

Becton, Dickinson and Company
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SAFETY DATA SHEET

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

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

1.1 Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
568097	BD Horizon™ RY586 Mouse IgG1, κ Isotype Control	No data available
568098	BD Horizon™ RY586 Mouse Anti-Human CD4	No data available
568099	BD Horizon™ RY586 Mouse Anti-Human CD4	No data available
568107	BD Horizon™ RY586 Mouse Anti-Human CD19	No data available
568108	BD Horizon™ RY586 Mouse Anti-Human CD19	No data available
568112	BD Horizon™ RY586 Mouse Anti-Human CD3	No data available
568113	BD Horizon™ RY586 Mouse Anti-Human CD3	No data available
568114	BD Horizon™ RY586 Mouse Anti-Human CD8	No data available
568115	BD Horizon™ RY586 Mouse Anti-Human CD8	No data available
568116	BD Horizon™ RY586 Mouse Anti-Human CD16	No data available
568117	BD Horizon™ RY586 Mouse Anti-Human CD16	No data available
568118	BD Horizon™ RY586 Mouse Anti-Human CD279 (PD-1)	No data available
568119	BD Horizon™ RY586 Mouse Anti-Human CD279 (PD-1)	No data available
568120	BD Horizon™ RY586 Mouse Anti-Human IFN-γ	No data available
568121	BD Horizon™ RY586 Mouse Anti-Human IFN-γ	No data available
568122	BD Horizon™ RY586 Mouse Anti-Human CD54 (ICAM-1)	No data available
568123	BD Horizon™ RY586 Mouse Anti-Human CD54 (ICAM-1)	No data available
568124	BD Horizon™ RY586 Mouse Anti-Human CD25	No data available
568125	BD Horizon™ RY586 Mouse Anti-Human CD25	No data available



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568126	BD Horizon™ RY586 Rat Anti-Mouse CD326	No data available
568127	BD Horizon™ RY586 Rat Anti-Mouse CD326	No data available
568128	BD Horizon™ RY586 Rat Anti-Mouse Zbtb7b	No data available
568129	BD Horizon™ RY586 Rat Anti-Mouse Zbtb7b	No data available
568130	BD Horizon™ RY586 Rat IgG2a, κ Isotype Control	No data available
568131	BD Horizon™ RY586 Mouse IgG2a, κ Isotype Control	No data available
568132	BD Horizon™ RY586 Mouse IgG2b, κ Isotype Control	No data available
568133	BD Horizon™ RY586 Mouse Anti-Human Granzyme B	No data available
568134	BD Horizon™ RY586 Mouse Anti-Human Granzyme B	No data available
568135	BD Horizon™ RY586 Mouse Anti-Human CD45	No data available
568136	BD Horizon™ RY586 Mouse Anti-Human CD45	No data available
568139	BD Horizon™ RY586 Mouse Anti-Human CD127	No data available
568140	BD Horizon™ RY586 Mouse Anti-Human CD127	No data available
568141	BD Horizon™ RY586 Mouse Anti-Human CD105	No data available
568142	BD Horizon™ RY586 Mouse Anti-Human CD105	No data available
568143	BD Horizon™ RY586 Mouse Anti-Human CD69	No data available
568144	BD Horizon™ RY586 Mouse Anti-Human CD69	No data available
568145	BD Phosflow™ RY586 Mouse Anti-Stat5 (pY694)	No data available
568146	BD Phosflow™ RY586 Mouse Anti-Stat5 (pY694)	No data available
568147	BD Horizon™ RY586 Mouse Anti-Ki-67	No data available
568148	BD Horizon™ RY586 Mouse Anti-Ki-67	No data available
568149	BD Horizon™ RY586 Mouse Anti-Human CD56 (NCAM-1)	No data available
568153	BD Horizon™ RY586 Mouse Anti-Human HLA-DR	No data available
568150	BD Horizon™ RY586 Mouse Anti-Human CD56 (NCAM-1)	No data available



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568151	BD Horizon™ RY586 Mouse Anti-Human IL-17A	No data available
568152	BD Horizon™ RY586 Mouse Anti-Human IL-17A	No data available
568154	BD Horizon™ RY586 Mouse Anti-Human HLA-DR	No data available
568155	BD Horizon™ RY586 Mouse Anti-Human CD123	No data available
568156	BD Horizon™ RY586 Mouse Anti-Human CD123	No data available
568157	BD Horizon™ RY586 Hamster Anti-Mouse CD3e	No data available
568159	BD Horizon™ RY586 Hamster IgG1, κ Isotype Control	No data available
568160	BD Horizon™ RY586 Rat IgG2b, κ Isotype Control	No data available
568161	BD Horizon™ RY586 Rat Anti-Mouse CD4	No data available
568162	BD Horizon™ RY586 Rat Anti-Mouse CD4	No data available
568163	BD Horizon™ RY586 Rat Anti-Mouse CD8a	No data available
568164	BD Horizon™ RY586 Rat Anti-Mouse CD8a	No data available
568158	BD Horizon™ RY586 Hamster Anti-Mouse CD3e	No data available

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

Identified uses: Scientific and industrial laboratory use. For research use only.

Uses advised against: Not for use in diagnostic or therapeutic procedures.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Becton Dickinson France S.A.S. Belgian Branch
Erembodegem-Dorp 86
9320 Erembodegem
Belgium

Telephone: 32 2 400 98 95

Fax: 32 2 401 70 94

Contact Person: BD Biosciences - Centralized European Office
Regulatory Compliance Department

E-mail: help.biosciences@europe.bd.com

1.4 Emergency telephone number: 32 2 400 98 95

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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The product has not been classified as hazardous according to the legislation in force.

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Not classified

2.2 Label Elements Not applicable

2.3 Other hazards

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: No hazardous ingredients.

SECTION 4: First aid measures

4.1 Description of necessary first-aid measures

General information: Get medical attention if symptoms occur.

Inhalation: Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.

Skin Contact: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.

Ingestion: Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Personal Protection for First-aid Responders: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No data available.



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Hazards: No data available.

4.3 Indication of immediate medical attention and special treatment needed

Treatment: No data available.

SECTION 5: Firefighting measures

General Fire Hazards: Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water spray to keep fire-exposed containers cool.

5.1 Extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Not applicable

5.2 Special hazards arising from the substance or mixture: Fire or excessive heat may produce hazardous decomposition products.

5.3 Advice for firefighters

Special fire fighting procedures: No unusual fire or explosion hazards noted.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Contact local authorities in case of spillage to drain/aquatic environment. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

6.1.1 For non-emergency personnel: No data available.

6.1.2 For emergency responders: No data available.

6.2 Environmental Precautions: Avoid release to the environment.

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6.3 Methods and material for containment and cleaning up: Absorb spillage with suitable absorbent material. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.

6.4 Reference to other sections: No data available.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling

Technical measures (e.g. Local and general ventilation): No special requirements under ordinary conditions of use and with adequate ventilation.

Safe handling advice: When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required.

Contact avoidance measures: No data available.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage conditions: Store in a cool, dry place. Keep container tightly closed.

Safe packaging materials: No data available.

Reserved for industrial and professional use. Read label before use.

7.3 Specific end use(s):

SECTION 8: Exposure controls/personal protection

**8.1 Control Parameters
Occupational Exposure Limits**

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

DNEL-Values

Remarks: DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
sodium hydroxide; caustic soda	Workers	Inhalation	Local, long-term; 1 mg/m ³	irritation respiratory tract
	General population	Inhalation	Local, long-term; 1 mg/m ³	irritation respiratory tract



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sodium azide	Workers	Inhalation	Systemic, long-term; 0.164 mg/m ³	Repeated dose toxicity
	General population	Eyes	Local effect;	No hazard identified
	General population	Inhalation	Systemic, long-term; 29 µg/m ³	Repeated dose toxicity
	Workers	Eyes	Local effect;	No hazard identified
	Workers	Dermal	Systemic, long-term; 0.0467 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 0.0167 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 0.0167 mg/kg	Repeated dose toxicity

2- Morpholinoethanesulphonic acid	Workers	Eyes	Local effect;	No hazard identified
	General population	Eyes	Local effect;	No hazard identified

Sodium chloride	General population	Inhalation	Systemic, long-term; 443.28 mg/m ³	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 2068.62 mg/m ³	Repeated dose toxicity
	Workers	Inhalation	Systemic, short-term; 2068.62 mg/m ³	Repeated dose toxicity
	General population	Inhalation	Systemic, short-term; 443.28 mg/m ³	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 126.65 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, long-term; 295.52 mg/kg	Repeated dose toxicity

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	Workers	Dermal	Systemic, short-term; 295.52 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, short-term; 126.65 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, short-term; 126.65 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 126.65 mg/kg	Repeated dose toxicity

Sorbitan, monododecanoate, poly(oxy-1,2-ethanediyl) derivs.	Workers	Eyes	Local effect;	No hazard identified
	General population	Eyes	Local effect;	No hazard identified

PNEC-Values

Remarks: PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
sodium azide	Aquatic (marine water)	15 ng/l	
	Sewage treatment plant	30 µg/l	
	Sediment (freshwater)	0.0167 mg/kg	
	Aquatic (freshwater)	0.35 µg/l	
	Sediment (marine water)	0.00072 mg/kg	
Sodium chloride	Soil	4.86 mg/kg	
	Aquatic (freshwater)	5 mg/l	

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	Sewage treatment plant	500 mg/l	
Sorbitan, monododecanoate, poly(oxy-1,2-ethanediyl) derivs.	Aquatic (marine water)	0.02 mg/l	
	Sediment (freshwater)	1.141 mg/kg	
	Sediment (marine water)	1000 mg/kg	
	Aquatic (freshwater)	0.2 mg/l	

8.2 Exposure controls

Appropriate Engineering Controls:

No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Wear safety glasses with side shields (or goggles).

Hand Protection:

Material: Chemical resistant gloves
Additional Information: Wash hands after contact.
Material: Suitable gloves can be recommended by the glove supplier.

Skin and Body Protection:

Wear a lab coat or similar protective clothing.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Hygiene measures:

Observe good industrial hygiene practices.

Environmental Controls:

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties



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Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless to pink
Odor:	Odorless
Odor Threshold:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flammability:	No data available.
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	No data available.
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	6.00
Viscosity	
Dynamic viscosity:	No data available.
Kinematic viscosity:	No data available.
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Soluble
Solubility (other):	No data available.
Dissolution Rate:	No data available.
Partition coefficient (n-octanol/water):	No data available.
Dispersion Stability:	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	No data available.
Bulk density:	No data available.
Relative vapor density:	No data available.

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity: Material is stable under normal conditions.



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- 10.2 Chemical Stability:** Material is stable under normal conditions.
- 10.3 Possibility of hazardous reactions:** Stable
- 10.4 Conditions to avoid:** Avoid exposure to high temperatures or direct sunlight.
- 10.5 Incompatible Materials:** Metals. Water reactive material.
- 10.6 Hazardous Decomposition Products:** Stable; however, may decompose if heated.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure

- Inhalation:** No data available.
- Skin Contact:** No data available.
- Eye contact:** No data available.
- Ingestion:** No data available.

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization



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Product: No data available.
Carcinogenicity Product: No data available.

Germ Cell Mutagenicity

In vitro Product: No data available.

In vivo Product: No data available.
Reproductive toxicity Product: No data available.

Specific Target Organ Toxicity - Single Exposure Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure Product: No data available.

Aspiration Hazard Product: No data available.

11.2 Information on health hazards

Other hazards Product: No data available.

SECTION 12: Ecological information

12.1 Ecotoxicity:

Acute hazards to the aquatic environment:

Fish Product: No data available.

Aquatic Invertebrates Product: No data available.

Toxicity to Aquatic Plants Product: No data available.

Toxicity to microorganisms Product: No data available.

Chronic hazards to the aquatic environment:

Fish Product: No data available.

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Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Toxicity to microorganisms

Product: No data available.

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

12.3 Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

12.4 Mobility in soil:

Product No data available.

12.5 Results of PBT and vPvB assessment:

Product No data available.

12.6 Other adverse effects:

Other hazards

Product: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose of waste and residues in accordance with local authority requirements.



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Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

SECTION 14: Transport information

ADR

14.1	UN number or ID number:	Not regulated.
14.2	UN Proper Shipping Name:	Not regulated.
14.3	Transport Hazard Class(es)	
	Class:	Not regulated.
	Label(s):	Not regulated.
	Hazard No. (ADR):	Not regulated.
	Tunnel restriction code:	Not regulated.
14.4	Packing Group:	Not regulated.
	Limited quantity	Not regulated.
	Excepted quantity	Not regulated.
14.5	Environmental Hazards	Not regulated.
14.6	Special precautions for user:	Not regulated.

ADN

14.1	UN number or ID number:	Not regulated.
14.2	UN Proper Shipping Name:	Not regulated.
14.3	Transport Hazard Class(es)	
	Class:	Not regulated.
	Label(s):	Not regulated.
	Hazard No. (ADR):	Not regulated.
	Tunnel restriction code:	Not regulated.
14.4	Packing Group:	Not regulated.
	Limited quantity	Not regulated.
	Excepted quantity	Not regulated.
14.5	Special precautions for user:	Not regulated.

RID

14.1	UN number or ID number:	Not regulated.
14.2	UN Proper Shipping Name:	Not regulated.
14.3	Transport Hazard Class(es)	
	Class:	Not regulated.
	Label(s):	Not regulated.
14.4	Packing Group:	Not regulated.
	Limited quantity	Not regulated.
	Excepted quantity	Not regulated.



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- 14.5 Environmental Hazards Not regulated.
14.6 Special precautions for user: Not regulated.

IMDG

- 14.1 UN number or ID number: Not regulated.
14.2 UN Proper Shipping Name: Not regulated.
14.3 Transport Hazard Class(es)
Class: Not regulated.
Label(s): Not regulated.
EmS No.: Not regulated.
14.4 Packing Group: Not regulated.
Limited quantity Not regulated.
Excepted quantity Not regulated.
14.5 Environmental Hazards Not regulated.
14.6 Special precautions for user: Not regulated.

IATA

- 14.1 UN number or ID number: Not regulated.
14.2 UN Proper Shipping Name: Not regulated.
14.3 Transport Hazard Class(es)
Class: Not regulated.
Label(s): Not regulated.
14.4 Packing Group: Not regulated.
Passenger and cargo aircraft : Not regulated.
Limited quantity Not regulated.
Excepted quantity Not regulated.
14.5 Environmental Hazards Not regulated.
14.6 Special precautions for user: Not regulated.

SECTION 15: Regulatory information

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

EU Regulations

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: None present or none present in regulated quantities.

EU. REACH Annex XIV, Substances Subject to Authorization: None present or none present in regulated quantities.

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended: None present or none present in regulated quantities.

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Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended: None present or none present in regulated quantities.

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): None present or none present in regulated quantities.

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: None present or none present in regulated quantities.

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

SECTION 16: Other information

Abbreviations and acronyms:
No data available.

Key literature references and sources for data: European Chemicals Agency (ECHA): Information on Chemicals.

Wording of the statements in section 2 and 3

: none

Training information: No data available.

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