

KOOL-IT RADIATOR CONCENTRATE

MATERIAL SAFETY DATA SHEET

MSDS No:		QUICK SMART PRODUCTS
Product Name:	KOOL-IT RADIATOR CONCENTRATE	53 ASSEMBLY DRIVE
Manufacturers Code:	COOL1, COOL5, COOL20, COOL205	TULLAMARINE VIC 3043
Date:	October 2010	ABN: 40 959 725 049 (03) 9338 6655 (BH) (03) 9336 7945 (AH)

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: KOOL-IT RADIATOR CONCENTRATE
Company Name: QUICK SMART PRODUCTS
Address: 53 Assembly Drive
Tullamarine Vic 3043
Telephone/Fax: (03) 9338 6655 (BH) Poisons Information Centre 131126 (AH) Fax: (03) 9335 2598
Recommended Use: Automotive Radiator Coolant

2. HAZARDS IDENTIFICATION

Statement of Hazardous/Dangerous Nature: HAZARDOUS SUBSTANCE.
DANGEROUS GOODS
Classified as Hazardous according to the criteria of NOHSC Australia.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)

UN No: None Allocated **DG Class:** 3.3 Combustible Liquid **Hazchem Code:** None Allocated
Packing Group: None Allocated **EPG:** None Allocated **Poisons Schedule:** S5

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	Name	Proportion	CAS	UN No
	Ethylene Glycol	VHigh	107-21-1	-
	Corrosion Inhibitors	Low	-	-
	Antifoam	VLow	-	-
	Denatonium Benzoate*	VLow	3734-33-6	-
	Dyestuff	<u>VLow</u>	-	-
		100%		

Proportion (% weight per weight)
VHigh >60, High 30 – 60, Med 10 – 29, Low 1 – 9, VLow <1
*Actual content at 10ppm

4. FIRST AID MEASURES

Poison Information Centres (131126) in each State Capital City can provide additional assistance for scheduled poisons.

Inhalation: Remove the source of contamination and move the affected person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. If the victim is not breathing, apply artificial resuscitation. In serious cases of over-exposure, seek immediate medical attention.

Ingestion: Immediately rinse out mouth and lips with water. Give plenty of water to drink. If more than 15 minutes from a hospital induce vomiting using fingers in the throat or Ipecac Syrup APF. Seek immediate medical attention.

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- Eye:** Hold eyelid open and flush with copious amounts of water for at least 15 minutes or until all contaminants are washed out completely. Seek immediate medical attention.
- Skin:** Remove contaminated clothing and launder before re-use. Wash contaminated skin with copious amounts of water. If irritation develops seek medical attention.
- First Aid Facilities:** Normal washroom facilities are generally suitable. It is recommended that an eyewash station be available and ready for use.
- Advice to Doctor:** Treat symptomatically. Early diagnosis and treatment of ingestion is important. Ensure emesis is satisfactory. Test and correct for metabolic acidosis and hypocalcemia. Apply rapid and sustained diuresis when possible with the use of hypertonic mannitol. Evaluate renal status and begin haemodialysis if indicated.

5. FIRE FIGHTING MEASURES

- Fire Fighting Measures:** Combustible liquid. Will burn if involved in a fire but not considered to be a significant fire risk.
- Suitable Extinguishing Media:** Water fog, (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).
- Protective Equipment for Fire Fighters:** Fire Fighters should wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing if risk of exposure to vapour or products of combustion.
- Specific Methods:** Combustible liquid. Will burn if involved in a fire but not considered to be a significant fire risk.
- Specific Hazards:** Store away from acids and oxidising agents.

6. ACCIDENTAL RELEASE MEASURES:

- Spills:** Spillages are slippery. Avoid accidents, clean up immediately. Personnel involved in cleaning up any spills are to wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Cordon off the spillage area. Isolate the source of the spillage or leak. Contain and collect using an absorbent material (sand or soil, inert material, vermiculite). Prevent run off into drains and waterways. Collect and seal in properly labelled containers for disposal. Rinse the area clean with detergent and water.
- Disposal:** Dispose of in accordance with Federal, EPA, State and Local Regulations. Disposal into sewer system is not permitted.

7. HANDLING AND STORAGE

- Handling:** Repeated or prolonged exposure to the material without personal protection should be avoided in order to lessen the possibility of disorders. Maintain good standards of personal hygiene i.e. washing hands prior to eating, drinking, smoking or using the toilet facilities. Keep container closed when not in use.
- Storage:** This material is classified as a 3.3 (Combustible Liquid) and a Scheduled Poison (S5) and must be stored, maintained and used in accordance with the relevant regulations. Store in a clean, dry place out of direct sunlight. Store away from acids, oxidising agents and foodstuffs. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks.

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8. EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational Exposure Limits:	No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC). However Exposure Standard for constituent:			
	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
	20	52	40	104
	Ethylene glycol (vapour)			
	These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure Standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.			
Personal Protective Equipment:	ICI Personal Protection Guide (No 2 1990): Code H – Overalls, Safety Shoes, Goggles, Gloves (S) Respirator. Avoid skin and eye contact. Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour respirator meeting the requirements of AS1715 and AS1716.			
Engineering Controls:	Use in well ventilated area. Vapour at elevated temperatures heavier than air – prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.			

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Green liquid
Odour:	Mild
Boiling Point:	180°C
Solubility:	Soluble in water and alcohol
Specific Gravity (20°C):	1.13
Evaporation Rate:	Not Available (n-Butyl acetate=1)
Vapour Pressure 20°C:	Not Available
Decomp Point C:	Not Available
Physical State:	Liquid
Flash Point:	116°C
Freezing Point:	-7°C
Flammability Limits (%):	Not Available
Sublimation Point:	Not Applicable
Autoignition Temp C:	Not Available
PH (50% soln):	7.5 – 9.0
Rel Vapour Density (air-1):	Not Available

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% Volatile by Volume: Not Available

Viscosity @ 20C 25cP

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and handling.
Conditions to Avoid:	Avoid sources of ignition, heat, direct sunlight.
Materials to Avoid:	Acids and oxidising agents.
Hazardous Decomposition:	None known.
Decomposition Products:	None known.
Hazardous Reaction:	Combustible liquid. Will burn if involved in a fire but not considered to be a significant fire risk.

11. TOXICOLOGICAL INFORMATION

Toxicology Information:	No LD50 data available for product. However for ethylene glycol (major constituent) (1): Oral LD50 (rat): 4700mg/kg Oral Lowest Lethal Dose (human): 786mg/kg Oral Lowest Lethal Dose (human): 398mg/kg – headache, nausea, vomiting Derma LD50 (rabbit): 9530mg/kg Inhalation Lowest Toxic Concentration (human): 10,000mg/m ³ - lachrymation, cough Estimated Lethal Dose (human): 100ml Skin (Rabbit): Mild Irritant Eyes (Rabbit): Mild Irritant The brain, lungs liver and kidneys are the main organs affected by systemic intoxication and renal failure is the usual cause of death. Treatment is as for oxalate poisoning, as ethylene glycol is metabolised to oxalic acid which is deposited in various organs as calcium oxalate crystals. Animal studies have shown that long term repeated exposure to high doses of ethylene glycol in the diet causes kidney injury. Not mutagenic in several IN VITRO mutagenicity studies. Birth defects were observed when ethylene glycol was administered to pregnant mice or rats in high doses in the diet or as a respirable aerosol. No effects were noted in the reproductive systems of male or female mice or rats nor on their reproductive performance. Several long term animal tests have found no carcinogenic effects.
Health Effects:	No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

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Acute Effects:

- Inhalation:** Not normally an inhalation risk due to low vapour pressure at ambient temperatures. Inhalation of vapour or mists generated by heating, stirring or spraying can result in headaches and irritation of the throat.
- Ingestion:** Swallowing can result in signs of intoxication followed by nausea and vomiting.
- Skin:** Contact with skin will result in mild irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.
- Eye:** A mild eye irritant.
- Chronic Effects (for Ethylene glycol (1):** No effects on fertility were found in a long term animal study dosed orally.

12. ECOLOGICAL INFORMATION

- Ecotoxicity:** No ecological data is available for this product.
- Persistence / Degradability:** Not available.
- Mobility:** Not available.
- Bioaccumulative Potential:** Not available.
- Environmental Protection:** Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

- Disposal Considerations:** Product should be placed in sealed, properly labelled containers for disposal. Dispose of waste according to Federal, EPA, State and Local Regulations. Assure conformity with all applicable regulations.

14. TRANSPORT INFORMATION

- Transport Information:** Classified as a 3.3 (Combustible Liquid) Dangerous Substance according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code). Refer to relevant regulations for storage and transport requirements.

15. REGULATORY INFORMATION

- Poisons Schedule:** S5 – This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.
- AICS (Australia):** All ingredients are listed in the Australian Inventory of Chemical Substances (AICS)

16. OTHER INFORMATION

- Contact Person/Point:** Technical Information: (03) 9338 6655

- Date of Preparation or last revision of MSDS:** MSDS reviewed: 27 October 2010

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This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user must review this MSDS in the context of how the product will be handled in the workplace and in conjunction with other materials. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

END OF MSDS