

SAFETY DATA SHEET

1. Identification

Product identifier Perkins ELC Advanced (Extended Life Coolant) Premix 50/50 with Embitterment

Other means of identification

Product code 2000755

Recommended use of the chemical and restrictions on use

Recommended use Antifreeze / Coolant.

Recommended restrictions Uses other than the recommended use.

Manufacturer/Importer/Supplier/Distributor information

Supplier Arteco Coolants India Pvt Ltd
#304A, Town Square,
Viman Nagar,
Pune – 411 014. Maharashtra
India
e-mail customerservice-india@arteco-coolants.com
Product information +91-(0)20-6728 6000

1.4. Emergency telephone number

Transportation emergency Europe: +44 20 35147487 (24hr) Access code: 335087
India: +001 803 015 203 9774 (24hr)

Health Emergency Europe: +44 20 35147487 (24hr) Access code: 335087
India: +001 803 015 203 9774 (24hr)

2. Hazards identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 5
Specific target organ toxicity - repeated exposure Category 2 (kidney)

Environmental hazards Not classified.

Label elements



Signal word Warning

Hazard statement May be harmful if swallowed. May cause damage to organs (kidney) through prolonged or repeated exposure.

Precautionary statement

Prevention Keep out of reach of children. Do not breathe mist/vapours.

Response If medical advice is needed, have product container or label at hand. IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

Storage Not assigned.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification None known.

Supplemental information None.

3. Composition/information on ingredients

Mixture

Chemical name	CAS number	%
Ethylene glycol	107-21-1	34 - < 80
Sodium benzoate	532-32-1	0.1 - < 3

Composition comments All concentrations are in percent by weight.
This product contains a bittering agent.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed Convulsions. Dizziness. Nausea, vomiting. Abdominal pain. Oedema. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Alcohol resistant foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterised.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapours. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Absorb spillage with suitable absorbent material. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Do not breathe mist/vapours. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	10 mg/m3	Aerosol, inhalable.
		50 ppm	Vapor fraction
	TWA	25 ppm	Vapor fraction
Sodium benzoate (CAS 532-32-1)	TWA	2.5 mg/m3	Inhalable fraction.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

Sodium benzoate (CAS 532-32-1)

Danger of cutaneous absorption

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapour cartridge and full facepiece.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Neoprene, butyl rubber, nitrile or Viton gloves are recommended. Full contact: Use gloves classified protection index 6 with breakthrough time of 480 minutes. Minimum glove thickness 0.38 mm.

Other

Wash hands thoroughly after handling. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapour cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Clear liquid.

Colour Red.

Odour Mild.

Odour threshold Not determined.

pH > 7.9 - < 8.6 (20°C)

Melting point/freezing point Not applicable. / ≤ -37 °C (≤ -34.6 °F)

Initial boiling point and boiling range 109 °C (228.2 °F) (Estimated)

Flash point Does not flash.

Evaporation rate Not determined.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not determined.

Explosive limit – upper (%) Not determined.

Vapour pressure Not determined.

Vapour density Not determined.

Relative density Not determined.

Solubility(ies)

Solubility (water) Miscible.

Partition coefficient (n-octanol/water)	Not applicable, product is a mixture.
Auto-ignition temperature	398 °C (748.4 °F) (Ethylene glycol)
Decomposition temperature	Not determined.
Viscosity	Not determined.
Other information	
Density	1.072 - 1.075 kg/l (20 °C (68 °F))
Kinematic viscosity	Not determined.
Molecular weight	Not applicable, product is a mixture.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidising agents. Nitrates. Peroxides. Chlorates.
Hazardous decomposition products	At elevated temperatures: Ketones. Aldehydes.

11. Toxicological information

Information on likely routes of exposure

Inhalation	In high concentrations, mists/vapours may irritate throat and respiratory system and cause coughing.
Skin contact	Prolonged or repeated contact may dry skin and cause irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May be harmful if swallowed. Ingestion of ethylene glycol may result in nausea, vomiting, abdominal cramps, blindness, liver damage, irritation, reproductive effects, nerve damage, convulsions, oedema of the lung, cardiopulmonary effects (metabolic acidosis), pneumonia and kidney failure which could result in death. The single lethal dose for humans is about 100 ml. Inhalation of high levels of vapour or mists for prolonged periods of time may also result in toxic effects.

Symptoms related to the physical, chemical and toxicological characteristics	Convulsions. Dizziness. Nausea, vomiting. Abdominal pain. Oedema. Prolonged exposure may cause chronic effects.
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Information on toxicological effects

Acute toxicity	May be harmful if swallowed.
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Product	Species	Test Results
Perkins ELC Advanced (Extended Life Coolant) Premix 50/50 with Embitterment (CAS -)		
<u>Acute</u>		
Oral		
ATEmix		3240 mg/kg bw
Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
<u>Acute</u>		
Dermal		
LD50	Mouse	> 3500 mg/kg
Inhalation		
<i>Aerosol</i>		
LC50	Rat	> 2.5 mg/l, 6 Hours
Oral		
LD50	Cat	1600 mg/kg

Components	Species	Test Results
Sodium benzoate (CAS 532-32-1)		
<u>Acute</u>		
Oral		
LD50	Rat	3450 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitisation		
Respiratory sensitisation	Not a respiratory sensitiser.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
ACGIH Carcinogens		
Ethylene glycol (CAS 107-21-1)	A4 Not classifiable as a human carcinogen.	
Sodium benzoate (CAS 532-32-1)	A5 Not suspected as a human carcinogen.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	May cause damage to organs (kidney) through prolonged or repeated exposure.	
Aspiration hazard	Not an aspiration hazard.	
Further information	No data available.	

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.		
Components	Species		Test Results
Ethylene glycol (CAS 107-21-1)			
Aquatic			
Crustacea	EC50	Daphnia magna	> 100 mg/l, 48 Hours
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	72860 mg/l, 96 hours
Persistence and degradability	Ethylene glycol: >90% / 10 days (OECD 301A) Readily biodegradable.		
Bioaccumulative potential			
Partition coefficient n-octanol / water (log Kow)			
Ethylene glycol (CAS 107-21-1)			-1.36
Sodium benzoate (CAS 532-32-1)			-2.27
Mobility in soil	This product is miscible in water and may not disperse in soil.		
Other adverse effects	No data available.		

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Controlled Narcotic & Psychotropic Precursors List

Not regulated

CWC (Chemical Weapons Convention Act 2000, Schedules 1-3)

Not regulated

List of Hazardous Chemicals (Manufacture, Storage and Import of Hazardous Chemical Rules, Schedule I (Part II)).

Ethylene glycol (CAS 107-21-1)

Hazardous Chemicals, Schedule 2: Threshold Quantities at an Isolated Storage (Manufacture, Storage and Import of Hazardous Chemical Rules 1989, as amended).

Not regulated

Hazardous Chemicals, Schedule 3: Threshold Quantities in an Industrial Installation (Manufacture, Storage and Import of Hazardous Chemical Rules 1989, as amended).

Not regulated

Ozone Depleting Substances (ODS) (Ozone Depleting Substances (Regulation and Control) Rules 2000, Schedule 1).

Not regulated

International regulations

All components comply with the following chemical inventory requirements: AIIIC (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States), TCSI (Taiwan), NZIoC (New Zealand).
For countries not listed above, further action by the importer is needed.

Stockholm Convention

Not listed.

Rotterdam Convention

Not listed.

Montreal Protocol

Not listed.

Kyoto Protocol

Not listed.

Basel Convention

Not listed.

16. Other information, including date of preparation or last revision

Issue date 01-October-2025

Revision date -

Version No. 01

List of abbreviations

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
ACGIH: American Conference of Governmental Industrial Hygienists.
EC50: Effective Concentration, 50%.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
LC50: Lethal Concentration, 50%.
LD50: Lethal Dose, 50%.
MARPOL: International Convention for the Prevention of Pollution from Ships.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TWA: Time Weighted Average.

References

ECHA CHEM

Disclaimer

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