

PRODUCT DATA SHEET & MSDS



DESCRIPTION:

Blue Chip Lubricants Coolpro M is a balanced blend of a number of carefully selected corrosion inhibitors in mono ethylene glycol. It is formulated to ensure optimum protection of all metal, rubber and plastic components in contact with the engine coolant. Coolpro M is suitable for most cooling systems in petrol and diesel engines.

PRODUCT FEATURES:

- Minimises rust and corrosion in engine cooling systems.
- Prevents galvanic attack caused by dissimilar metals e.g. steel, cast iron, aluminium, brass, copper and tin.
- Neutralises the effect of acidic degradation of glycol.
- Compatible with all common hose and seal materials used in cooling systems.
- Protects against boiling at elevated operating temperatures
- Prevents freezing in winter with resultant engine block cracking.

APPLICATIONS:

Recommended for use in vehicles and equipment where the cooling system needs protection against freezing, boiling and corrosion. Always use correct concentration as recommended by the engine manufacturer. Do not top-up with neat water alone. For maximum protection most OEMs recommend a 50:50 solution.

TECHNICAL DATA:

PROPERTY	UNITS	ANTIFREEZE CONCENTRATE
pH Value of 50 % solution		8.7
Reserve Alkalinity 0.1N HCl	ml	15.5
Freezing Point of 50 % solution	°C	-38
Freezing Point of 33 % solution	°C	-20
Specific Gravity 20°C/20°C	Kg/l	1.12
Appearance	Visual	Blue

PERFORMANCE LEVEL:

Exceed the requirements of most European and International Standards including:

- AFNOR NF R15-601
- ASTM D 3306 and D 4985
- BS 6580
- SAE J 1034
- TS 3582

All reasonable care has been taken to ensure that the information contained in this Product Data Sheet is accurate at the date of issue. It should be noted, however, that the information may be effected by changes, subsequent to the date of issue, in the blend formulation or the requirements of any third party specification relating to this product or the methods of application. Final determination of suitability of any material is the

PRODUCT DATA SHEET & MSDS**1. PRODUCT IDENTIFICATION**

Product	:	Engine Cooling System Protector.
Company Identification	:	COOLPRO M
Substance / Preparation	:	Preparation
Product Use	:	For use in engine cooling systems that need protection against freezing, boiling and corrosion.

2. COMPOSITION

Chemical Composition	:	Mono Ethylene Glycol and corrosion inhibitor additives.
Hazardous Components	:	Ethylene glycol diethyl ether

3. HAZARDS IDENTIFICATION

Hazards	:	Contact can cause irritation of skin, eyes and respiratory tract. Extremely dangerous in case of ingestion..
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4. FIRST AID MEASURES

Eye Contact	:	Flush eyes thoroughly with water. Obtain medical advice if any irritation occurs.
Skin Contact	:	Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin thoroughly. If irritation persists obtain medical attention.
Ingestion	:	DO NOT induce vomiting because of danger of aspirating liquid into lungs. Seek medical attention immediately. Never give anything by mouth to an unconscious person.
Inhalation	:	Evacuate the victim to a safe area as soon as possible. If the victim is not breathing, perform artificial respiration. Allow the victim to rest in a well-ventilated area. Seek medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing media	:	In case of fire use water sprays, fog or standard foam is recommended. DO NOT USE water jets. Water may be used to cool nearby heat exposed areas /objects /packages. Avoid spraying directly into storage containers because of the danger of boil-over. Move container away from fire area if you can do it without risk.
Special hazards	:	Fires in confined areas should be dealt with by trained personnel wearing approved breathing apparatus. Toxic fumes may be evolved on burning or exposure to heat.
Protective clothing	:	Use suitable protective breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Any spillages should be regarded as a potential fire risk. In the event of spillage, remove all sources of ignition and ensure good ventilation. Spilled material may make surface slippery. Clean up spilled material immediately. It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.
Environmental precautions:	:	Do not wash product into drainage systems, protect drains from potential spills to minimize contamination. In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover from the surface. Protect environmentally sensitive areas and water supplies. Minimize contact of spilled material with soils to prevent runoff to surface waterways.
Small Spills	:	For small spills clean up the material immediately. Contain and recover spilled material using sand or other suitable inert absorbent material.
Large Spills	:	Recovery of large spills should be affected by specialist personnel.

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7. HANDLING AND STORAGE

- Handling precautions : Avoid contact with skin and observe good personal hygiene. Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate. Avoid frequent or prolonged skin contact with fresh or used product. Wash hands thoroughly after contact. Use disposable cloths and discard when soiled. Do not put soiled cloths in pockets. Take necessary precautions against accidental spillage into soil and water. Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times.
- Storage precautions : Store under cover away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Occupational Exposure Limits : There is no appropriate occupational exposure limit to this material.
- Engineering controls : The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

Personal Protective Equipment

- Respiratory system : Respiratory protection is unnecessary, provided the concentration of vapour, mists or fumes is adequately controlled. The use of respiratory equipment must be strictly in accordance with any statutory requirements governing its selection and use.
- Hands : Use chemical resistant, impervious gloves.
- Eyes : Safety glasses with side shields. Goggles with a face shield may be necessary depending on quantity of product and conditions of use.
- Skin : Disposable outer garments where there is the potential for contact with the material.

9. PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	UNITS	ANTIFREEZE CONCENTRATE
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10. STABILITY AND REACTIVITY

- Conditions to avoid : Sources of ignition. Thermal decomposition products will vary with conditions. Incomplete combustion will generate smoke, carbon dioxide and hazardous gasses, including carbon monoxide.
- Incompatible Materials : Avoid contact with strong oxidizing agents
- Stability : Stable at ambient temperatures. Hazardous polymerization reactions will not occur.

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11. TOXICOLOGICAL INFORMATION

Skin contact	:	Slightly hazardous in case of skin contact (irritant).
Eye contact	:	Slightly hazardous in case of eye contact (irritant).
Ingestion	:	Extremely dangerous in case of ingestion.
Inhalation	:	Slightly hazardous in case of inhalation (lung irritant). Can cause nausea, headaches and vomiting.

12. ECOLOGICAL INFORMATION

Aquatic toxicity	:	Spills may cause physical damage to organisms; oxygen transfer could also be impaired.
Biodegradability	:	This product is inherently biodegradable.
Bio-accumulation	:	There is no evidence to suggest bio-accumulation will occur.
Mobility	:	Spillages may penetrate the soil causing ground and water contamination.

13. DISPOSAL CONSIDERATIONS

Disposal Methods	:	Where possible, arrange for the product to be recycled. Dispose via an authorised person / licensed waste disposal conductor in accordance with local regulations.
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14. TRANSPORT INFORMATION

Road Transport	:	Not classified as hazardous for transport
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15. REGULATORY INFORMATION

EEC hazard classification	:	EU Regulation (EC) No. 1907/2006 (REACH)
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DISCLAIMER

The information provided in this data sheet and the health, safety and environmental information it contains, is correct to the best of our knowledge at the date of publication. However, neither Blue Chip Lubricants (Pty) Ltd nor any of its affiliates, accept any liability whatsoever for the accuracy or completeness of the information contained herein. Since this information may be applied under conditions beyond our control, we do not accept any responsibility for the results of its use. Final determination of suitability of any material is the sole responsibility of the user.