



MATERIAL SAFETY DATA SHEET
 according to EC Directive 2001/58/EC
ROG-8 buffer

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name	ROG-8 Buffer
COMPANY NAME	Orla Protein Technologies
Address	Nanotechnology Centre, Herschel Building, Newcastle Upon Tyne, NE1 7RU
Telephone	++ 44 (0)191 243 0683
Telefax	++ 44 (0)191 222 3528
Emergency telephone number	++ 44 (0)191 243 0683
Use of the Substance/Preparation	

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation :

CAS	Chemical Name	% Weight	EINECS*	Classification
1185-53-1	Tris Hydrochloride	< 1 %	214-684-5	N/A
29836-26-8	n-octylglucoside	1 %		N/A
60-00-4	ethylenediaminetetraacetic acid	< 1 %	200-449-4	N/A

* EINECS - EINECS

Symbol(s) :

R -phrase(s) :

S -phrase(s) :

3. HAZARDS IDENTIFICATION

Most important hazards : Generally considered non hazardous

4. FIRST AID MEASURES

Inhalation	N/A
Eye contact	N/A
Skin contact	N/A
Ingestion	N/A

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Not applicable
Extinguishing media which must not be used for safety reasons	Not applicable
Specific methods	Not applicable
Special protective equipment for firefighters	Not applicable
Specific hazards	Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Splash goggles. Gloves. Protective clothing
Environmental precautions	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Methods for cleaning up	Dilute with water and absorb with an inert dry material and place in an appropriate waste disposal container.

7. HANDLING AND STORAGE

Storage :

Technical measures/Precautions	Store at room temperature.
Incompatible products	N/A
Specific use(s)	Store at room temperature.

Handling :

Technical measures/Precautions	Avoid strong oxidizing agents.
Safe handling advice	Avoid inhalation; avoid contact with eye skin and clothing. Avoid prolonged exposure

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls :

Engineering measures	N/A
-----------------------------	-----

Exposure Limit Values :

CAS	Chemical Name	% Weight	ACGIH*
1185-53-1	Tris Hydrochloride	< 1 %	
29836-26-8	n-octylglucoside	1 %	
60-00-4	ethylenediaminetetraacetic acid	< 1 %	

* ACGIH - Occupational Exposure Limits - TWAS

Personal protective equipment :

Eye protection	Safety goggles
Hand protection	Protective gloves
Respiratory protection	Not necessary
Skin and body protection	Lab coat
Environmental exposure controls	Follow local rules

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information :

Form	Liquid
Colour	colourless
Odour	N/A

Boiling point/range	N/A
Flash point	N/A
Vapour pressure	N/A
Vapour density	N/A
Partition coefficient	N/A

pH	8
Water solubility	Aqueous buffer
Evaporation Rate	N/A
Oxidizing properties	N/A
Explosive properties	N/A
Melting Point/Range	N/A
Density	N/A
Viscosity	N/A
Flammability	Non flammable

10. STABILITY AND REACTIVITY

Conditions to avoid	Excess heat.
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	N/A

11. TOXICOLOGICAL INFORMATION

The toxicological properties of this particular composition have not been thoroughly investigated.

Acute toxicity :

Product Information :

LD50/oral/rat	N/A
LD50/dermal/rabbit	N/A
LC50/inhalation/8h/rat	N/A
Eye irritation	N/A
Skin irritation	N/A
mutagenic effects	N/A
Reproductive toxicity	N/A

12. ECOLOGICAL INFORMATION

Ecological information :

Toxicity to fish	N/A
EC50/48h/daphnia	N/A
EC50/72h/algae	N/A

Mobility : N/A

Persistence and degradability : N/A

Bioaccumulative potential : N/A

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products	Waste must be disposed of in accordance with local regulations.
Contaminated packaging	Waste must be disposed of in accordance with local regulations.

14. TRANSPORT INFORMATION

Road transport : non hazardous

Sea transport : non hazardous

Air transport : non hazardous

15. REGULATORY INFORMATION

Not hazardous according to Directive 67/548/EEC

16. OTHER INFORMATION

Further information for the safety data sheet :

The chemical, physical and toxicological properties of this particular composition have not been thoroughly investigated. The above information is believed to be correct for one or more constituents of the mixture and does not purport to be all inclusive and shall be used only as guide.

The information in this document is based on the current state of knowledge and is applicable to the product with regard to appropriate safety precautions.

It does not represent any guarantee of the properties of the product.

Orla Protein Technologies Ltd does not assume any liability whatsoever for the accuracy or completeness of the information

contained herein. All materials may present unknown hazards and should be used with caution. Hazards other than those described herein may exist.

End of Safety Data Sheet