

**MATERIAL SAFETY DATA SHEET**

according to EU Directive 93/112/EC

**MITRE BONDING SYSTEM**

Version: 2

Print date: 27.1.05

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

Product Name Activator  
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**

Substance.	%Wt.	CAS No.	EINECS No.
Heptane (F): R11, (Xi) R38, (N) R50/53, (Xn): R65, (-) R67	60-90%	142-82-5	205-563-8
Substituted Toluidine: (T) R23/24/25, (Xn) R33, (N) R52/53	<0.5%	99-97-8	202-805-4
Butane (F+) R12	10-30%	106-97-8	203-448-7
Propane (F+) R12	10-30%	74-98-6	200-827-9

**3. Hazards identification**

Main Hazards: Extremely Flammable. Irritating to skin. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Vapours may cause drowsiness and dizziness.

Other Hazards: In use, may form flammable/explosive vapour-air mixture.

**4. First aid measures**

Symptoms:  
Inhalation: Exposure may cause coughing or wheezing. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness. Convulsions may occur.

Eyes: There may be irritation and redness. Corneal burns may occur.

Skin: There may be irritation and redness at the site of contact.

Ingestion: Nausea and stomach pain may occur. There may be vomiting and diarrhoea. There may be loss of consciousness. Convulsions may occur.

Action:  
Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

Eyes: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Skin: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Ingestion: Do not induce vomiting. If conscious, give 1 pint of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

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**5. Fire fighting measures**

Suitable Extinguishers: Alcohol resistant foam. Carbon dioxide.  
Exposure Hazards: Vapour may travel considerable distance to source of ignition and flash back. Forms explosive air-vapour mixture. **EXTREMELY FLAMMABLE.**  
Protection Of Fire-Fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

**6. Accidental release measures**

Personal precautions: Eliminate all sources of ignition. Mark out the contaminated area with signs and prevent access to unauthorised personnel.  
Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.  
Clean Up Procedures: Mix with sand or vermiculite. If inside, transfer outside of building in suitable containers. For small spills, absorb on to paper and allow to evaporate in a fume cupboard. Wash the spillage site with large amounts of water.

**7. Handling and storage**

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance. Smoking is forbidden.  
Storage conditions: Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed. Ensure lighting and electrical equipment are not a source of ignition.  
Suitable Packaging: Must only be kept in original packaging.

**8. Exposure controls / personal protection**

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.  
Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.  
Hand Protection: Protective gloves.  
Eye Protection: Safety goggles.  
Skin Protection: Protective clothing with elasticated cuffs and closed neck. Boots made of PVC.

**9. Physical and chemical properties**

State: Aerosol  
Colour: Colourless  
Odour: Barely perceptible odour  
Oxidising: Non-oxidising (by EC criteria)  
Flash Point °C: -4

**10. Stability and reactivity**

Stability: Stable under normal conditions.  
Conditions to avoid: Sources of ignition, flames  
Materials to avoid: Oxidising agents.  
Hazardous decomposition products: In combustion emits toxic fumes of carbon dioxide and carbon monoxide.

**11. Toxicological information**

Ingredient 2: SUBSTITUTED TOLUIDINE  
IPR MUS LD50 212mg/kg

**12. Ecological information**

Mobility: Volatile  
Persistence and Degradability: Only slightly biodegradable.  
Bioaccumulative potential: No data available.

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**13. Disposal considerations**

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**14. Transport information**

ADR/RID

UN No: 1950  
 ADR Class: Class 2  
 Shipping Name: AEROSOL DISPENSER  
 IMDG/IMO  
 UN No: 1950  
 Class 2  
 IATA/ICAO  
 UN No: 1950  
 Class 2

**15. Regulatory information**

Hazard Symbols:



Extremely Flammable



Irritant



Dangerous to the environment

Risk Phrases: R12 Extremely Flammable  
 R38 Irritating to skin  
 R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R67 Vapours may cause drowsiness and dizziness

Safety Phrases: Pressurised container, protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition – No Smoking. Keep out of the reach of children.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provision.

**16. Other Information**

Additional Information: This data sheet is issued in accordance with the European (Chips 3) directive 2001/59/CE (28 ATP) which is effective from July 2002.

Risk Phrases Used In Section 2:

R11 Highly flammable  
 R38 Irritating to skin  
 R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R65 Harmful, may cause lung damage if swallowed.  
 R67 Vapours may cause drowsiness and dizziness  
 R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
 R33 Danger of cumulative effects.  
 R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.  
 R12 Extremely flammable.

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

Product Name	Superglue Medium Viscosity
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**

Component	%	CAS No
Ethyl-2-Cyanoacrylate	70-90	7085-85-0

[Sens.] R42/43

**3. Hazards identification**

Main hazards:	May cause sensitization by inhalation and skin contact.
Other hazards:	RISK OF ACCIDENTAL SKIN BONDING. Irritating to respiratory system.

**4. First aid measures (SYMPTOMS)**

Skin Contact:	Danger bonds skin and eyes in seconds.
Eye contact:	Danger bonds skin and eyes in seconds.
Ingestion:	It is unlikely that this substance will be swallowed due to its physical properties.
Inhalation:	Remove subject to fresh air. Seek medical advice if condition does not improve.

**4. First aid measures (ACTION)**

Skin Contact:	Remove all contaminated clothes and footwear immediately unless stuck to skin. Accidentally bonded skin should only be peeled apart using a blunt instrument such as the handle of a spoon. It is best not to force skin apart. Wash area with warm soapy water. Expect separation in 2-4 days.
Eye contact:	Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination. Accidental bonding of the eye will disassociate normally within a few days. Do not attempt to pull or prise skin apart. An uncomfortable irritant feeling will accompany any accidental bonding but the bond formed will later breakdown leading to good recovery.
Ingestion:	Do not induce vomiting. It unusual to ingest this material due to immediate solidification upon contact with moisture in mouth. Usually the material will release in 2 days. Always position the patient to prevent ingestion of the released residue.
Inhalation:	Remove casualty from exposure ensuring one's own safety whilst doing so. Vapours may give rise to irritation of the respiratory system or irritate the eyes. Prolonged exposure to individuals in high concentration of vapours may give rise to chronic effects in sensitive individuals. Good air movement will lower any risk.

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#### 5. Fire fighting measures

Extinguishing media:	Water spray. Carbon dioxide. Dry chemical powder. Alcohol or polymer foam.
Exposure hazards:	For large volume fires call fire brigade wear respirators and protective clothing.
Protection of fire-fighters:	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

#### 6. Accidental release measures

Personal precautions:	Refer to section 8 of SDS for personal protection details. Evacuate the area immediately. For volume spills, ventilate the area and spray or mist water over the spill. This will help to reduce vapour and develop a low polymer skin that upon cure can be mechanically removed by scraping. It is advisable to wear a mask and goggles to avoid inhalation.
Environmental precautions:	Do not discharge into drains or rivers.
Clean-up procedures:	Wash the spillage site with large amounts of water. Avoid all incompatible materials in clean-up Procedure – see section 10 of SDS.

#### 7. Handling and storage

Handling requirements:	Ensure there is sufficient ventilation of the area. Pipes used to transfer the product must be free of water.
Storage conditions:	Store in cool, well ventilated area. Keep container tightly closed. Keep away from direct sunlight. Store under inert gas. Avoid contact with water or humidity. Avoid incompatible materials and conditions – see section 10 of SDS.
Suitable packaging:	Must only be kept in original packaging.

#### 8. Exposure controls / personal protection

Engineering measures:	Ensure there is sufficient ventilation of the area. Ensure all engineering measures mentioned in section 7 of SDS are in place.
Respiratory protection:	High standards of industrial hygiene are required for safe handling of volume. While it is not necessary to wear special breathing apparatus in well ventilated areas however it is good practice to maintain relative humidity between 50-60%.
Hand protection:	Protective gloves. Do not use cotton gloves. The use of our glue safe 55 barrier cream helps to maintain soft uncontaminated unbonded skin free of hard particles which peel away easily with washing.
Eye protection:	Ensure eye bath is to hand. Most users unless exposed to risk of drops from overhead working should not need eye glasses. Always be careful of bringing liquid to the eye by rubbing with unclean fingers. Wipe away any contamination with a tissue or wipe.
Skin protection:	Protective clothing with elasticated cuffs and closed neck. Boots made of PVC.

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**9. Physical and chemical properties**

State:	Liquid
Colour:	Colourless
Odour:	Characteristic odour
Evaporation rate:	Negligible
Solubility in water:	Insoluble
Also soluble in:	Acetone. THE USE OF THE DEBONDERS TYPES BLO/NMS/DEBOND OO ARE RECOMMENDED
Viscosity:	3Cps UP TO 2500CpS
Boiling point/range °C:	.200C
Melting point/range °C:	N/EST
Flammability limits %: lower:	N/EST
upper:	N/EST
Flash Point °C:	85
Autoflammability °C:	N/EST
Vapour pressure:	NONE
Relative density:	1.06 TO 1.10
pH:	NOT REL

**10. Stability and reactivity**

Stability:	Stable under normal conditions. May polymerise on exposure to light.
Conditions to avoid:	Heat. Direct sunlight. Humidity.
Materials to avoid:	Water. Bases. Alcohols. Amines. Strong oxidizing agents.

**11. Toxicological information**

Chronic toxicity:	May cause sensitisation by inhalation. May cause sensitisation by skin contact.
Routes of exposure:	Refer to section 4 of SDS for routes of exposure and corresponding symptoms.

**12. Ecological information**

Mobility:	Insoluble in water.
Persistence and degradability:	No data available.
Bioaccumulative potential:	No data available.

**13. Disposal considerations**

Disposal of packaging:	Dispose of as normal industrial waste.
NB:	The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**14. Transport information****ADR/RID**

Shipping name:	UNRESTRICTED combustable liquid	(n.o.s cyanoacrylate ester)
Hazard ID no:	none	

**IMDG/IMO****IATA/ICAO**

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**15. Regulatory information**

Hazard symbols:



Irritant.

Risk phrases:

R42/43: May cause sensitisation by inhalation and skin contact.

Safety phrases:

S23: Do not breathe vapours.

S24: Avoid contact with skin.

S37: Wear suitable gloves.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.

Note:

The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**16. Other Information**

Other information:

SEE SECTION 4 PROCEDURES FOR ACCIDENTAL BONDING OF SKIN THIS DATA SHEET IS ISSUED IN ACCORDANCE WITH THE EUROPEAN (CHIP 3) DIRECTIVE 2001/59/CE (28 ATP) WHICH IS EFFECTIVE FROM JULY 2002.

Risk phrases used in s.2:

R42/43: May cause sensitisation by inhalation and skin contact.

This data is offered in good faith as typical values and not as a product specification. No warranty either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable, each user should review the recommendations in the specific context of the intended use and determine whether they are appropriate.