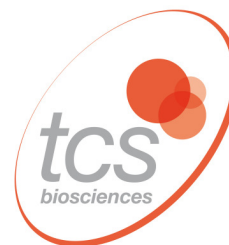


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SAFETY DATA SHEET

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 and (EU) No 453/2010

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

1.1 Product Identifier

Product Name: **Tris Concentrate**
Product Number: **HC0108**
Brand: **TCS Biosciences**
IUPAC name: **not determined**

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

1.4 Emergency telephone number

In case of emergency: 24hr contact number: +44 (0)1296 711205

SECTION 2. Hazards Identification

2.1 Classification of the substance or mixture

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

This mixture does not need to be labelled in accordance with EC directives or respective national laws.

SECTION 3. Composition/Information on Ingredients

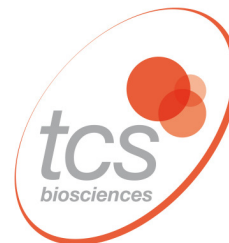
3.2 Mixtures Tris Concentrate

Synonyms: None

Contains the following hazardous substance

Name	EC No	CAS-No	Content	Classification in accordance with CLP 1272/2008
Sodium Azide	247-852-1	26628-22-8	<0.5%	Acute Tox 2;H300, Aquatic Acute 1; H400 Aquatic Chronic1;H410 EUH032
Hydrochloric Acid	7647-01-0	231-595-7	<1%	Skin Corr 1B;H314, STOT SE3;H335

Refer to section 16 for additional classification information.



SECTION 4. First Aid Measures

4.1 Description of first aid measures

If exposed keep patient calm and seek immediate medical attention. Show this safety data sheet to doctor/physician in attendance.

If inhaled

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Get medical advice/attention.

In case of skin contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

In case of eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical advice/attention.

If swallowed

IF SWALLOWED: Do NOT induce vomiting. Rinse out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical advice/attention.

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 alcohol-resistant foam or fine water spray, dry chemical powder or carbon dioxide

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Precautions for fire-fighters

Wear self-contained breathing apparatus /protective clothing where appropriate .Avoid contact with skin and eyes.

5.4 Further information

No data available.

SECTION 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

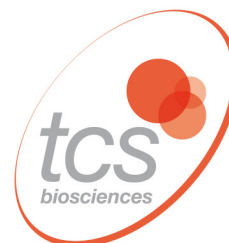
Observe all warning labels on container. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection. Wash hands thoroughly after handling.

6.2 Environmental precautions

Do not let undiluted product or large quantities enter drains or water course. Prevent further leakage or spillage where safe to do so. Inform responsible authorities as appropriate.

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6.3 Methods and materials for containment and cleaning up

Absorb spillage with appropriate absorbent material e.g. vermiculite or sand; and dispose into suitably labelled closed containers for disposal according to local regulations. 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

Take precaution to avoid exposure. Avoid contact with eyes and skin. Avoid spillage. Wear appropriate personal protective equipment provided. Avoid prolonged or repeated exposure. Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place.

7.3 Specific end uses

Recommend restriction to professional users only.

SECTION 8. Exposure Controls//Personal Protection

8.1 Control parameters

Components with workplace control parameters

TWA Time Weighted Average Concentration

STEL Short Term Exposure Limit

LTEL Long Term Exposure Limit

Components with workplace control parameters

Component	CAS-No	Value	Control Parameters	Basis
Sodium Azide	26628-22-8	TWA	0.1mg/m ³	UK. EH40 WEL – Workplace Exposure Limit
		STEL	0.3mg/m ³	UK. EH40 WEL – Workplace Exposure Limit

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

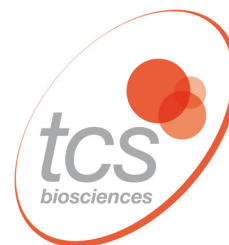
Avoid exposure to sprays/mist/aerosols. Wear approved safety goggles where splashing is probable.

Skin Protection

Handle with chemical-resistant, impervious gloves complying with appropriate government standards: EU Directive 89/686/EEC; standard EN 374. Inspect gloves prior to use to ensure adequate protection. Use proper glove removal technique to avoid skin contact with substance/mixture

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Body Protection

Use protective clothing with closed cuffs and closed neck, appropriate to the concentration /amount of the dangerous substance at the specific workplace.

Respiratory protection

It is recommended that full-face respirator or air hood be used where splashing is likely; use respirator and components tested and approved to appropriate government standards such as NIOSH (US) or EN 143 / EN 14387 (EU).

8.2.3 Environmental Exposure Controls None

SECTION 9. Physical and Chemical Properties

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

9.1 Information on basic physical and chemical properties

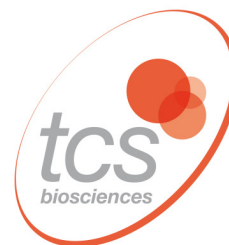
a) Appearance Form:	Clear liquid
b) Odour:	none
c) Odour Threshold:	No data available
d) pH	No data available
e) Melting point:	No data available
f) Boiling point:	No data available
g) Flashpoint:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper/lower flammability limits:	No data available
k) Vapour pressure:	No data available
l) Vapour density:	No data available
m) Relative density:	No data available
n) Water solubility:	Soluble
o) Partition coefficient (log Kow):	No data available
p) Autoignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

9.2 Other information

Particle Size No data available

SECTION 10. Stability and Reactivity

10.1	Reactivity	No data available
10.2	Chemical stability	Stable under specified conditions of use and storage
10.3	Possibility of hazardous reactions	No data available
10.4	Conditions to avoid	No data available.
10.5	Incompatible materials	Strong Oxidising agents, Strong Acids, organic materials.



SECTION 11. Toxicological Information

11.1 Information on toxicological effects

Toxicokinetics Sodium Azide (CAS-No 26628-22-8)

(a) Acute toxicity	LD50 oral - rabbit -10mg/kg LD50 inh.- rat -37mg/kg LD50 derm - rabbit-20mg/kg
(b) Skin corrosion/irritation	No data available
(c) Serious eye damage/ eye irritation	No data available
(d) Respiratory or skin sensitization	No data available
(e) Germ cell mutagenicity	No data available
(f) Carcinogenicity	No data available
Tumourigenic	No data available
RTECS criteria:	No data available
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC or EC.
(g) Reproductive toxicity	No data available
(h) STOT Specific target organ toxicity - single exposure	No data available
(i) STOT Specific target organ toxicity - repeated exposure	No data available
(j) Aspiration hazard	No data available

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed. May cause discomfort.
Skin	May be harmful if prolonged contact with skin. May cause skin irritation.
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.

Additional Information

SECTION 12. Ecological Information

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

12.1 Aquatic Toxicity Sodium Azide (CAS-No 26628-22-8)

Aquatic Acute 1 LC50 96h Mysid shrimp = 0.149mg/l

Aquatic Chronic 1 EC50 19d Macrocytis pyrifera = 1.1 mg/l

Adverse ecological effects cannot be excluded in the event of improper handling or disposal.

12.2 Persistence and degradability No data available.

12.3 Bioaccumulative potential No data available.

12.4 Mobility in soil No data available

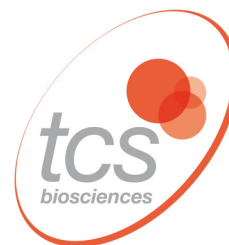
12.5 Results of PBT and

vPvB assessment No data available

12.6 Other adverse effects No data available

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SECTION 13. Disposal Considerations

13.1 Waste treatment methods

Product Dispose of waste according to local regulations.
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	n/a	n/a	n/a
14.2 UN proper shipping name	n/a	n/a	n/a
14.3 Transport hazard class(es)	n/a	n/a	n/a
14.4 Packaging group	n/a	n/a	n/a
14.5 Environmental hazards	No	Marine pollutant: No	No
14.6 Special precautions for users	No data available		
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No data available		

SECTION 15. Regulatory information

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 and (EU) 453/2010

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

Additional information from Section 3

Hazard Statements

H300	Fatal if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
EUH032	Contact with acids liberates very toxic gas

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.

V1 created 21.10.14

V2 created 25.05.2017, Removal of classification and labelling according to Directive 1999/45/EEC & 67/548/EEC affecting sections 2 & 3, updated product code section 1.

HDS44end