



MATERIAL SAFETY DATA SHEET

PRODUCT: HP Sealer Part B
MANUFACTURER: Tile & Floor Care Chemicals CC
MANUFACTURERS ADDRESS: Cnr. Sam Green & Evergreen Roads
Greenhills Industrial Estate
Tunney Ext 7
Germiston 1401

Tel: +2711 822-6901
Facsimile: +2711 822-6902
After Hours: +2782 462 8222
Website Address: www.tfc.co.za
E-mail Address: shipping@tfc.co.za

1. Product Name: HP Sealer Part B

Physical Form: Colourless liquid
Colour: Colourless
Odour: Faint camphor, pleasant, ketonic
Hazchem Code: Flammable liquid Flash point 18°C (closed cup)
Hazards: Harmful if swallowed.
Flammable
May cause skin sensitisation
May cause skin irritant
Causes respiratory tract and eye irritant
Intended Use: Co reactant for urethane coating
C.A.S. Chemical Name: Methyl isobutyl ketone / aliphatic isocyanate
Chemical Family: Ketone
Synonyms: 2-methylpropyl methyl ketone / hexamethylene-1-6 diisocyanate
Empirical Formula: C₈H₁₂O
Extinguishing Media: Ignition will give rise to a Class B Fire. In case of large fire use: alcohol foam, water fog or spray

2. Composition / Information on hazardous ingredients

Ingredients	Cas No
Aliphatic Isocyanate	28162-81-2
Methyl Isobutyl Ketone	108-10-1
Non hazardous proprietary additives	n/a

3. Hazard Identification

DANGER

Causes respiratory tract and eye irritation

Very hazardous in case of eye contact, characterised by redness, watering and itching

Flammable liquid and vapour

Vapour may cause flash fire

Hazardous in case of ingestion. Swallowing can cause nausea, vomiting and central nervous system depression.

Extremely hazardous in case of skin contact, characterised by itching, scaling, reddening or occasionally blistering. Severe over-exposure can result in death.

Hazardous in case of inhalation. Inhalation of high concentrations can produce central nervous system depression which can lead to loss of coordination, impaired judgement and if exposed to high concentrations can cause narcotic effect.

4. First Aid Measures

Eye Contact: Immediately hold eyelids apart and immediately flush eyes with plenty of water for at least 20 minutes. Use Cold Water.
Seek medical attention if any pain or redness develops or persists.

Skin Contact: Wash affected skin areas thoroughly with soap and water for at least 20 minutes.
Remove contaminated clothing as soon as possible and wash underlying skin.
In extreme situations of saturation with this product, drench with water, remove clothing as soon as possible and wash with soap and water.
Seek medical attention if skin becomes red, swollen or painful

Inhalation: Evacuate the victim to a safe area as soon as possible. Seek medical attention immediately.

Ingestion: Do not induce vomiting. Examine lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material has been ingested.
Loosen clothing such as collar, tie, belt or waistband. If victim is not breathing perform artificial respiration.
Have conscious person drink several glasses of water or milk. Seek immediate medical attention.

5. Fire Fighting Measures:

Flammability Of The Product: Flammable
Autoignition Temperature: 150°C
Flammable Limits: Lower 1.4% Upper 7.5%
Products Of Combustion: These products are carbon dioxides (CO, CO₂)
Fire Hazards In Presence Of Var Subs: Flammable in presence of open flames and sparks
Risk of explosion of the product in presence of mechanical impact. Reacts violently with potassium tert-butoxide, can react vigorously with reducing materials, strong oxidisers. Can attach many plastics.
Small Fires: Use dry chemical powder.
Large Fires: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up auto ignition or explosion.

Protective clothing: Wear MSHA/NIOSH approved self contained breathing apparatus or equivalent and full protective gear.
Special Remarks On Fire Hazards: Vapours may travel to source of ignition and flash back. Vapours are heavier than air.
Special Remarks On Explosion Haz: Vapours may form explosives mixtures with air. Vapour explosion hazard indoors, outdoors or in sewers. Containers may explode if heated.

Flash Point: Closed cup 14°C Open cup 18°C

6. Accidental Release Measures

Small Spill And Leak: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container for later disposal.

Large Spill And Leak: Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapours. Prevent entry into sewers, basements or confined areas, dike if needed. Call for assistance on disposal.

7. Handling and Storage

Keep away from heat, sparks and flame.
Keep container closed
Use only with adequate ventilation
To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.
Use explosion-proof electrical (ventilating, lighting and material handling) equipment
Store in a segregated and approved area
Keep container in a cool, well ventilated area
Keep container tightly closed and sealed until ready to use

Avoid all possible sources of ignition (spark or flame)

8. Exposure Controls/Personal Protection

Controls:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Ensure that eye wash stations and safety showers are proximal to the work station location.
Personal Protection:	Eyes - splash goggles Body - Chemical resistant overalls Respiratory - Vapour respirator. Be sure to use an approved/certified respirator or equivalent Wear appropriate respirator when ventilation is inadequate. Hands - Polyvinyl alcohol (PVA) gloves Feet - Chemical resistant safety boots Personal protection in case of a large spill - Splash goggles, full suit, vapour respirator, boots, gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient: consult a specialist BEFORE handling this product.

9. Physical and Chemical Properties

Colour:	Colourless
State:	Liquid
Odour Characteristic:	Faint camphor, pleasant, ketonic
Density:	vapou - 3.45
Boiling Point:	115.9°C
Melting / Freezing Point	-84°C
Vapour Pressure:	15.7mm of Hg at 20°C
Critical Temperature:	298.3°C
Flammable Limits:	1.1 - 7.0 %
Solubility in Water:	Partially Soluble

10. Stability and Reactivity

Stability And Reactivity:	The product is stable.
Conditions Of Instability:	Sparks, open flames, heat, electrostatic discharge and othe ignition sources. Reacts violently with strong oxidising agents reducing agent and potassium tert-butoxide.
Incompatibility With Various Sub:	Extremely incompatible with oxidizing materials, reducing materials, potassium tert-butoxide.
Hazardous Decomposition:	Carbon dioxide and carbon monoxide may form when heated to decomposition
Hazardous Polymerization:	Will not occur

11. Toxicological Information:

Toxicity To Animals:	Acute Oral Toxicity (LD50): 2080mg/kg (Rat) Acute Dermal Toxicity (LD50): 16000mg/kg (Rabbit) Acute Toxicity of the vapour (LD50): 2000ppm 4 hours (Rat)
Chronic Effects On Humans:	Passes through the placental barrier. Can cause CNS depression. Can cause gastrointestinal disturbances. Exposure can cause dermatitis. Exposure can cause stomach pains, vomiting. Prolonged chronic exposure may cause kidney damage.

12. Ecological Information:

Ecotoxicity:	Ecotoxicity in water (LC50): 460mg/l 24 hours (Goldfish) 505mg/l 96 hours (Fathead Minnow)
Products Of Degradation:	Acetone is the main photo oxidation product of M.I.B.K. In the presence of nitrogen oxides, peroxyacetyl/nitrate and methyl nitrate are formed. Carbon oxides (CO, CO ₂) are produced.

13. Disposal Considerations:

Waste Information:	Waste must be disposed of in accordance with federal, state and local enviroment control regulations.
Waste Stream:	RCRA Hazardous Waste: U161, RQ of 5000 lbs.

14. Transport Information:

UN No:	1245
Hazchem Code:	3
IMDG Code:	1245
IMDG Packaging Group:	II
Marine Pollutant:	Yes
Class:	3 - Flammable liquid group II/III
Subsidiary Risks:	None
Tremcard No:	

15. Regulatory Information:

HCS Classification:	Flammable liquid having a flash point lower than 37.8 °C
Safety Phases National Legislation:	Avoid contact with skin and eyes. Highly flammable. Harmful by inhalation. Irritating to eyes and respiratory system. EINECS NO 203-550-1

16. Other Information:

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properness of the product.