

1. Identification.

GP3 Antifreeze based on Mono Ethylene Glycol with Bitrex.

2. Composition / Information on Ingredients.

Ingredient Name:	CAS No.	Contents	Health (class)	Risk (R No.)
Ethanediol	107-21-1	60-100%	Xn	22
Di ethylene glycol	111-46-6	0-5%	Xi	36,38
3-Butoxypropane-2-ol	5131-66-8	0-1%	Xi	36,38
CAS No:	107-21-1			

3. Hazards Identification.

Harmful if swallowed.

4. First Aid Measures.

- Inhalation:** Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.
- Ingestion:** Never make an unconscious person vomit or drink fluids! Get medical attention.
- Skin:** Remove affected person from source of contamination. Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention promptly if symptoms occur after washing.
- Eyes:** Promptly wash eyes with lots of water while lifting the eye lids. Get medical attention if any discomfort continues.


5. Fire Fighting Measures.

Extinguishing Media: Water, foam, carbon dioxide (CO₂), dry chemicals, sand, dolomite etc.

Unusual Fire & Explosion Hazards: May develop highly toxic or corrosive fumes if heated.

6. Accidental Release Measures.

Spill Cleanup Methods: Ventilate well, stop flow of gas or liquid if possible. Remove ignition sources. Do not allow chemical to enter confined spaces such as sewers due



to explosion risk. Sewers designed to preclude formation of explosive concentrations of vapour may be permitted. Absorb small quantities with paper towels and evaporate in safe place (fume hood). Allow sufficient time for vapours to completely clear the hood ducts, then burn the paper in a location away from combustible materials. Collect with noncombustible absorbent material. Flush with water. Dike for large spills. Let evaporate. Keep out of confined spaces because of explosion risk. Clean-up personnel should use respiratory and / or liquid contact protection.

7. Handling & Storage.

Usage Precautions: Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Avoid acids, moisture, and combustible materials. Read and follow manufacturer's recommendations.

Storage Precautions: Keep in cool, dry, ventilate storage and closed containers.

Storage Criteria: Misc. hazardous material storage.

8. Exposure Controls & Personal Protection.

Ingredient Name	CAS No.	STD	LT EXP (8 hrs)	ST EXP (15 min)
Ethenediol:	107-21-1	OES.	60.00mg/m ³	125.00mg/m ³
Di ethylene Glycol:	111-46-6			
3-Butoxypropan-2-OL	5131-66-8			

Protective Gloves: Use protective gloves made of : Butyl rubber, rubber (natural, latex), neoprene, polyvinyl chloride (PVC).

Eye Protection: Wear approved chemical safety goggles where eye exposure is reasonably probable.

9. Physical & Chemical Properties.

- (a) Appearance: Liquid. Hygroscopic. Viscous.
- (b) Colour: Colourless.
- (c) Odour/Taste: Odourless or no characteristic odour. Sweet.
- (d) Solubility Description: Miscible with water. Miscible with: Acetone. Alcohol.
- (e) Boiling Point (°C): -197
- (f) Melting Point (°C): ~ - 12
- (g) Specific Gravity (Water = 1): 1.10 @ 20°C

Stewart Speke

(h)	Vapour Density (air = 1):	2.14
(i)	Vapour Pressure:	0.05 @ 20°C
(j)	Viscosity:	21.00 cps @ 20°C
(k)	Flash Point (°C):	~111
(l)	Flash Point Method:	CC (Closed cup).
(m)	Auto Ignition Temperature (°C):	400
(n)	Flammability Limit (lower %):	3.20

10. Stability & Reactivity.

Stability: Avoid: Heat, sparks, flames. Moisture.

Materials to Avoid: Chlorosulphonic acid, Oleum, Phosphorus Pentasulphide, Sulphuric Acid.
Acids oxidizing. Strong oxidising agents.

11. Toxicological Information.

Toxic Dose1- LD50: 4700.00mg/kg (oral rat).

Health Warnings: Gas or vapour is harmful on prolonged exposure or in high concentration. Narcotic effect.

Route of Entry: Ingestion. Skin and/or eye contact.

Target Organs: Central nervous system. Heart and Cardiovascular system. Kidneys. Liver.
Respiratory system, lungs. Brain.

Medical Symptoms: Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

12. Ecological Information.


Degradability: No data available.

Acute Fish Toxicity: No data available.

Water hazard classification: No data available.

13. Disposal Considerations.

Disposal Methods: Incinerate in suitable combustion chamber. Dilute with organic solvent and incinerate using effluent gas cleaner. Collect on absorbent material, place in cardboard kegs and incinerate. Confirm disposal procedures with environmental engineer and local regulations. Wash to drains, with lots of water.



14. Transport Information.

Label for conveyance: No transport warning sign required.

Road: AD Class No.; N/C
AD Label No.; N/C
AD Item No. ; N/C
Hazchem Code; N/C

Rail: Rail Transport Class No.; N/C
Railroad PT; N/C

Sea: Sea Transport Class No.; N/C
Sea Pack GR; N/C
IMEG Page No.; N/C

Air: Air Transport Class No; N/C
Air Pack GR; N/C

15. Regulatory Information.

Label for supply: Harmful.

Risk phrases: R22 Harmful if swallowed.

Safety phrases: Not classified.


UK regulatory references: Classification, Packaging and Labelling Regulations 1984.
Health and Safety at Work Act 1974.
The Control of Substances Hazardous to Health Regulations 1988.

16. Other Information.

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SAFETY DATA SHEET

GP3 ANTIFREEZE

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A handwritten signature in blue ink that reads "Stewart Speke".

Approved By: Quality Assurance Manager

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