accuracy and quality as a science

SAFETY DATA SHEET

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with this material, as well as describing potential risks to the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material.

This Safety Data Sheet is prepared in accordance with formatting described in the REACH Regulation (EC) No 1907/2006, in CLP Regulation (EC) No 1272/2008 and in Annex I of the Commission Regulation (EU) No 2015/830.

SECTION 1. Identification of the substances/mixture and of the company/undertaking

1.1 Product Identifier

Product Name: **Defibrinated Horse Blood**

Product Number: **HB001 HB001L HB001B HB002 HB002B HB003B HB004B HB005B HB008B HB009B HB011B HB012 HB013L HB014B HB028B HB029 HB030 HB031HB032 HB033 HB034 HB035 HB035B HB035T HB051B HB057B HB058B HB061 HB062B HB064B HB065 HB068B HB071B HB074B HB077B HB079B HB095B HB099B**

Brand: **TCS Biosciences**

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

Identified uses For professional use only.

1.3 Details of the supplier of the safety data sheet

Company: TCS Biosciences Ltd
Botolph Claydon, Buckingham,
MK18 2LR, UK

Telephone: +44 (0) 1296 714222

Email address: sales@tcsgroup.co.uk

Web address: www.tcsbiosciences.co.uk

EC Representative: TCS Biosciences Europe B.V.,
Provincial Weg 6,
Kornhom,
Netherlands.

1.4 Emergency telephone number

+44 (0)1296 714222 only available during the following office hours:
Monday – Thursday 8:30 – 17:00 GMT/BST
Friday 9:00 – 15:00 GMT/BST

SECTION 2. Hazards Identification

2.1 Classification of the substance or mixture

2.1.1 Classification in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008:

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

2.2 Label Elements

2.2.1 Labelling in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008:

This mixture is not considered hazardous and is not required to be labelled in accordance with EC directives or respective national laws.

2.3 **Other hazards:** Although classed as non-hazardous this mixture contains animal source material. Handle as though capable of transmitting infectious agents.
No substance contained in this product meets the criteria for vPvB and PBT according to Regulation (EC) No 1907/2006, Annex XIII; and, no substance within this product is identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.

SECTION 3. Composition/Information on Ingredients

3.2 **Mixtures**
Synonyms: 100 % Horse Blood
Form: Liquid

Horse Blood derived from healthy donor animals held in closed herds on our own farm. Animals undergo regular veterinary inspection and are certified healthy.

Component	EC-No	CAS-No	Concentration	Classification in accordance with Regulation (EC) No 1272/2008
Horse Blood	n/a	n/a	PCV 40-50%	Non hazardous

SECTION 4. First Aid Measures

4.1 **Description of first aid measures**
Get medical advice if you feel unwell. Show this safety sheet to doctor/physician in attendance.

If inhaled
No Toxicity expected from inhalation.

In case of skin contact
IF ON SKIN (or hair): Wash with plenty of soap and water. Wash contaminated clothing before reuse.

In case of eye contact
Rinse cautiously with water for several minutes. If eye irritation persists get medical advice/attention.

If swallowed
Do NOT induce vomiting. Rinse out mouth with water. Get medical advice/attention if irritation persists.

4.2 **Most important symptoms and effects, both acute and delayed**
No data available.

4.3 **Indication of immediate medical attention and special treatment needed**
No data available.

SECTION 5. Fire-Fighting Measures

5.1 **Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 **Special hazards arising from the substance or mixture**
Nature of decomposition products not known.

5.3 **Precautions for fire-fighters**
Wear self-contained breathing apparatus, where appropriate.

5.4 **Further information** The product itself does not burn.

SECTION 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Observe all warning labels on container. Avoid contact with skin and eyes
Avoid breathing mist/vapours or gas. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Avoid discharge into the environment. Do not let large volumes enter drains or water course. Inform responsible authorities as appropriate.

6.3 Methods and materials for containment and cleaning up

Absorb any spilt liquid with appropriate absorbent material into suitably labelled closed containers for disposal. Wash spillage site with water and appropriate detergent.

6.4 Reference to other sections

For disposal refer to section 13.

SECTION 7. Handling and Storage

7.1 Precautions for safe handling

Avoid contact with eyes and skin .Ensure adequate ventilation. Wear appropriate personal protective equipment provided. Wash hands thoroughly after handling. Do not eat or drink when handling product.

7.2 Conditions for safe storage, including any incompatibilities

Store at 2 - 8^{o}C. See expiry date on the label for stability under correct storage conditions. Do not freeze. Keep away from sources of heat.

7.3 Specific end uses

Recommended restriction to professional users only.

SECTION 8. Exposure Controls//Personal Protection

8.1 Control parameters

Components with workplace control parameters

To the best of our knowledge this product contains no substances with occupational exposure limit values. Ingestion of large quantities may result in nausea, vomiting or diarrhoea.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

8.2.2 Personal protective equipment

8.2.2.1 Eye/face protection

Avoid exposure to liquid splashes. Where appropriate use equipment for eye protection complying with appropriate government standards such as NIOSH (US) or EN166 (EU).

8.2.2.2 Skin and Body Protection

Handle with gloves. Inspect gloves prior to use to ensure adequate protection. Use proper glove removal technique to avoid skin contact with substance/mixture. Dispose of contaminated gloves after use in accordance with local and national applicable laws and good laboratory practises. Wash and dry hands thoroughly after handling. The selected protective gloves have to satisfy the specifications of the EU Directive 89/686/EEC and the standard EN 374 derived from it.
Wear appropriate impervious personal protective equipment provided as per general industrial hygiene practice and good laboratory practices.

8.2.2.3 Respiratory protection

Respiratory protection is not required.

8.2.3 Environmental Exposure Controls None

SECTION 9. Physical and Chemical Properties

This product has not been tested. Judgements on the physical/chemical properties of this product have been made based upon consideration of its major components.

9.1 Information on basic physical and chemical properties

a)	Physical state:	Liquid.
b)	Colour:	Bright red
c)	Odour:	No data available
d)	Melting/freezing point	No data available
e)	Initial boiling point /boiling range:	No data available
f)	Flammability:	No data available
g)	Upper/lower explosion limits:	Not applicable
h)	Flash point:	No data available
i)	Auto-ignition temperature:	Not applicable
j)	Decomposition temperature:	No data available
k)	pH:	No data available
l)	Kinematic viscosity:	Not applicable
m)	Solubility at 20°C: Water	No data available
	Fat	No data available
n)	Partition coefficient n-octanol/water (log value):	Not applicable
o)	Vapour pressure:	No data available
p)	Density and/or relative density:	No data available
q)	Relative vapour density:	Not applicable
r)	Particle characteristics:	Not applicable

9.2 Other information

9.2.1. Information with regard to physical hazard classes Not applicable.

9.2.2. Other safety characteristics Not applicable.

SECTION 10. Stability and Reactivity

This product has not been tested. Judgements on the expected stability/reactivity of this product have been made based upon consideration of its major components.

10.1	**Reactivity**	No data available
10.2	**Chemical stability**	No data available
10.3	**Possibility of hazardous reactions**	No data available
10.4	**Conditions to avoid**	Extremes of temperature.
10.5	**Incompatible materials**	No data available
10.6	**Hazardous decomposition Products**	No data available

SECTION 11. Toxicological Information

11.1 Information on toxicological effects

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

Toxicokinetics - Mixture

(a) Acute toxicity	Based on available data; the classification criteria are not met.
(b) Skin corrosion/irritation	Based on available data; the classification criteria are not met.
(c) Serious eye damage/ eye irritation	Based on available data; the classification criteria are not met.
(d) Respiratory or skin sensitization	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	Not listed: IARC, ACGIH, NIOSH, OSHA.
Tumourigenic	**IARC:** No component of this product at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.
(g) Reproductive toxicity	Based on available data; the classification criteria are not met.
(h) STOT Specific target organ toxicity - single exposure	Based on available data; the classification criteria are not met.
(i) STOT Specific target organ toxicity - 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.

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed. Ingestion of large quantities may result in nausea, vomiting or diarrhoea.
Skin	May be harmful if absorbed through skin. May cause skin irritation and/or dermatitis.
Eyes	May be harmful if in contact with eyes. May cause eye irritation.
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties: No component of this mixture is classified as endocrine disrupting according to Regulation (EU) No 2017/2100.

11.2.2 Other information: No data available.

SECTION 12. Ecological Information

The toxicological properties of this product has not been fully investigated. Judgements have been made based upon consideration of major component(s).

12.1	**Aquatic Toxicity**	Not classified as acutely toxic to aquatic organisms. Adverse ecological effects cannot be excluded in the event of improper handling or disposal .
	Toxicity to fish	No data available.
12.2	**Persistence and degradability**	No data available.
12.3	**Bioaccumulative potential**	Do not let undiluted product or large quantities enter drains or water course. Inform responsible authorities as appropriate.
12.4	**Mobility in soil**	No data available
12.5	**Results of PBT and vPvB assessment**	No data available
12.6	**Other adverse effects**	No data available

SECTION 13. Disposal Considerations

13.1 Waste treatment methods

13.1.1 Product Offer surplus. Dispose of non-recyclable substances via a licensed waste material processor in accordance with local authority requirements.

Contaminated Packaging Dispose of as unused product.

SECTION 14. Transport Information

Not regulated as dangerous goods under ADR/RID, IMDG, or IATA

		ADR/RID	IMDG	IATA
14.1	**UN-Number**	na	na	na
14.2	**UN proper shipping name**	na	na	na
14.3	**Transport hazard class(es)**	na	na	na
14.4	**Packaging group**	na	na	na
14.5	**Environmental hazards**	No	Marine pollutant: No	No
14.6	**Special precautions for users**	No data available		
14.7	**Maritime transport in bulk according to IMO instruments**	No data available		

SECTION 15. Regulatory information

This Safety Data Sheet complies with the requirements of Regulations (EC) No. 1907/2006 and its amendments (EU) No. 453/2010 & (EU) No. 2015/830; and (EC) No. 1272/2008.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
All components are listed as existing substances in Europe

15.2 Chemical Safety Assessment
A Chemical Safety Assessment has not been carried out for this product.

SECTION 16. Other information

Further information
The information herein is provided in good faith and is correct to the best of our knowledge but makes no representation as to its completeness or accuracy. This safety data sheet is intended for use only as a guide for the appropriate precautionary handling of material by suitably trained persons.
TCS Biosciences Ltd shall not be held liable for any loss, injury or damage which may result from its use.

Version 1 created 1.6.13
Version 2 created 11.06.2015, update to section 2.
Version 3 created 22.12.2020, addition of product code HB002
Version 4 created 31.01.2021, addition of product code HB005B
Version 5 created 7.7.2021, addition of product codes HB001 HB001L HB001B HB004B HB011B HB012 HB058B HB079 HB079B.
Version 6; 23 product codes added - HB002B HB003B HB008B HB009B HB013L HB014B HB028B HB031 HB035B HB035T HB051B HB057B HB061 HB062B HB064B HB065 HB068B HB071B HB074B HB077B HB095B HB099B, HB079 removed. Addition of EC Representative information to Section 1, format updated to comply with Annex II of REACH.

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