MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	ROAD RUNNER PLUS
Manufacturer's Product Code	7271
Other Names	Distillate based diesel additive with biocide.
Major Recommended Uses	As a diesel fuel additive with a built-in biocide so as to improve and preserve the performance of the fuel.
Supplier's Details	Mantek 7 Ralph Street, Alexandria Sydney NSW 2015 Telephone Number (Office Hours): (02) 9669 0261 Fax Number: (02) 9693 1562 Emergency Telephone Number: (02) 9214 0755
Date of Issue	August 2005

SECTION 2 - HAZARDS IDENTIFICATION

Hazard Classification	Classified as hazardous according to the criteria of NOHSC.
Dangerous Goods Class & Sub-risk	None allocated.
Poisons Schedule	Schedule 5.
Risk Phrases	Harmful. May cause lung damage if swallowed.
Safety Phrases	Keep out of reach of children Avoid contact with skin and eyes and do not breathe vapour. If swallowed, do not induce vomiting; seek medical advice.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients			
Chemical Entity	CAS No	Proportion	Synonyms
ALIPHATIC PETROLEUM DISTILLATES	8008-20-6	10-30%	kerosene
2-ETHYLHEXYL NITRATE	27247-96-7	30-60%	octyl nitrate
AROMATIC PETROLEUM DISTILLATE	64742-94-5	10-30%	heavy aromatic naphtha
POLYOLEFIN AMIDE ALKENEAMINE		<10%	
NAPHTHALENE	91-20-3	<10%	
2-ETHOXYHEXANOL	104-76-7	<10%	
ethoxyhexanol			
TRIMETHYL BENZENE	25551-13-7	<10%	
4-(2-NITROBUTYL) MORPHOLINE	2224-44-4	<10%	nitrobutyl morpholine

SECTION 4 – FIRST AID MEASURES

Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Seek medical attention if irritation develops. Wash contaminated clothing before re-use.
Еуе	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor or for at least 15-minutes. Seek medical attention if irritation develops.
Inhalation	If inhaled, remove from contaminated area to fresh air. Apply artificial respiration if not breathing.
Ingestion	If swallowed, do NOT induce vomiting. Give 3-4 glasses of water. If vomiting occurs, give fluids again and keep head below hips to prevent aspiration of liquid into the lungs. Seek medical attention.
First Aid Facilities	General eyewash and normal washroom facilities.
Advice to Doctor	There is no specific antidote. Treat the patient symptomatically. Ingestion and subsequent vomiting of this product can lead to aspiration of the product into the lungs. This can cause damage and may be fatal.
Additional Information	Medical conditions aggravated by exposure are pre-existing respiratory and skin conditions such as asthma, emphysema and dermatitis. Chronic overexposure may cause dermal and respiratory irritation, although this is most unlikely in normal usage. Target organs: Central nervous system and blood forming organs. The primary route of entry into the body is via inhalation.

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SECTION 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media	In the event of a fire, dry-chemical, foam and CO ₂ are the recommended extinguishing agents. Do not use water jets onto product as this may cause frothing and spattering.
Special Protective Equipment and Precautions for Fire Fighters	Fire fighters should wear self-contained breathing apparatus and full protective gear.
Fire/Explosive Hazards	Combustible material. At decomposition temperature, can release oxides of carbon and nitrogen. Vapours are heavier than air and may travel to distant sources of ignition and flashback.
Hazchem Code	None allocated.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Containment and Clean Up	Wear appropriate personal protective equipment and clothing to minimise exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. If possible contain and dike the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container for subsequent disposal. Dispose of waste according to the Environmental Protection Authority (EPA), federal, state and local regulations. For large spills, evacuate area, stop and contain spill, remove via wet vacuum and absorbent, and dispose of via waste disposal. Prevent spill from entering any waterway. Contact the EPA or your local Waste Management Authority if large quantities of this material enter any waterway.
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SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling	Observe precautions stated on product label, and follow industry safety regulations. Eating and smoking should be prohibited where the preparation is used. Do not use around welding or other ignition sources. Build up of mists or vapours in the atmosphere must be prevented - avoid breathing in spray or mists or vapours. Repeated or prolonged skin exposure without protection should be prevented. It is essential that all that come into contact with this material maintain high standards of personal hygiene - i.e. washing hands prior to eating, drinking, smoking or using toilets.
Conditions for Safe Storage	Classified as a class C1 combustible liquid for storage and handling purposes. Store in a dry, well-ventilated area away from heat, sources of ignition, oxidising agents and foodstuffs. Keep original containers closed when not in use and securely sealed and protected against physical damage. Do not pressurise, cut, heat or weld containers.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards	Not established for this mixture. The exposure limits for individual components follow Petroleum distillates TWA – 5mg/m ³ Naphthalene TWA - 52mg/m ³ (10ppm); STEL – 79mg/m ³ (15ppm) Trimethyl benzene TWA - 123mg/m ³ (25ppm)
Engineering Controls	General exhaust is usually adequate, although local ventilation is recommended to control exposure from operations that can generate mists or vapours, particularly in enclosed areas. Where airborne levels cannot be kept below the exposure limits, an approved organic vapour/particulate respirator should be worn.
Personal Protective Equipment	
Eye/Face Protection	Avoid contact with eyes - safety glasses with side shields should be worn if eye contact is likely.
Skin Protection	Impervious neoprene or nitrile rubber gloves should be worn. Refer to AS/NZS 2161 for information on glove selection.
Respiratory Protection	If misting is likely to occur, or if used in poorly ventilated areas where exposure will be above the TWA, an approved combined organic vapour/particulate respirator meeting the requirements outlined in AS/NZS 1715 and AS/NZS 1716 should be used.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	A clear, red, non-viscous liquid with a nitrate odour.
рН	Not applicable.
Vapour Pressure	5mm Hg at 25°C
Vapour Density	4.7 (Air = 1)
Boiling Point	>230°C
Solubility in Water (g/L)	Negligible
Specific Gravity	0.92 (Water = 1)
Flashpoint	63°C
Flashpoint Method	T.C.C.
Flammability Limits	LEL – 0.7%; UEL – 7.0%
% Volatiles by Volume	99.5%
Evaporation Rate	0.04 (Butyl acetate = 1)

SECTION 10 - STABILITY AND REACTIVITY

Stability	Stable.
Conditions/Materials to Avoid	Incompatible with reducing agents and strong oxidisers such as chlorine bleach.
Hazardous Decomposition Products	Oxides of carbon and nitrogen.

SECTION 11 - TOXICOLOGICAL INFORMATION

Health Effects:.			
Acute - Swallowed	May cause irritation of the gastrointestinal system with nausea, vomiting and diarrhoea. Ingestion and subsequent vomiting can lead to aspiration into lungs that can cause lung damage.		
Acute - Eye	Eye contact may cause irritation with reddening and tearing.		
Acute - Skin	May cause skin irritation seen as itching and redness. May cause allergic skin reaction. May be absorbed through the skin in harmful amounts.		
Acute - Inhaled	not a hazard with normal use. Mist may cause respiratory irritation seen as coughing and sneezing. May cause headaches, dizziness, nausea, tightness of chest, metallic taste, fever, chills and dry throat.		
Chronic	Medical conditions aggravated by exposure are pre-existing respiratory and skin conditions such as asthma, emphysema and dermatitis. Chronic overexposure may cause dermal and respiratory irritation, although this is most unlikely in normal usage.		
Target Organs	Central nervous system and blood forming organs.		
Product Contains Chemicals Listed as Carcinogens by	International Agency for the Research of Cancer (IARC): NO Other: NO		

SECTION 12 - ECOLOGICAL INFORMATION

No specific toxicology data on this product is available. When used as indicated, no adverse environmental effects are foreseen. Avoid contaminating water- ways - do not allow product to enter drains, waterways or sewers.		
Persistence/Degradability	No specific data is available. Expected to be slowly biodegradable in aerobic conditions.	
Mobility	Non-volatile. Insoluble in water.	

SECTION 13 – DISPOSAL CONSIDERATIONS

Do not dispose of into waterways. Dispose of waste according to Environmental Protection Authority, federal, state and local regulations. Empty containers can be land filled after cleaning, when in compliance with local regulations. A registered chemical disposal company can undertake disposal.

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SECTION 14 - TRANSPORT INFORMATION

UN Number	None allocated.
UN Proper Shipping Name	None allocated.
Transport Hazard Class	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
Packaging Group	Non allocated.
Hazchem Code	Non allocated.

SECTION 15 - REGULATORY INFORMATION

Poisons Schedule Schedule 5.

SECTION 16 – OTHER INFORMATION

Aug 2005: Poison Schedule. Aug 2004: Initial copy of 16-heading MSDS.

Since the user's working conditions are not known by the supplier, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The product must not be used for any purposes other than those specified in Section 1 without first obtaining written handling instructions. MANTEK assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such non-recommended use, storage or disposal of the product.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties.

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