

1. Information of the substance/mixture and of the company/undertaking	
1.1 Commercial product name	AST (GOT) (Manual only)
Cat. No.:	AS147
1.2 Company:	RANDOX Laboratories Ltd., 55 Diamond Road, Crumlin, Co. Antrim, United Kingdom, BT29 4QY Tel: +44 (0) 28 9442 2413; Fax: +44 (0) 28 9445 2912 Email: <a href="mailto:msds@randox.com">msds@randox.com</a> Website: <a href="http://www.randox.com">www.randox.com</a>
1.3 In Emergencies:	Tel: +44 (0) 28 9442 2413

2. Hazards identification	
Sodium hydroxide solution	Sodium hydroxide 16% w/v
Classification	C; Corrosive (Sodium Hydroxide)

3. Composition / Information on Ingredients	
Warnings:	<p>For <i>in vitro</i> diagnostic use only. Do not pipette by mouth. Handle laboratory reagents in accordance with Good Laboratory Practice.</p> <p>May cause irritation to skin and eyes, may be irritating to mucous membranes and upper respiratory tract. Avoid contact with skin, avoid inhalation and ingestion.</p> <p>Buffer &amp; Calibration Standard contain Sodium Azide (&lt; 0.1%). Avoid ingestion or contact with skin or mucous membranes. In case of skin contact, flush affected area with copious amounts of water. In case of contact with eyes or if ingested, seek immediate medical attention.</p> <p>Sodium Azide reacts with lead and copper plumbing, to form potentially explosive azides. When disposing of such reagents flush with large volumes of water to prevent azide build up. Exposed metal surfaces should be cleaned with 10% sodium hydroxide.</p> <p>Sodium Hydroxide is Corrosive: It causes severe burns to eyes and skin. If ingested it causes internal irritation and damage. Toxic by ingestion inhalation or excessive skin contact.</p>
Risk phrases:	R35; Causes severe burns
Safety phrases:	<p>S26; In case of contact with eyes, rinse immediately with plenty of water and seek medical advice</p> <p>S37/39; Wear suitable gloves and eye / face protection</p> <p>S45; Avoid contact with eyes</p>

4. First aid measures	
Emergency First Aid:	Call an internal First Aider where available or else contact a physician immediately. Direction for First Aider or Physician:
Inhalation:	If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
Ingestion:	If swallowed wash out mouth with water provided person is conscious, call a physician.
Skin Contact:	In case of skin contact immediately wash skin with soap and copious quantities of water.
Eye Contact:	Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Call a physician.

5. Fire-fighting measures	
Extinguishing media:	No Restrictions
Thermal decomposition:	Gases which are damaging to health do not form in dangerous quantities

6. Accidental release measures	
After spillage:	<p><b>PRECAUTIONS</b> If local regulations permit, mop up with plenty of water and run to waste diluting greatly with running water. Otherwise, transfer to container and arrange removal by disposal company. Wash site spillage thoroughly with detergent and water.</p> <p>For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.</p> <p>If material has entered surface drains it may be necessary to inform local authorities, including fire services if flammable.</p>
Absorbent material:	<p>All Reagents except Sodium Hydroxide: No Restrictions</p> <p>Sodium Hydroxide: Neutralise Sodium Hydroxide spill with suitable absorbent material prior to disposal.</p>

7. Handling and storage	
7.1 Handling:	Wash thoroughly after handling. Do not use if skin is cut or scratched. Avoid contact with eyes, skin and clothing.
7.2 Storage	Store at temperatures and conditions as indicated on the product label
Do not store together:	Not applicable

8. Exposure controls/personal protection	
MEL/OES	Not determined
Respiratory protection:	None
Eye protection:	Protective glasses
Hand protection:	Protective gloves
Skin protection:	A laboratory coat is recommended

9. Physical and chemical properties	
Physical state:	Liquid Reagents
Colour:	Colourless (buffer, sodium hydroxide solution & calibration standard) Yellow (colorimetric dye)
Odour:	Odourless
pH value:	Not determined
Boiling point	Not determined
Melting point:	Not determined
Oxidising properties:	Not determined
Ignition temperature	Not determined
Explosion limits:	Not determined
Density:	Not determined
Solubility in water:	Soluble

10. Stability and reactivity	
Hazardous Reactions:	None when used appropriately
Hazardous decomposition products:	Only small concentrations

11. Toxicological information:	
LD50 oral	Not determined
LD50 intraperitoneal	Not determined
LD50 skin	Not determined
LC50 inhalation	Not determined
Toxicologic information:	Not thoroughly investigated

12. Ecological information	
Water hazard class:	Sodium Hydroxide: WGK 1 Other Reagents: Data not yet available.

<b>13. Disposal considerations</b>	<p><b>PRECAUTIONS</b></p> <p>If local regulations permit, mop up with plenty of water and run to waste diluting greatly with running water. Otherwise, transfer to container and arrange removal by disposal company. Wash site spillage thoroughly with detergent and water.</p> <p>For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.</p> <p>If material has entered surface drains it may be necessary to inform local authorities, including fire services if flammable.</p>
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<b>14. Transport Information</b>			
GGVE/GGVS:	Data not yet available	RID/ADR	Data not yet available
ICAO/IATA-DGR:	Data not yet available	UN-Nr.:	Data not yet available
IMDG-CODE:	Data not yet available	MFAG	Data not yet available
		EMS:	Data not yet available

<b>15. Regulatory information</b>	
	Classified according to CHIP 3
Hazard symbol:	C (Sodium hydroxide solution)
Risk phrases	R35; Causes severe burns
Safety phrases	S26; In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S37/39; Wear suitable gloves and eye / face protection S45; Avoid contact with eyes
Precautions:	See section 3

<b>16. Other information</b>	
	The information herein is believed to be correct as of the date hereof but is provided without warranty of any kind. The recipient of our products is responsible for observing any National laws and guidelines applicable.