


<b>MATERIAL SAFETY DATA SHEET</b> according to EU Directive 93/112/EC		
<b>ROOF AND PATH CLEANER</b>		
Version: 2	Print date: 24.1.05	

### 1. Identification of Substance/Preparation and Company

Product Name	Roof and Path cleaner
Company	Biokil Crown Ltd 7 Stadium Ind Park, Long Eaton Nottingham, NG10 2DD
Telephone	0115 946 0060
Fax	0115 946 9767
Emergency Telephone	07967 10 71 95

### 2. Composition / Information on ingredients

	CAS No	R-Phrase	S-Phrase	Range
Alkyl dimethyl benzyl ammonium chlorides	61789-71-7	34,22	26,28, 36/37/39	20%
Inert ingredients (including wetting agent)	8			80%

### 3. Hazards identification

Classification in accordance with 'The Chemicals (Hazards Information and Packaging to Supply) regulations:  
Harmful if swallowed  
Corrosive – causes burns

### 4. First aid measures

SWALLOWING	Do not induce vomiting. Administer large quantities of water and seek medical attention immediately (show label where possible). Never administer any liquid by mouth to an unconscious person.
EYES	Rinse immediately with plenty of clean water for at least 15 minutes and seek medical attention.
INHALATION	Remove patient to fresh air, keep warm and at rest. If symptoms attributable to this product occurs, seek medical advice.
SKIN	Remove all contaminated clothing and wash affected areas with soap and water. If irritation occurs consult a doctor. Launder contaminated clothing before re-use.

### 5. Fire fighting measures

EXTINGUISHING MEDIA	Product is essentially non-combustible.
PPE : FIRE	See: PPE Spillage
PRODUCTS OF COMBUSTION	Product distillation may evolve oxides of nitrogen and carbon.
PPE : SPILLAGE	Wear suitable (neoprene/PVC or Nitrile) gloves, eye/face protection and boots.
OTHER INFORMATION (FIRE)	None known

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**6. Accidental release measures**

Wear suitable protective equipment. Where possible remove or shut off source of leak. Absorb spillage with dry sand, earth, vermiculite or similar material, and place into a suitable, correctly labelled container to await disposal. Rinse remaining spill with water and absorb as before. Do not allow run-off, product or waste to contaminate [ponds, watercourses or ditches. If contamination occurs, inform the Police and Fire Brigade immediately.

**7. Handling and storage**

Wear suitable protective clothing, gloves and eye/face protection. Store in original container, tightly closed and out of reach of children. Keep apart from food, drink and animal feedstuffs. Never use empty drinks bottles or food containers to store or mix this product.

**8. Exposure controls / personal protection**

Wear suitable gloves (neoprene/[PVC,Nitrile), eye/face protection and clothing. If spraying wear suitable respiratory protection (i.e. air fed respirator or cartridge type giving protection against aqueous aerosols or mists). Engineering controls of operator exposure may replace PPE if it can be shown to give an equal or higher standard of protection. Keep unprotected persons and animals away from treated surfaces until they are dry.

**9. Physical and chemical properties**

APPEARANCE:	Clear to Amber liquid	FLASH POINT:	>100°
ODOUR:	Slightly ammoniacal	AUTO IGNITION:	Not known
PH:	5-8	OXIDISING PROPERTIES:	None known
BOILING POINT:	100°C	DENSITY:	0.98 – 1.00 g/ml
MELTING POINT:	N/A		
EXPLOSIVE PROPERTIES:	None known		
VAPOUR PRESSURE:	Of water		
SOLUBILITY IN WATER:	Miscible in all proportions		
SOLUBILITY IN SOLVENT:	(SPECIFY SOLVENT) Organic polar solvents		
PARTITION COEFFICIENT	Not known		N-Octanol/Water

OTHER INFORMATION None.

**10. Stability and reactivity**

Stable and non-reactive under normal conditions of storage and handling.

**INCOMPATIBLE SUBSTANCES**

Strong oxidising substances.

**11. Toxicological information**

LD50 (oral) rat (Rhodia) 900mg/kg (for active ingredient @ 50% concentration)

	<b>EFFECTS OF ACUTE (OVER) EXPOSURE</b>
SKIN:	Possible reddening at the site of contact with some itching and blistering possible.
EYES:	Severe irritation (stinging) and watering
INHALATION:	(spraymist). Reddening/irritation of the mucous membranes, nose and throat, possible accompanied by a persistent cough.
INGESTION:	Severe abdominal pain, nausea, vomiting with irritation (reddening) of the gastric tract.

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**12. Ecological information**

Potentially biodegradable. Product is toxic to aquatic organisms and may exhibit phytotoxicity. The ultimate destination of the active ingredient is soil and sediment.

**13. Disposal considerations**

Disposal of waste and contaminated containers in accordance with the 'Environmental Protection Act 1990 (as amended) at a waste disposal site approved and licensed by the local authority and operated by an approved competent and licensed waste disposal contractor. Duty of Care waste transfer form should specify: Quaternary Ammonium Halide Solution. Empty decontaminated containers may be sent for recycling.

**14. Transport information**

PACKAGING GROUP	III
HAZARD CLASS	8 item 66°(C)
UN No.	1780 (corrosive liquid n.o.s.)
TREM CARD No.	Not known
OTHER INFORMATION	In mixed loads store apart from food drink and animal feedstuffs.

**15. Regulatory information****Read the Label before purchase and use.**

Classification according to 'The Chemicals (Hazard Information and Packaging) Regulations:

RISK SYMBOLS (S)	Xn, C
RISK PHRASES	Corrosive – causes burns (R-34) Harmful if swallowed (R-22)
SAFETY PHRASES	S2 – Keep out of reach of children S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 – After contact with skin, wash immediately with soap and water. S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.

**16. Other Information**

The control of Substances Hazardous to Health Regulations may apply to the use of this product at work.  
NOTICE TO CUSTOMER:

ENSURE ALL POTENTIAL USERS OF THIS PRODUCT ARE AWARE OF THIS MSDS PRIOR TO PRODUCT'S USE.

KEEP MSDS IN A SAFE PLACE READILY LOCATABLE IN CASE OF FUTURE USE.

READ THIS MSDS IN CONJUNCTION WITH ANY LABEL AND DIRECTIONS FOR USE ON THE PRODUCT CONTAINER.

DESTROY ALL OBSOLETE COPIES RELATING TO THIS PRODUCT.

THIS MSDS RELATES ONLY TO THE PRODUCT SPECIFIED.

COPIES OF THIS DOCUMENT ARE AVAILABLE ON REQUEST.

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