

# SAFETY DATA SHEET

BG EPR® Engine Performance Restoration®



## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** : BG EPR® Engine Performance Restoration®  
**Product code** : 109  
**Product description** : Not available.  
**Product type** : Liquid.  
**Other means of identification** : P109-XXXX; 1091, 1095, 1096, 10916, 10932, 10953, 10960, 10964, 10996, 109100; 109E; 109S; 109WOR; 109ML30

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

#### Identified uses

Engine lubricant service

#### Uses advised against

Not applicable.

### 1.3 Details of the supplier of the safety data sheet

BG Products Inc.  
 740 S. Wichita Street  
 Wichita, KS, 67213, USA  
 www.bgprod.com  
 316-266-8120  
 msds@bgprod.com

**e-mail address of person responsible for this SDS** : msds@bgprod.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Center

**Telephone number** : 00 +1 703-527-3887 (CHEMTREC INTL)

#### Supplier

**Telephone number** : 00 +1 703-527-3887 (CHEMTREC INTL)  
 24-hour telephone and/or website

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to UK CLP/GHS

Flam. Liq. 3, H226

Eye Irrit. 2, H319

Asp. Tox. 1, H304

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

**Ingredients of unknown toxicity** : 15 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

**Ingredients of unknown ecotoxicity** : Contains 79.1% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

**SECTION 2: Hazards identification****2.2 Label elements****Hazard pictograms**

:

**Signal word**

: Danger

**Hazard statements**

: Flammable liquid and vapor.  
May be fatal if swallowed and enters airways.  
Causes serious eye irritation.

**Precautionary statements****Prevention**

: Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Response**

: IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

**Storage**

: Not applicable.

**Disposal**

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements**

: Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

: Not applicable.

**Special packaging requirements****Containers to be fitted with child-resistant fastenings**

: Not applicable.

**Tactile warning of danger**

: Not applicable.

**2.3 Other hazards****Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII**

: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification**

: None known.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

: Mixture

Product/ingredient name	Identifiers	%	Classification	Type
Distillates (petroleum), hydrotreated heavy paraffinic	REACH #: 01-2119484627-25 EC: 265-157-1 CAS: 64742-54-7 Index: 649-467-00-8	≥50 - ≤75	Carc. 1B, H350	[1]
cyclohexanone	EC: 203-631-1 CAS: 108-94-1 Index: 606-010-00-7	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
2-(propyloxy)ethanol	EC: 220-548-6 CAS: 2807-30-9 Index: 603-095-00-2	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Eye Irrit. 2, H319	[1]

**SECTION 3: Composition/information on ingredients**

4-methylpentan-2-ol	EC: 203-551-7 CAS: 108-11-2 Index: 603-008-00-8	≤10	Flam. Liq. 3, H226 STOT SE 3, H335	[1] [2]
Distillates (petroleum), solvent-dewaxed heavy paraffinic	REACH #: 01-2119471299-27 EC: 265-169-7 CAS: 64742-65-0 Index: 649-474-00-6	≤0.3	Carc. 1B, H350	[1]
See Section 16 for the full text of the H statements declared above.				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

**Type**

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**4.2 Most important symptoms and effects, both acute and delayed****Over-exposure signs/symptoms**

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

## SECTION 4: First aid measures

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- 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.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**SECTION 6: Accidental release measures**

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

**SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**7.1 Precautions for safe handling**

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**Seveso Directive - Reporting thresholds****Danger criteria**

Category	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

**7.3 Specific end use(s)**

- Recommendations** : Lubricants and additives
- Industrial sector specific solutions** : Not available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limits**

Product/ingredient name	Exposure limit values
cyclohexanone	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b> STEL: 20 ppm 15 minutes. TWA: 10 ppm 8 hours. STEL: 82 mg/m <sup>3</sup> 15 minutes. TWA: 41 mg/m <sup>3</sup> 8 hours.
4-methylpentan-2-ol	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b> STEL: 170 mg/m <sup>3</sup> 15 minutes. STEL: 40 ppm 15 minutes. TWA: 106 mg/m <sup>3</sup> 8 hours. TWA: 25 ppm 8 hours.

**Biological exposure indices**

Product/ingredient name	Exposure indices
cyclohexanone	<b>EH40/2005 BMGVs (United Kingdom (UK), 8/2018)</b> BGV: 2 mmol/mol creatinine, cyclohexanol [in urine]. Sampling time: post shift.

**Recommended monitoring procedures** : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects
Distillates (petroleum), hydrotreated heavy paraffinic	DNEL	Long term Oral	0.74 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.97 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.19 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	2.73 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	5.58 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	1.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	1.5 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	10 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	20 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	20 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	40 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	40 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	40 mg/m <sup>3</sup>	Workers	Systemic

**SECTION 8: Exposure controls/personal protection**

2-(propyloxy)ethanol	DNEL	Short term Inhalation	80 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	80 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	2.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	7.7 mg/m <sup>3</sup>	General population	Systemic
4-methylpentan-2-ol	DNEL	Long term Inhalation	36 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	4.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	11.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	14.7 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	14.7 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	52.1 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	83 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	83 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	104 mg/m <sup>3</sup>	Workers	Local
Distillates (petroleum), solvent-dewaxed heavy paraffinic	DNEL	Short term Inhalation	155.2 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	208 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	0.74 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.97 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.19 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	2.73 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	5.58 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation			

**PNECs**

No PNECs available.

**8.2 Exposure controls****Appropriate engineering controls**

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Individual protection measures**



**SECTION 8: Exposure controls/personal protection**

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid.
- Color** : Amber. [Light]
- Odor** : Not available.
- Odor threshold** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flammability (solid, gas)** : Not available.
- Upper/lower flammability or explosive limits** : Not available.
- Flash point** : Closed cup: 43°C (109.4°F) [Pensky-Martens]
- Auto-ignition temperature** :

Ingredient name	°C	°F	Method
2-(propyloxy)ethanol	256	492.8	
cyclohexanone	420	788	

- Decomposition temperature** : Not available.



SECTION 9: Physical and chemical properties

pH	:	Not available.																																																
Viscosity	:	Kinematic (40°C): 6.07 mm²/s																																																
Solubility(ies)	:																																																	
<table><tr><th>Media</th><th>Result</th></tr><tr><td>cold water</td><td>Not soluble</td></tr><tr><td>hot water</td><td>Not soluble</td></tr></table>			Media	Result	cold water	Not soluble	hot water	Not soluble																																										
Media	Result																																																	
cold water	Not soluble																																																	
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Solubility in water	:	Not available.																																																
Partition coefficient: n-octanol/ water	:	Not applicable.																																																
Vapor pressure	:																																																	
<table><tr><th rowspan="2">Ingredient name</th><th colspan="3">Vapor Pressure at 20°C</th><th colspan="3">Vapor pressure at 50°C</th></tr><tr><th>mm Hg</th><th>kPa</th><th>Method</th><th>mm Hg</th><th>kPa</th><th>Method</th></tr><tr><td>2-(propyloxy)ethanol</td><td>4.82</td><td>0.64</td><td>EU A.4</td><td></td><td></td><td></td></tr><tr><td>cyclohexanone</td><td>3.75</td><td>0.5</td><td></td><td></td><td></td><td></td></tr><tr><td>Distillates (petroleum), hydrotreated heavy paraffinic</td><td>&lt;0.08</td><td>&lt;0.011</td><td>ASTM D 5191</td><td></td><td></td><td></td></tr><tr><td>Distillates (petroleum), solvent-dewaxed heavy paraffinic</td><td>&lt;0.08</td><td>&lt;0.011</td><td>ASTM D 5191</td><td></td><td></td><td></td></tr><tr><td>Distillates (petroleum), solvent-dewaxed light paraffinic</td><td>&lt;0.08</td><td>&lt;0.011</td><td>ASTM D 5191</td><td></td><td></td><td></td></tr></table>			Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C			mm Hg	kPa	Method	mm Hg	kPa	Method	2-(propyloxy)ethanol	4.82	0.64	EU A.4				cyclohexanone	3.75	0.5					Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191				Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.08	<0.011	ASTM D 5191				Distillates (petroleum), solvent-dewaxed light paraffinic	<0.08	<0.011	ASTM D 5191			
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Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.08	<0.011	ASTM D 5191																																															
Distillates (petroleum), solvent-dewaxed light paraffinic	<0.08	<0.011	ASTM D 5191																																															
Relative density	:	0.8773																																																
Vapor density	:	Not available.																																																
Explosive properties	:	Not available.																																																
Oxidizing properties	:	Not available.																																																
Particle characteristics																																																		
Median particle size	:	Not applicable.																																																

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
cyclohexanone	LD50 Dermal	Rabbit	5000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
2-(propyloxy)ethanol	LD50 Oral	Rat	1800 mg/kg	-
	LD50 Dermal	Guinea pig	1 g/kg	-
4-methylpentan-2-ol	LD50 Oral	Rat	3089 mg/kg	-
	LD50 Oral	Rat	2590 mg/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LD50 Oral	Rat	>5000 mg/kg	-

**Conclusion/Summary** : Not available.**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
BG EPR® Engine Performance Restoration®	9000.0	N/A	34000	N/A	N/A
Distillates (petroleum), hydrotreated heavy paraffinic	15000	5000	N/A	N/A	N/A
cyclohexanone	1800	N/A	8000	N/A	N/A
2-(propyloxy)ethanol	3089	1100	N/A	N/A	N/A
4-methylpentan-2-ol	2590	N/A	N/A	N/A	N/A

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
cyclohexanone	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 ug	-
	Skin - Mild irritant	Human	-	48 hours 50 %	-
2-(propyloxy)ethanol	Skin - Mild irritant	Rabbit	-	500 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 ug	-
	Skin - Mild irritant	Guinea pig	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

**Conclusion/Summary** : Not available.**Sensitization****Conclusion/Summary** : Not available.**Mutagenicity****Conclusion/Summary** : Not available.**Carcinogenicity****Conclusion/Summary** : Not available.**Reproductive toxicity****Conclusion/Summary** : Not available.**Teratogenicity****Conclusion/Summary** : Not available.**Specific target organ toxicity (single exposure)**

BG EPR® Engine Performance Restoration®

**SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
4-methylpentan-2-ol	Category 3	-	Respiratory tract irritation

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Product/ingredient name	Result
BG EPR® Engine Performance Restoration®	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : May be fatal if swallowed and enters airways.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : Adverse symptoms may include the following:  
 nausea or vomiting

**Delayed and immediate effects and also chronic effects from short and long term exposure****Short term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

**Conclusion/Summary** : Not available.  
**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Reproductive toxicity** : No known significant effects or critical hazards.

**Other information** : Not available.

**SECTION 12: Ecological information****12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
cyclohexanone	Acute EC50 32.9 mg/l	Algae - Green algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute LC50 527000 µg/l Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	Chronic EC10 3.56 mg/l	Algae - Green algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours

**Conclusion/Summary** : Not available.

**12.2 Persistence and degradability**

**Conclusion/Summary** : Not available.

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
cyclohexanone	0.86	-	low
2-(propyloxy)ethanol	0.673	-	low
4-methylpentan-2-ol	1.43	-	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods****Product**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.





**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**SECTION 13: Disposal considerations**

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number</b>	UN1993	UN1993	UN1993	UN1993
<b>14.2 UN proper shipping name</b>	FLAMMABLE LIQUID, N.O.S. (Distillates (petroleum), hydrotreated heavy paraffinic, cyclohexanone)	FLAMMABLE LIQUID, N.O.S. (Distillates (petroleum), hydrotreated heavy paraffinic, cyclohexanone)	FLAMMABLE LIQUID, N.O.S. (Distillates (petroleum), hydrotreated heavy paraffinic, cyclohexanone)	Flammable liquid, n.o.s. (Distillates (petroleum), hydrotreated heavy paraffinic, cyclohexanone)
<b>14.3 Transport hazard class(es)</b>	3 	3 	3 	3 
<b>14.4 Packing group</b>	III	III	III	III
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.

**Additional information**

**ADR/RID** : **Hazard identification number** 30  
**Limited quantity** 5 L  
**Special provisions** 274, 601  
**Tunnel code** (D/E)

**ADN** : **Special provisions** 274, 601

**IMDG** : **Emergency schedules** F-E, \_S-E\_  
**Special provisions** 223, 274, 955

**IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344.  
**Special provisions** A3

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to IMO instruments** : Not available.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****UK (GB)/REACH****Annex XIV - List of substances subject to authorization****Annex XIV**

None of the components are listed.

**SECTION 15: Regulatory information****Substances of very high concern**

None of the components are listed.

**Ozone depleting substances**

Not listed.

**Prior Informed Consent (PIC)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Seveso Directive**

This product is controlled under the Seveso Directive.

**Danger criteria****Category**

P5c

**EU regulations**

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**International regulations****Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list**

**Australia** : All components are listed or exempted.  
**Canada** : All components are listed or exempted.  
**China** : All components are listed or exempted.  
**Eurasian Economic Union** : **Russian Federation inventory**: All components are listed or exempted.  
**Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.  
**Japan inventory (ISHL)**: Not determined.  
**New Zealand** : All components are listed or exempted.  
**Philippines** : All components are listed or exempted.



**SECTION 15: Regulatory information**

<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: All components are listed or exempted.
<b>Turkey</b>	: All components are listed or exempted.
<b>United States</b>	: All components are active or exempted.
<b>Viet Nam</b>	: All components are listed or exempted.
<b>15.2 Chemical Safety Assessment</b>	: This product contains substances for which Chemical Safety Assessments are still required.

**SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
 GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = GB CLP-specific Hazard statement  
 N/A = Not available  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 SGG = Segregation Group  
 vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification**

<b>Classification</b>	<b>Justification</b>
Flam. Liq. 3, H226 Eye Irrit. 2, H319 Asp. Tox. 1, H304	On basis of test data Calculation method On basis of test data

**Full text of abbreviated H statements**

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.

**Full text of classifications**

Acute Tox. 4	ACUTE TOXICITY - Category 4
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Carc. 1B	CARCINOGENICITY - Category 1B
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

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**Notice to reader**

BG EPR® Engine Performance Restoration®

**SECTION 16: Other information**

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.