-0 RTECS: TC6615500	Potassium phosphate, Monobasic	0.03%
CAS: 7447-40-7 RTECS: TS8050000	Potassium chloride	0.025%
CAS: 26628-22-8 RTECS: VY8050000	Sodium azide	0.02%

# 4 First-aid measures

- Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.

(Contd. on page 3)

\_119

Printing date 05/23/2022

Revision date 05/23/2022

(Contd. from page 2)

#### Trade name: Latex Beads-Rabbit IgG-PE Complex

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- Most important symptoms and effects, both acute and delayed May cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects. No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

## **5 Fire-fighting measures**

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- A solid water stream may be inefficient.
- Special hazards arising from the substance or mixture
- 67-56-1During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

# 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Mount respiratory protective device. · Environmental precautions: Dilute with plenty of water. • Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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. Protective Action Criteria for Chemicals · PAC-1: 7778-77-0 Potassium phosphate, Monobasic 9.6 mg/m<sup>3</sup> 26628-22-8 Sodium azide 0.026 mg/m<sup>3</sup> · PAC-2: 7778-77-0 Potassium phosphate, Monobasic 110 mg/m<sup>3</sup> 26628-22-8 Sodium azide 0.29 mg/m<sup>3</sup> · PAC-3: 7778-77-0 Potassium phosphate, Monobasic 630 mg/m<sup>3</sup> 26628-22-8 Sodium azide 5.3 mg/m<sup>3</sup>

# 7 Handling and storage

#### · Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Printing date 05/23/2022

Revision date 05/23/2022

#### Trade name: Latex Beads-Rabbit IgG-PE Complex

(Contd. from page 3)

Prevent formation of aerosols.

- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- Storage: Store in accordance with information listed on the product insert.
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- 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.
- · Control parameters
- Components with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- · Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- 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. Store protective clothing separately.
- · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

#### Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

US

Printing date 05/23/2022

Revision date 05/23/2022

(Contd. from page 4)

# Trade name: Latex Beads-Rabbit IgG-PE Complex

· Eye protection:



Tightly sealed goggles

9 Physical and chemical propert	
Information on basic physical and ch	nemical properties
General Information	
· Appearance: Form:	l invite
Color:	Liquid Colorless
· Odor:	Odorless
· Structural Formula	H2O
Molecular Weight	18 g/mol
· Odor threshold:	Not determined.
Formulation	150 µl of latex beads coated with rabbit-IgG conjugated to PE
<sup>·</sup> pH-value at 20 °C (68 °F):	7.4
· Change in condition	
Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212́ °F)
Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
<sup>·</sup> Density at 20 °C (68 °F):	1 g/cm³ (8.345 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/water	): Not determined.
· Viscosity:	
Dynamic at 20 °C (68 °F):	0.952 mPas
Kinematic:	Not determined.
· Solvent content:	
Water:	98.7 %
	(Contd. on page

Printing date 05/23/2022

Revision date 05/23/2022

Trade name: Latex Beads-Rabbit IgG-PE Complex

		(Contd. from page 5)
VOC content:	0.00 % 0.0 g/l / 0.00 lb/gal	
Solids content:	1.3 %	
• <b>Other information</b> No further relevant information available.		

# **10 Stability and reactivity**

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## **11 Toxicological information**

· Information on toxicological effects

• Acute toxicity:

7647-14-5 Sodium chloride		
Oral	LDLO	1,000 mg/kg (man)
	TDLO	650 ml/kg (man)
	LD50	4,000 mg/kg (mouse)
		3,000 mg/kg (rat)
	LD50	4 g/kg (mouse)
Inhalative	LC50	320 mg/m³ (mouse)
	TCLO	0.63 mg/m³ (hmn)
	LCLO	29,300 mg/m³/7h (mouse)
Irritation of skin	Irritation	500 mg/24h (rabbit)
Irritation of eyes	Irritation	100 mg/24h (rabbit)
	Intraperitoneal LD50	2,602 mg/kg (mouse)
	Subcutaneous LD50	31.6 mg/kg (rat)
	Intravenous LD50	59.5 mg/kg (rat)
	Data	15 mg/3D (hmn)
	Subcutaneous LD50	3 g/kg (mouse)

• on the skin: No irritant 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:

(Contd. on page 7)

US

Printing date 05/23/2022

Revision date 05/23/2022

#### Trade name: Latex Beads-Rabbit IgG-PE Complex

(Contd. from page 6)

- · 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.

#### OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

# **12 Ecological information**

- · Toxicity
- 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.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Not hazardous for water.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

# **13 Disposal considerations**

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number		
DOT, IMDG, IATA	not regulated	
UN proper shipping name		
DOT, IMDG, IATA	not regulated	
Transport hazard class(es)		
DOT, ADN, IMDG, IATA		
Class	not regulated	
Packing group		
DOT, IMĎG, IATA	not regulated	

Printing date 05/23/2022

#### Revision date 05/23/2022

### Trade name: Latex Beads-Rabbit IgG-PE Complex

	(Contd. from page 7
Not applicable.	
Not applicable.	
x II of	
Not applicable.	
not regulated	
,	Not applicable. <b>( II of</b> Not applicable.

# **15 Regulatory information**

 Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
 Sara

•	xtremely hazardous substances):	
26628-22-8 S		
•	specific toxic chemical listings):	
26628-22-8 S	odium azide	
TSCA (Toxic S	Substances Control Act):	
7732-18-5 W		ACTI
	odium chloride	ACTIV
	odium phosphate, Dibasic	ACTIV
	otassium phosphate, Monobasic	ACTIV
	otassium chloride	ACTIV
26628-22-8 S	odium azide	ACTIV
Hazardous Ai	Pollutants	
•	redients is listed.	
Proposition 6		
	own to cause cancer:	
None of the ing	redients is listed.	
Chemicals kn	own to cause reproductive toxicity for females:	
None of the ing	redients is listed.	
	own to cause reproductive toxicity for males:	
None of the ing	redients is listed.	
Chemicals kn	own to cause developmental toxicity:	
None of the ing	redients is listed.	
Carcinogenic	categories	
EPA (Environ	nental Protection Agency)	
	redients is listed.	
None of the ing		
	ld Limit Value)	
TLV (Thresho 26628-22-8 Se		· · · · · · · · · · · · · · · · · · ·

Printing date 05/23/2022

#### Revision date 05/23/2022

#### Trade name: Latex Beads-Rabbit IgG-PE Complex

(Contd. from page 8)

#### • Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **16 Other information**

All chemicals may pose unknown hazards and should be used with caution. This SDS applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. Cayman Chemical Company assumes no responsibility for incidental or consequential damages, including lost profits, arising from the use of these data. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Cayman Chemical Company assumes no responsibility for the completeness or accuracy of the information contained herein.

- · Department issuing SDS: Environment protection department.
- · Contact: -
- Date of preparation / last revision 05/23/2022 / -

· Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL: Recommended Exposure Limit** STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2



Printing date 02/18/2022

Revision date 02/18/2022

Page 1/9

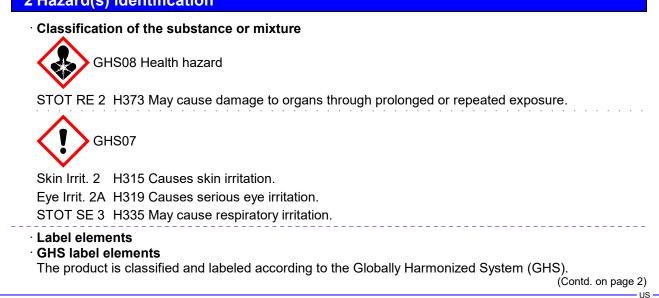
### **1** Identification

- Product identifier
- Trade name: Cell-Based Assay Buffer Tablet
- · Article number: 10009322
- · Application of the substance / the mixture This product is for research use - Not for human or veterinary diagnostic or therapeutic use.
- · Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Cayman Chemical Co. 1180 E. Ellsworth Rd. Ann Arbor, MI 48108 USA

· Information department: Product safety department · Emergency telephone number: During normal opening times: +1 (734) 971-3335 US/CĂNADA: 800-424-9300 Outside US/CANADA: 703-741-5970

# 2 Hazard(s) identification



Printing date 02/18/2022

Revision date 02/18/2022

#### Trade name: Cell-Based Assay Buffer Tablet

Hazard pictog	(Contd. from page
GHS07 GHS	08
Signal word W	/arning
	nining components of labeling:
Sodium chloride	
	sphate, Monobasic
Hazard statem	
H315 Causes s	
	erious eye irritation.
	se respiratory irritation.
	se damage to organs through prolonged or repeated exposure.
Precautionary	
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / eye protection / face protection.
P302+P352	If on skin: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P3	338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses
D040	present and easy to do. Continue rinsing.
P312 P321	Call a poison center/doctor if you feel unwell.
P314	Specific treatment (see on this label). Get medical advice/attention if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/internation
	regulations.
Classification	
NFPA ratings (	(scale 0 - 4)
<u> </u>	
	ealth = 2
	re = 0

2 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH2Health = \*2FIRE0Fire = 0REACTIVITY0Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 3)

US

Revision date 02/18/2022

# Trade name: Cell-Based Assay Buffer Tablet

(Contd. from page 2)

3 Composition/info	ormation on ingredients	
<ul> <li>Chemical characteri</li> <li>Description: Mixture</li> </ul>	zation: Mixtures of the substances listed below with nonhazardous additions.	
· Dangerous compone	ents:	
CAS: 7647-14-5 RTECS: VZ4725000	Sodium chloride	81.4%
CAS: 7778-77-0 RTECS: TC6615500	Potassium phosphate, Monobasic	2.2%
· Other ingredients		
CAS: 7558-79-4 RTECS: WC4500000	Sodium phosphate, Dibasic	14.4%
CAS: 7447-40-7 RTECS: TS8050000	Potassium chloride	2.0%

### **4 First-aid measures**

#### · Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed

May cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects. No further relevant information available.

• **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## **5 Fire-fighting measures**

- Extinguishing media
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment. A solid water stream may be inefficient.
- Special hazards arising from the substance or mixture 67-56-1During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

(Contd. on page 4)

Printing date 02/18/2022

#### Revision date 02/18/2022

#### Trade name: Cell-Based Assay Buffer Tablet

(Contd. from page 3)

<b>Personal precautions, protective equipment and emergency procedures</b> Mount respiratory protective device.	
<b>Environmental precautions:</b> Do not allow to enter sewers/ surface or ground water.	
Methods and material for containment and cleaning up:	
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.	
Protective Action Criteria for Chemicals	
PAC-1:	
PAC-1:         7778-77-0       Potassium phosphate, Monobasic	9.6 mg/m <sup>3</sup>
	9.6 mg/m <sup>3</sup>
7778-77-0 Potassium phosphate, Monobasic	9.6 mg/m <sup>s</sup>
7778-77-0 Potassium phosphate, Monobasic PAC-2:	

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- 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.

- · Control parameters
- **Components with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- · Additional information: The lists that were valid during the creation were used as basis.

• Exposure controls

- Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.

(Contd. on page 5)

Printing date 02/18/2022

Revision date 02/18/2022

#### Trade name: Cell-Based Assay Buffer Tablet

(Contd. from page 4)

#### · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

## Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### Eye protection:



Tightly sealed goggles

### **9** Physical and chemical properties

- · General Information
- Appearance:

· Appearance:	
Form:	Solid
Color:	Not determined.
· Odor:	Characteristic
· Odor threshold:	Not determined.
· Formulation	PBS tablet
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not determined.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
	(Contd. on page

US -

Printing date 02/18/2022

Revision date 02/18/2022

# Trade name: Cell-Based Assay Buffer Tablet

		(Contd. from page
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not applicable.	
· Density:	Not determined.	
Relative density	Not determined.	
· Vapor density	Not applicable.	
<ul> <li>Evaporation rate</li> </ul>	Not applicable.	
· Solubility in / Miscibility with		
Water:	Insoluble.	
· Partition coefficient (n-octanol/w	rater): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
VOC content:	0.00 %	
Solids content:	100.0 %	
• Other information	No further relevant information available.	

# **10 Stability and reactivity**

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## **11 Toxicological information**

- · Information on toxicological effects
- · Acute toxicity:

7647-14-5 Sodium chloride			
Oral	LDLO	1,000 mg/kg (man)	
-	TDLO	650 ml/kg (man)	
	LD50	4,000 mg/kg (mouse)	
		3,000 mg/kg (rat)	
	LD50	4 g/kg (mouse)	
Inhalative	LC50	320 mg/m³ (mouse)	
	TCLO	0.63 mg/m <sup>3</sup> (hmn)	
	LCLO	29,300 mg/m³/7h (mouse)	
	1	L	(Contd. on page

US

Printing date 02/18/2022

Revision date 02/18/2022

### Trade name: Cell-Based Assay Buffer Tablet

		(Contd. from page 6)	
Irritation of skin	Irritation	500 mg/24h (rabbit)	
Irritation of eyes	Irritation	100 mg/24h (rabbit)	
-	Intraperitoneal LD50	2,602 mg/kg (mouse)	
	Subcutaneous LD50	31.6 mg/kg (rat)	
	Intravenous LD50	59.5 mg/kg (rat)	
	Data	15 mg/3D (hmn)	
	Subcutaneous LD50	3 g/kg (mouse)	
7778-77-0 Potas	sium phosphate, Mo	onobasic	
Oral	LDLO	4,640 mg/kg (rat)	
<ul> <li>Additional toxicological information: The product shows the following dangers according to internally approved calculation methods f preparations: Irritant</li> </ul>			
· Carcinogenic ca	ategories onal Agency for Rese	earch on Cancer)	
None of the ingre	• •		
•	oxicology Program)		
None of the ingre			
•		ealth Administration)	
None of the ingre	edients is listed.		

# **12 Ecological information**

- · Toxicity
- · 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.
- Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

(Contd. on page 8)

Printing date 02/18/2022

Revision date 02/18/2022

#### Trade name: Cell-Based Assay Buffer Tablet

(Contd. from page 7)

### 13 Disposal considerations

· Waste treatment methods

#### · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

#### · Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

Transport information		
· UN-Number · DOT, IMDG, IATA	not regulated	
UN proper shipping name DOT, IMDG, IATA	not regulated	
Transport hazard class(es)		
DOT, ADN, IMDG, IATA Class	not regulated	
Packing group DOT, IMDG, IATA	not regulated	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	_
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	<b>x II of</b> Not applicable.	
UN "Model Regulation":	not regulated	

# **15 Regulatory information**

· Sara

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

Section 355 (extremely hazardous substances):
None of the ingredients is listed.
Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.
TSCA (Toxic Substances Control Act):
All components have the value ACTIVE.
Hazardous Air Pollutants
None of the ingredients is listed.
Proposition 65
Chemicals known to cause cancer:
None of the ingredients is listed.

(Contd. on page 9)

US

Printing date 02/18/2022

Revision date 02/18/2022

#### Trade name: Cell-Based Assay Buffer Tablet

(Contd. from page 8)

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### **16 Other information**

All chemicals may pose unknown hazards and should be used with caution. This SDS applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. Cayman Chemical Company assumes no responsibility for incidental or consequential damages, including lost profits, arising from the use of these data. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Cayman Chemical Company assumes no responsibility for the completeness or accuracy of the information contained herein.

- · Department issuing SDS: Environment protection department.
- · Contact: -
- Date of preparation / last revision 02/18/2022 / -

 Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety **OSHA: Occupational Safety & Health** TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL: Recommended Exposure Limit** Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2 \* \* Data compared to the previous version altered.