

**1. Identification of the substance/preparation and of the company**

**Product name:** Elution Buffers # 1, 2, 3 for Beta-Thalassemia mode

**Use of the substance:** for in vitro diagnostic use  
Catalogue # (see attached) 800 mL

**Company Identification:** Tosoh Corporation  
**Manufacturer:** Shiba-Koen First Building  
3-8-2, Shiba Minato-ku  
Tokyo 105-8623 (JAPAN)

**Company Identification:** Tosoh Bioscience, Inc.  
**Supplier:** 6000 Shoreline Ct., Ste. 101  
S. San Francisco, CA 94080

**Product information**  
(6 a.m. to 5 p.m. PST) 1-800-248-6764

**Medical Emergencies (24 HR):** Hazard Information Services  
1-800-228-5635  
612-221-3999

**DOT Emergency (24 HR):** Hazard Information Services  
1-800-228-5635  
612-221-3999

**2. Composition/information on substances**

**Substance/Preparation:**

<b>Ingredient name</b>	<b>CAS number</b>	<b>% (optional)</b>
Sodium azide	26628-22-8	<0.12
Sodium Hydroxide	1310-73-2	<0.1
Trisodium Phosphate	7601-54-9	<1.5

**3. Hazards identification**

**Classification:** The preparation is not classified as dangerous according to directive 1999/45/EC

**Physical/chemical hazards:** Not applicable

**Human health hazards:** Harmful if swallowed

**Environmental hazards:** Not applicable

**4. First aid measures****Effects and symptoms**

Inhalation:	No known significant effects or critical hazards.
Ingestions:	Harmful if swallowed.
Skin contact:	No known significant effects or critical hazards.
Eye contact:	No known significant effects or critical hazards.

**First aid measure:**

Inhalation:	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.
Ingestions:	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
Skin contact:	In case of skin contact, immediately flush skin copiously with water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention immediately.
Eye contact:	In case of eye contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Obtain medical attention immediately.

**5. Fire-fighting measures**

Extinguishing media:	Use an extinguishing agent suitable for surrounding fires.
Special exposure hazards:	No specific hazards.
Special protective equipment for fire fighters:	Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**6. Accidental release measures**

Personal precautions:	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (Section 8).
Environmental precautions	Avoid dispersal of spilled material and run-off from contact with soil, waterways, drains and sewers.



Methods for cleaning up:

If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be added in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills, surround spilled material or otherwise contain material to ensure that run-off does not reach soil, waterways, drains or sewers. Place spilled material in an appropriate container for disposal.

7. Handling and storage

- Handling: When handling, avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
- Storage: For storage, keep unopened container closed at refrigerated temperature 2-8 °C.
- Packaging materials: Recommended: use original containers when able.
- Specific uses: Not applicable.

8. Exposure controls/personal protection

- Exposure controls
  - Sodium azide
    - Occupational exposure limits
    - TLV: 0.3 mg/M<sup>3</sup> (8-hr TWA) total dust
    - PEL: 0.1 ppm
  - Sodium Hydroxide
    - TLV/PEL: 2 mg/M<sup>3</sup>
- Occupational exposure controls: Provide exhaust ventilation or other engineered controls to keep the airborne concentration of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates that this is necessary. Respirator selection must be based upon known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection: Chemical-resistant, impervious gloves or gauntlets complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates that this is necessary. 4-8 hours breakthrough time nitrile rubber gloves.
- Eye protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates that this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin protection: Personal protective equipment for the body should be selected based upon the task being performed and the risks involved and should be approved by a specialist before handling this product. A lab coat is recommended.

**9. Physical and chemical properties**

Physical state:	powder or liquid
Color:	White or clear
Odor:	Odorless
pH:	7-8
Boiling point:	Not available
Melting point:	Not available
Flash point:	Not available
Flammability (solid/gas):	Not available
Explosive properties:	Not available
Explosive limits:	Not applicable
Oxidizing properties:	Not available
Vapor pressure:	Not available
Specific gravity:	Not applicable
Solubility:	Easily soluble in cold water
Octanol/water partition coefficient:	Not available
Viscosity:	Not available
Vapor density:	Not available
Evaporation rate (butyl acetate = 1):	Not available
Auto-ignition temperature:	Not available

**10. Stability and reactivity**

Stability:	The product is stable.
Conditions to avoid:	Not available
Materials to avoid:	Keep away from oxidizing reagents
Hazardous decomposition products:	Not available
Hazardous polymerization:	Hazardous polymerization will not occur

**11. Toxicological information**

Potential acute health effects:	
Inhalation:	No known significant effects or critical hazards.
Ingestion:	Harmful if swallowed
Skin contact:	Irritating to skin.
Eye contact:	Irritating to eyes.



## Acute toxicity:

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Sodium azide	LD50	27 mg/kg	Oral	Mouse
	TDL0	0.7 mg/kg	Oral	Human
	LD50	20 mg/kg	Dermal	Human

## Potential chronic health effects:

<u>Carcinogenicity:</u>	No known significant effects or critical hazards.
<u>Mutagenicity:</u>	No known significant effects or critical hazards.
<u>Reproductive Toxicity:</u>	No known significant effects or critical hazards.

**12. Ecological information**

<u>Ecotoxicity data:</u>	Not applicable
<u>Other ecological information:</u>	
<u>Mobility:</u>	Not available
<u>Other adverse effects:</u>	No known significant effects or critical hazards.

**13. Disposal considerations**

<u>Methods of disposal:</u>	The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and run-off and avoid contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
<u>Hazardous waste:</u>	The classification of this product may meet the criteria for a hazardous waste.

**14. Transport information**International transport regulations

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>Packing group</u>	<u>Label</u>	<u>Additional information if required</u>
ADR/RID Class	3288	TOXIC SOLID, INORGANIC, N.O.S. (Sodium azide)	NA	NA	NA	Not available
ADN Class	3288	TOXIC SOLID, INORGANIC, N.O.S. (Sodium azide)	NA	NA	NA	Not available
IMDG Class	3288	TOXIC SOLID, INORGANIC, N.O.S. (Sodium azide)	NA	NA	NA	Not available
IATA-DGR Class	3288	TOXIC SOLID, INORGANIC, N.O.S. (Sodium azide)	NA	NA	NA	Not available



**15. Regulatory information**

Hazard symbols:	Non-applicable
Risk phrases:	Non-applicable
Safety phrases:	Non-applicable
Product use:	In vitro diagnostic use

**16. Other information**

History:

Date of printing:	_____
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Prepared by:	Michael Golob

**Notice to Reader:**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



Tosoh Bioscience

TOSOH

## Material Safety Data Sheet

Beta-Thal Elution Buffers, No 1, No 2, No 3

### List of Catalogue numbers for Beta-Thal Elution Buffers:

Catalogue Number	Product Name	Analyzer
020306	Elution Buffer HSi Variant 1	G7
020307	Elution Buffer HSi Variant 2	G7
020308	Elution Buffer HSi Variant 3	G7