

1. Information of the substance/mixture and of the company/undertaking	
1.1 Commercial product name	RANSEL (Glutathione Peroxidase Test Kit)
Cat. No.:	RS505
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	
Cumene Hydroperoxide	Approx 80%
Classification:	O; Oxidising C; Corrosive

3. Composition / Information on Ingredients	
Warnings:	<p>For in vitro diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.</p> <p>The buffer and diluting agent contain &lt; 0.1%(w/v) Sodium Azide. 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><b>Cumene Hydroperoxide is supplied at approximately 80% v/v. Causes severe burns to eyes and skin. If ingested causes internal irritation and damage. Toxic by ingestion, inhalation or excessive skin contact.</b></p>
<u>Cumene Hydroperoxide</u>	
Risk phrases:	<p>R7; May cause fire R23; Toxic by inhalation R34; Causes burns R21/22; Harmful in contact with skin and if swallowed R51/53; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R48/20/22; Harmful: danger of serious damage to health by prolonged exposure through inhalation, and in contact with skin and if swallowed</p>
Safety phrases:	<p>S53; Avoid exposure – obtain special instruction before use S14; Keep away from combustible material S50; Do not mix with reducing agents, organic materials, acids, finely powdered metals and their alloys S61; Avoid release to the environment. Refer to special instructions/safety data sheet S3/7; Keep container tightly closed in a cool place S36/37/39; Wear suitable protective clothing, gloves and eye/face protection</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	
Flash point:	Not determined
Flammable limits:	Not determined
Extinguishing media:	No restriction
Special Fire Fighting Procedures:	Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Unusual Fire and Explosion Hazards:	May emit toxic fumes under fire conditions
Thermal decomposition:	Not determined

6. Accidental release measures	
After spillage:	<p><b>Cumene Hydroperoxide:</b> Wear respirator (if appropriate), protective footwear (if appropriate) and one-way rubber gloves. Cover material with dry lime or sodium carbonate. Pick up, keep in closed container and hold up for waste disposal.</p> <p><b>Other Reagents:</b> Use appropriate spill absorbent kit as instructed by the manufacturer. Alternatively, mop up with an absorbent material and hold for waste disposal. Appropriate Personal Protective Equipment should be worn, e.g. laboratory coat, gloves, safety glasses and mask. Ventilate area and wash spill site after material pick up is complete.</p>
Absorbent material:	No restriction

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:	Avoid contact of Cumene Hydroperoxide with reducing agents, organic materials, acids, or finely powdered metals.

8. Exposure controls/personal protection	
MEL/OES	Not determined
Respiratory protection:	May be necessary for a large Cumene Hydroperoxide spill.
Eye protection:	Protective glasses
Hand protection:	Standard laboratory rubber or latex gloves.
Skin protection:	A laboratory coat or apron is recommended

9. Physical and chemical properties	
Physical state:	Liquid (Buffer and Cumene Hydroperoxide) Solid (Reagent and Diluting agent)
Colour:	Colourless (Buffer and Cumene hydroperoxide) Red/brown (Reagent) Pale yellow (Diluting agent)
Odour:	Cumene Hydroperoxide has an acrid odour.
pH value:	Not determined
Boiling point	Cumene hydroperoxide; 100°C - 101°C / 8mm
Melting point:	Not determined
Substance does have Oxidising properties:	Cumene Hydroperoxide
Ignition temperature	Not determined
Explosion limits:	Not determined
Specific Gravity:	1.030
Solubility in water:	Not determined

10. Stability and reactivity	
Stability:	Stable
Conditions to avoid:	Not determined
Substances to avoid:	Strong oxidising agents, also acids.
Hazardous decomposition products:	Not determined

11. Toxicological information:	
LD50 oral	Cumene Hydroperoxide 382 mg/kg (rat)
LD50 intraperitoneal	Cumene Hydroperoxide 95 mg/kg (rat)
LD50 skin	Cumene Hydroperoxide 500 mg/kg (rat)
LC50 inhalation	Cumene Hydroperoxide 220 PPM/4h (rat)
Toxicologic information:	Cumene Hydroperoxide displays evidence of mutagenic effects. The full

	toxicological investigation of this material (to the best of our knowledge) has not been completed.
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12. Ecological information	
Water hazard class:	Data not yet available

13. Disposal considerations	<p>Each disposal facility must determine proper disposal methods of the substance or preparation and any contaminated packaging to comply with Local and National Environmental Regulations</p> <p>Refer to Section 6.</p>
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14. Transport Information			
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

15. Regulatory information	
	Classified according to CHIP 3
Hazard symbol:	O; Oxidising C; Corrosive
<p>Risk phrases:</p> <p>Safety phrases:</p>	<p>R7; May cause fire  R23; Toxic by inhalation  R34; Causes burns  R21/22; Harmful in contact with skin and if swallowed  R51/53; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  R48/20/22; Harmful: danger of serious damage to health by prolonged exposure through inhalation, and in contact with skin and if swallowed</p> <p>S53; Avoid exposure – obtain special instruction before use  S14; Keep away from combustible material  S50; Do not mix with reducing agents, organic materials, acids, finely powdered metals and their alloys  S61; Avoid release to the environment. Refer to special instructions/safety data sheet  S3/7; Keep container tightly closed in a cool place  S36/37/39; Wear suitable protective clothing, gloves and eye/face protection</p>
Precautions:	See Section 3

16. Other information	
	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.