

1: Identification of substance / mixture

1. Product Identifier

Mixture

Product Name **TGS 10X Solution (TRIS-Glycine-SDS Buffer)**
Product Code T32080
CAS Number
Other Names
IUPAC
MFCN Number
EC/EINECS
REACH Number Index-No

2. Relevant identified uses of the substance or mixture and uses advised against

Research and Development

3. Details of the supplier of the safety data sheet

Melford Laboratories Ltd
Bildeston Road, Chelsworth
Ipswich
Suffolk
IP77LE
UK



Telephone: 01449 741178
Fax: 01449 741217
Email: support@melford.co.uk

4. Emergency telephone number

+44(0)1449 741178 -

2. Hazards Identification

1. Classification of the substance or mixture

Non Hazardous

2. Label elements

Non Hazardous

Hazard Statements

Non Hazardous

Precautionary Phrases

Non Hazardous

3. Other Hazards

Non Hazardous

3. Composition / Information on Ingredients

2. Mixtures

Product Name	Hazards	Concentration
Water		
CAS Number: 7732-18-5		Q.S.
TRIS base/TRIS HCl		
CAS Number: 77-86-1/1185-53-1		250mM
Glycine		
CAS Number: 56-40-6		1.92M
SDS		
CAS Number: 151-21-3		1%

4. First Aid Measures

1. Description of first aid measures

<i>Skin Contact</i>	Wash immediately with plenty of soap and water. Consult a doctor.
<i>Eye Contact</i>	Rinse opened eye for several minutes under running water. Consult a doctor.
<i>Ingestion</i>	Wash out mouth with water. Consult a doctor.
<i>Inhalation</i>	If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Consult a doctor.

2. Most important symptoms and effects

No data available

3. Indication of any immediate medical attention

No data available

5. Firefighting measures

1. Extinguishing Media

Suitable Water spray.
Carbon dioxide.
Alcohol or polymer foam.
Dry chemical powder.

Unsuitable No data available

2. Special Hazards arising from the substance or mixture

No data available

3. Advice for Fire Fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. Accidental Release Measures

1. Personal Precautions

Refer to section 8 of SDS for personal protection details.

2. Environmental Precautions

Do not discharge into drains or rivers.

3. Methods & Materials

Transfer to a closable, labelled salvage container for disposal by an appropriate method.

4. Preventing the occurrence of secondary hazards.

Clean up all spills immediately. Wear suitable PPE.
Ensure sufficient ventilation.

7. Handling and Storage

1. Personal Precautions

Safe Handling Avoid the formation or spread of mists in the air.
Avoid direct contact with the substance.
Ensure there is exhaust ventilation of the area.

Protection against explosions and fires Normal measures for preventive fire protection.

2. Conditions for safe storage, including any incompatibilities

<i>Managing Storage Risks</i>	Store in cool, well ventilated area.
<i>Storage Controls</i>	No special requirements
<i>Maintaining Integrity</i>	No special requirements
<i>Other advice</i>	no further information available

3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. Exposure Controls/Personal Protection

1. Control Parameters

No Data Available

2. Exposure Controls

<i>General protective and hygiene measures</i>	Avoid contact with skin and eyes
<i>Engineering measures</i>	Ensure there is exhaust ventilation where dusts/mists may form.
<i>Eye / Face Protection</i>	Safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)
<i>Hand protection</i>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived f
<i>Respiratory protection</i>	Respiratory protection not required. Where protection from nuisance levels of dusts/vapour are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<i>Skin protection</i>	Protective clothing. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<i>Other personal protection advice</i>	No data.

9. Physical and Chemical Properties

1. Physical and Chemical Properties

Appearance	Liquid
Odour	No Data Available
Odour threshold	No Data Available
PH	8.25-8.55
Melting point / Freezing point	No Data Available
Initial boiling point and boiling range	No Data Available
Flash point	No Data Available
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	No Data Available
Vapour pressure	No Data Available
Vapour density	No Data Available
Relative density	No Data Available

Solubility(ies):	No Data Available
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

2. Other Information

None

10. Stability and Reactivity

1. Reactivity

No data available

2. Stability

Stable under recommended storage conditions.

3. Possibility of Hazardous Reactions

No data available

4. Conditions to Avoid

No data available

5. Incompatible Materials

Bases.
Strong oxidizing agents.

6. Hazardous Decomposition Products

No data available

11. Toxicology information

1. Information

<i>Acute Toxicity</i>	Component- SDS LD50 Oral 1288 mg/kg (Rat) LD50 Dermal 580 mg/kg (Rabbit) LD50 Inhalation 3900 mg/m3 1h (Rat)
<i>Skin corrosion/irritation</i>	No information available
<i>Serious eye Damage/irritation</i>	No information available
<i>Respiratory or skin sensitisation</i>	No information available
<i>Germ Cell mutagenicity</i>	No information available
<i>Carcinogenicity</i>	No information available
<i>Reproductive toxicity</i>	No information available
<i>STOT-single exposure</i>	No information available
<i>STOT-repeated exposure</i>	No information available
<i>Aspiration hazard</i>	No information available

2. Additional

The toxicological properties have not been fully investigated

12. Ecological Information

1. Toxicity

Component- SDS

Toxicity to Fish

LC50 15-18.9 mg/L Pimephales promelas 96 h
LC50 4.06-5.75 mg/L Lepomis macrochirus 96 h
LC50 4.2-4.8 mg/L Lepomis macrochirus 96 h
LC50 6.2-9.6 mg/L Pimephales promelas 96 h
LC50= 4.2 mg/L Oncorhynchus mykiss 96 h
LC50 13.5-18.3 mg/L Poecilia reticulata 96 h
LC50 5.8-7.5 mg/L Pimephales promelas 96 h
LC50 9.9-20.1 mg/L Brachydanio rerio 96 h
LC50 10.2-22.5 mg/L Pimephales promelas 96 h
LC50 8-12.5 mg/L Pimephales promelas 96 h
LC50= 4.5 mg/L Lepomis macrochirus 96

2. Persistence and degradability

No information available

3. Bio-Accumulative Potential

No information available

4. Mobility and Soil

No information available

5. Results of PBT & vPvB assessment

No information available

6. Other adverse effects

No information available

13. Disposal Considerations

1. Waste Treatment Methods

Disposal Operations Consult state, local or national regulations for proper disposal.

Disposal of Packaging Disposal must be made according to official regulations.

14. Transport Information

Air (ICAO)

Not classified as hazardous for transport

Road (ADR)

Not classified as hazardous for transport

Sea (IMDG)

Not classified as hazardous for transport

15. Safety, health, environmental and national regulations

1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

This safety data sheet complies to the requirements of Regulation (EC) No. 1907/2006

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)

RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association

ICAO:International Civil Aviation Organization

ICAO-TI: Technical Instructions by the ICAO

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS:Chemical Abstracts Service

3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material nused in combination with any other material or in any process unless specified in the text