

**MATERIAL SAFETY DATA SHEET**

**NATIONAL RADIATOR COOLANT (CONC 40 %)**

**1. Chemical & Company Identification**

**Trade Name** : Radiator Coolant & Anti-Freeze conc. 40 %

**Supplier** :  **Techno Lube LLC-Dubai.**  
 P.O. Box. 116636. Dubai  
 United Arab Emirates.

**Routine Inquiries** : 00971-4 8018321

**Fax** : 00971-4 8867014

**Chemical Description** : Radiator Coolant

**2. Composition & Ingredients**

<b>Components</b>	<b>CAS No.</b>	<b>Range in %</b>
Water	7732185	55 - 65
Ethylene glycol	107211	35 - 45
Additives such as Corrosion Inhibitor, Bactericides and Fungicides		1 - 3

**3. Hazards Identification**

**Warning Statements** - Harmful or fatal if swallowed. Keep out of reach of children.

**Eyes** – May cause irritation to the eyes.

**Oral** – Expected to have moderate acute toxicity by ingestion.

Liver and/or kidney damage have been reported to occur following significant overexposures.

**Inhalation** – Irritation of the nose, throat and lungs, headache, nausea, drowsiness, dizziness or unconsciousness may result from exposure to vapors or mists present in poorly ventilated or confined areas, or generated from spraying or heating the material.

**Skin** - Expected to cause no more than minor skin irritation.

Prolonged or frequently repeated contact may cause more severe irritation or may cause the skin to become cracked or dry from the defatting action of this material.

**Long Term Toxic Effect** – Contains a solvent that may cause adverse systemic effects when ingested, inhaled or absorbed through the skin.

See Section 11 for additional information.

#### **4. First Aid Measures**

**Eyes** - Flush eyes immediately with fresh water for several minutes while holding the eyelids open.

If irritation persists, see a doctor.

**Skin** - Wash skin thoroughly with soap and water. If skin irritation persists or a rash develops as a result of excessive contact, see a doctor. Launder contaminated clothing.

**Ingestion** - If swallowed and person is conscious, give water or milk. DO NOT make person vomit except on advice of medical personnel. If advice cannot be obtained, take person with container and label to nearest emergency treatment center. Never give anything by mouth to an unconscious person.

**Inhalation** - If respiratory irritation or any signs or symptoms as described in this MSDS occur, move the person to fresh air. If any of these effects continue, see a doctor.

#### **5. Fire Fighting Measures**

**Ignition Temp. (Degrees C)** : Not determined

**Flammable Limits (% by Volume)** : Not Determined

**Flash Point (degrees C)** : Not applicable

**Fire Extinguishing Agents** - According to the U.S. National Fire Protection Association Guide, use water fog, dry chemical, 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 spray to disperse the vapors and to provide protection for persons attempting to stop the leak.

**Explosion Hazards** - For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency.

## 6. Accidental Release Measures

**In Case of Spill** - Stop the source of the leak or release and contain spill if possible. Ventilate area. Use respirator and protective clothing as discussed in this MSDS. Cover spill with a generous amount of inert absorbent. Use a stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent a water using a stiff broom. Pick up liquid with additional absorbent and place in a disposable container. Prevent contamination of groundwater or surface water.

**7. Handling & Storage** - Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

## 8. Exposure Control / Personal Protection

**Eyes** – Avoid eye contact. The wearing of chemical safety goggles, or face shield is recommended.

**Skin** – Avoid contact with skin or clothing.

Exposed employees should exercise reasonable personal cleanliness: this include cleansing exposed skin several times daily with soap and water and laundering or dry cleaning soiled work clothing at least weekly.

**Inhalation** – Respiratory protection is normally not required. However, if operating conditions create airborne concentrations, which exceed the recommended exposure, standard(s), the use of an approved respirator is recommended.

Wear approved respiratory protection such as a toxic dust, mist and fume respirator.

## 9. Physical & Chemical Properties.

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Note : The following data may represent a range of approximate or typical values for products in the same family. Precise technical information is provided in Product Bulletins and can be obtained from your Marketing Representative.

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**Appearance & Odor**  
**Boiling Point (deg. C)**

Green colour liquid  
: Not determined

<b>Vapor Pr. (mmHg @ 25 deg. C)</b>	: Low
<b>Density (kg/l at 15 deg. C)</b>	: 1.05
<b>pH of Undiluted Product</b>	: 8-8.5
<b>Solubility (water)</b>	: > 10 %
<b>Percent Volatile by Volume</b>	: Not Determined
<b>Evaporation</b>	: Not Determined
<b>Viscosity (All Product Grades)</b>	: < 20 mm <sup>2</sup> /s @ 40 deg. C

## 10. Stability & Reactivity

**Hazardous Polymerization** – DO NOT OCCUR

**Products of Combustion** – Carbon monoxide, carbon dioxide may be formed on burning in limited air supply.

**Conditions to Avoid** – Strong Oxidizers and heat.

## 11. Toxicological Information

**General** – This product contains ethylene his product contains ethylene glycol (EG) and/or diethylene glycol (DEG) which are poorly absorbed through the skin, and which are usually not hazardous via inhalation unless working conditions result in heating or spraying of the material. EG and DEG can cause severe intoxication when swallowed in a single dose, due to the action of several toxic metabolites. The estimated oral lethal dose of undiluted material about 100 cc (3.3 oz) for an adult human. Early symptoms may resemble those of alcohol intoxication. Later symptoms may include behavioral changes, drowsiness, vomiting, diarrhea, thirst, convulsions, cyanosis, rapid heart rate and kidney failure, depending on the dose. The cause of death is usually acute central nervous system depression or subsequent kidney damage. Acute or chronic consumption of products containing ethylene glycol can produce health effects in humans. The major health effects observed in animals following repeated ingestion are on the central nervous system, liver, kidney and reproductive/ developmental system. While normal use of this material should not result in any adverse effects, we strongly recommend that the precautions outlined in this MSDS be followed to minimize skin contact and keep inhalation of mists to a minimum.

This material contains 2-ethylhexanoic acid. The primary human health effect reported is irritation to the eyes and skin. The major health effects observed in animals following repeated oral administration are on the liver and reproductive/developmental system in high doses. While normal use of this material should not result in any adverse effects, we strongly recommend that the precautions outlined in this MSDS be followed to reduce skin contact and keep inhalation of mists to a minimum.

## 12. Disposal Considerations

**Waste Disposal** – Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

**Remarks** : Release of this product to be prevented from contaminating soil and the water ways.

### **13. Transport Information**

#### **Transport of Dangerous Goods:**

**UN Number** : Not Applicable  
**Dangerous Goods Class** : Not Applicable  
**Proper Shipping Name** : Not Applicable

**Additional Information** : None Determined

### **14. Other Information**

To the best of our knowledge, the information provided in this MSDS document is correct. We do not assume any liability for consequences of the use of this information since it may be applied under conditions beyond our control or knowledge. Also, it is possible that additional data could be made available after this MSDS was issued.

Certain hazards are described herein; however these may not be the only hazards that exist. All materials may present unknown hazards and should be used with caution.

Customers are encouraged to review this information, follow precautions, and comply with all applicable laws and regulations regarding the use and disposal of this product. For specific technical data or advice, concerning this product as supplied in your country please contact your local sales representative. The final determination of the suitability of any material is the sole responsibility of the user.