

MATERIAL SAFETY DATA SHEET

"READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET
BEFORE HANDLING OR DISPOSING OF PRODUCT"

99004 NISSAN L-250 COOLANT PREMIXED

1. PRODUCT AND COMPANY NAME

PRODUCT CODE AND NAME

99004 NISSAN L-250 COOLANT PREMIXED

DESCRIPTION

Antifreeze

COMPANY

ARTECO N.V.

Technologiepark-Zwijnaarde 2

B-9052 Gent-Zwijnaarde

BELGIUM

Tel: 0032/(0)9 240 7320

Fax: 0032/(0)9 240 7324

Emergency phone number : 0044/(0)18 65 407 333

Poison Control Center (Belgium only) : +32/(0)70 245 245

2. COMPOSITION/INFORMATION ON INGREDIENTS

Name	% Wt	CAS No.	EC No.
Ethylene glycol	> 45	107-21-1	203-473-3
Xn R 22 Harmful if swallowed.			
Potassium-para-tert-butyl-benzoate	0,1 - 0,99	16518-26-6	240-587-2
Xn R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.			
Xn R 62 Possible risk of impaired fertility.			
Xn R 48/20/21/22 Harmful : danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.			
N R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.			

The product contains a bittering repellent agent.

3. HAZARDS IDENTIFICATION

Product classification

HARMFUL

Acute effects of exposure to man

Inhalation

Vapours or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness.

Skin contact

Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seen as local redness and swelling. May cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye.

Eye contact

DATE ISSUED : 24/06/2004

Supersedes : 13/04/2004

Page : 1 / 7

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MATERIAL SAFETY DATA SHEET

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99004 NISSAN L-250 COOLANT PREMIXED

Ingestion

Ethylene glycol and diethylene glycol are toxic when swallowed. A lethal dose for an adult is 1-2 ml per kilogram, or about 100 ml. Symptoms include staggering, slurred speech, loss of coordination, confusion, faintness, nausea, vomiting, increased heart rate, difficulty breathing, difficulty seeing, convulsions, and collapse. Symptoms may be delayed. Decreased urine output, kidney failure, and nervous system damage may also occur. Aspiration may occur during swallowing or vomiting, resulting in lung damage. Repeated ingestion may cause kidney damage.

Chronic effects of exposure to man

Medical conditions aggravated by exposure

Repeated overexposure may aggravate an existing kidney disease. Because of its irritating properties, repeated skin contact may aggravate an existing dermatitis (skin condition).

Effects of exposure to the environment

Believed not to be toxic to aquatic species.

4. FIRST AID MEASURES

Route of exposure

Inhalation

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or symptoms persist.

Skin contact

Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention.

Ingestion

Get immediate medical attention. If person is conscious and can swallow, immediately give two glasses of water (500 ml) but do not induce vomiting. If vomiting occurs, give fluids again. Have physician determine if condition of person will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

Other recommendations

Ethylene glycol poisoning may initially produce behaviour changes, drowsiness, vomiting, diarrhoea, thirst and convulsions. Renal damage or failure with metabolic acidosis are late signs of poisoning. Immediate treatment may reduce toxic effects, supplemented, if

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necessary with haemodialysis. Intravenous ethanol in sodium bicarbonate solution is a recognized antidote. Contact a poison centre for further treatment information.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water fog, dry powder, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water fog to disperse the vapours and to provide protection for persons attempting to stop the leak.
Water jet

Extinguishing media which must not be used for safety reasons
Special exposure hazards arising from the substance or preparation itself,
combustion products, resulting gases
Special protective equipment for firefighters

None

The nature of special protective equipment required will depend upon the size of the fire, the degree of confinement of the fire and the natural ventilation available. Fire-resistant clothing and self-contained breathing apparatus is recommended for fires in confined spaces and poorly-ventilated areas. Full fire-proof clothing is recommended for any large fires involving this product.

6. ACCIDENTAL RELEASE MEASURES

Procedures in case of accidental release or leakage

Ventilate area. Avoid breathing vapour. Use self-contained breathing apparatus or supplied air mask for large spills or confined areas. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing.

7. HANDLING AND STORAGE

Handling

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

Storage

Transport, handle and store in accordance with applicable local regulations and only in labelled containers designed for this product.

DATE ISSUED : 24/06/2004

Supersedes : 13/04/2004
Page : 3 / 7
Pollux6®©

MATERIAL SAFETY DATA SHEET

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99004 NISSAN L-250 COOLANT PREMIXED

Specific use (s)

For intended product uses please refer to the Product Information Leaflet (PIL)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection

Airborne concentrations should be kept to lowest levels possible. If vapour, mist or dust is generated, 3M mask type 7002 fitted with cartridges for organic vapours e.g. type 3M/6057.

E.g. Dräger panorama Nova respirator mask + respirator type PA 94 should be used for cleaning large spills or upon entry into tanks, vessels, or other confined spaces. See below for applicable permissible concentrations. Avoid skin contact. Nitrile/neoprene gloves recommended. When contamination has occurred, wash exposed skin with soap and water.

Hand and skin protection

Eye protection

Chemical type goggles or face shield recommended to prevent eye contact.

Exposure limit for the product

Ethylene glycol : TWA/OEL (8hr) : 52 mg/m³ ;
STEL : 104 mg/m³ ; ACGIH : STEL = 100 mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Green liquid

Odour

Mild odour

Flash point (ASTM D92), °C

Not determined

Relative density

1.0 kg/l @ 20 °C

pH

7.9 @ 30 % vol

Solubility in water

100 %

10. STABILITY AND REACTIVITY

Conditions to avoid

Sources of ignition such as flames, sparks, hot surfaces.

Materials to avoid

Avoid contact with strong oxidising agents.

Hazardous decomposition products

Oxides of carbon, aldehydes and ketones.

11. TOXICOLOGICAL INFORMATION

Acute

Inhalation

High concentrations of vapours or mist are likely to be irritating to the respiratory tract and may cause nausea, dizziness, headaches and

DATE ISSUED : 24/06/2004

Supersedes : 13/04/2004

Page : 4 / 7

Pollux6®©

MATERIAL SAFETY DATA SHEET

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99004 NISSAN L-250 COOLANT PREMIXED

Skin contact

Eye contact

Ingestion

Chronic

drowsiness.

Slightly irritating to the skin.

Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.

Harmful. Causes headache, weakness, confusion, loss of coordination, dizziness, difficulty walking, nausea, vomiting, decreased blood pressure, increased heart rate, pulmonary oedema, kidney failure, unconsciousness, convulsions, and coma. Symptoms maybe delayed. Severe poisoning may cause death. Repeated ingestion may cause kidney damage. Repeated overexposure may aggravate an existing kidney disease.

12. ECOLOGICAL INFORMATION

Mobility

Persistence and degradability

Potential to bioaccumulate

Aquatic toxicity

Remarks

Not determined

According to EC criteria : Expected to be readily biodegradable

This product is estimated to have a low potential to bioconcentrate.

Believed not to be toxic to aquatic species.

Releases of small quantities are unlikely to affect adversely the functioning of water treatment plants.

13. DISPOSAL CONSIDERATIONS

Disposal

Dispose in accordance with local laws and regulations governing disposal of chemicals.
EWC-Nr. : 16 01 14

14. TRANSPORT INFORMATION

Transport

Not regulated

15. REGULATORY INFORMATION

Classification/Labelling information

Symbol (letter notation) + Indication of danger

Risk phrases

Under the criteria of Directive EEC/67/548 (dangerous substances) and EEC/1999/45 (dangerous preparations) :

Xn HARMFUL

Xn R 22

Harmful if swallowed.

DATE ISSUED : 24/06/2004

Supersedes : 13/04/2004

Page : 5 / 7

Pollux6®©

MATERIAL SAFETY DATA SHEET

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99004 NISSAN L-250 COOLANT PREMIXED

Safety phrases for public use

S 2 Keep out of the reach of children.
S 46 If swallowed, seek medical advice
immediately and show this container or label.

Safety phrases for industrial use

S 36/37 Wear suitable protective clothing
and gloves.

Hazardous ingredients

Ethylene glycol

Additional information

Refer to any national measures that may be
relevant.

16. OTHER INFORMATION

other information

Acute or chronic oral consumption of products
containing ethylene glycol can produce
significant adverse health effects, including
death, in humans and animals. Keep out of
reach of children. Such products should not be
used in potable (drinking) water systems or other
systems where contamination of potable water
supplies is possible (e.g., recreational vehicles,
winterizing potable water systems).

Full text of risk phrases

Do not decant into unlabeled containers.

Xn R 22 Harmful if swallowed.

Xn R 20/21/22 Harmful by inhalation, in
contact with skin and if swallowed.

Xn R 62 Possible risk of impaired
fertility.

Xn R 48/20/21/22 Harmful : danger of
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Changes were made in sections :

2, 3, 7, 9, 15, 16

DATE ISSUED : 24/06/2004

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All information contained in this Material Safety Data Sheet and, in particular, the health and safety
and environmental information is accurate to the best of our knowledge and belief as at the date of
issue specified. However, the Company makes no warranty or representation, express or implied, as
to the accuracy or completeness of such information.

The provision of this Material Safety Data Sheet is not intended, of itself, to obviate the need for all
users to satisfy themselves that the product described is suitable for their individual purposes and
that the safety precautions and environmental advice are adequate for their individual purposes and
situation. Further, it is the user's obligation to use this product safely and to comply with all applicable
laws and regulations concerning the use of the product.

DATE ISSUED : 24/06/2004

Supersedes : 13/04/2004

Page : 6 / 7

Pollux6®©

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99004 NISSAN L-250 COOLANT PREMIXED

The company accepts no responsibility for any injury, loss or damage, consequent upon any failure to follow the safety and other recommendations contained in this Material Safety Data Sheet, nor from any hazards inherent in the nature of the material, nor from any abnormal use of the material.

"Data sheet prepared by TEXACO BELGIUM N.V.

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DATE ISSUED : 24/06/2004

Supersedes : 13/04/2004
Page : 7 / 7
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