

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : MK DESCALER
Chemical Formula : Compounded product
Chemical Family : N/A
Uses : Acidic cleaner
Supplier : Marckem Sdn Bhd
Address : No.43, Jalan 3/62B, Bandar Menjalara Kepong, 52200
Kuala Lumpur
Contact : 03-62773568
Email : kl_inquiry@marckem.com

SECTION 2. HAZARDS IDENTIFICATION


Hazard Pictograms :
Signal Word : Warning; Danger
Hazard Classifications : Skin corrosion – Category 1B
: Serious eye damage – Category 1
: Acute toxicity (Oral) – Category 4
Hazard Statements : H302: Harmful if swallowed.
: H314: Causes skin corrosion.
: H318: Causes serious eye damage.
Precautionary Statements: Prevention
: P102: Keep out of reach of children.
: P233: Keep container tightly closed.
: P264: Wash hands thoroughly after handling.
: P280: Wear protective gloves/protective clothing/eye
protection/face protection
: Response
: P301+P330+P331: IF SWALLOWED: rinse mouth,
Do not induce vomiting.
: P302+P352: IF ON SKIN: wash with soap and water.
: P305+P351+P338: IF IN EYES: Rinse continuously with
water for several minutes. Remove contact lenses if
present and easy to do. Continue rinsing.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Hydrochloric Acid	Hydrofluoric Acid	2-Butoxyethanol
CAS No.	7647-01-0	7664-39-3	111-76-2
Proportion	<10.0%	~2.5%	5.00%
Exposure Limit	PEL:5ppm	OSHA (TLV):3ppm	PEL. Skin:50ppm
Toxicological	NDA	LD50/1276ppm/1H	LD50/Oral/Rat:2.68ml/kg

SECTION 4. FIRST AID MEASURES

Eye Contact : Wash the eyes with large amount of water. If any irritation or discomfort persists, seek medical attention.

Skin Contact : Wash the affected area with large amount of water. If any irritation or discomfort persists, seek medical attention.

Inhalation : Remove the affected person to fresh air. If any irritation or discomfort persists, seek medical attention.

Ingestion : Do not induce vomiting. The affected person may be given water to drink. Seek immediate medical attention.

SECTION 5. FIRE FIGHTING MEASURES

Product : Not considered as flammable

Flash Point : Not determined (Aqueous System)

Autoignition Temperature: NA

Flammable Limit (%) : Not determined (Aqueous System)

Explosion Properties : NA

Extinguishing Media : Dry chemical, water fog or alcohol foam

Fire Fighting Instruction : Wear full protective cloth & self-contained breathing apparatus.

Explosion Hazard in Presence of Various Chemical : During fire, HLC and HF may decompose by reacting with certain metals to produce very flammable and explosive H² gas.

SECTION 6. ACCIDENTAL RELEASE MEASURE

Small Leak or Spill : Flush away to drain using large amount of water.

Large Spill : Wear protective equipment. Stop spills at sources.
Absorbs off by scraping up and tipping.

SECTION 7. HANDLING AND STORAGE

Handling : Avoid direct contact with eyes. Always follow industrial safety practices.

Storage : Store well away from acids and protect from extremes of temperature.

SECTION 8. EXPOSURE CONTROL AND PERSONAL PROTECTION**a) Exposure Limit:**

Chemical Name	Hydrochloric Acid	Hydrofluoric Acid	2-Butoxyethanol
CAS No.	7647-01-0	7664-39-3	111-76-2
Standard	PEL:5ppm	(TLV):3ppm or 2.5mg/m ³	PEL. Skin:50ppm
Reference	OSHA	OSHA	Two OSHA

b) Personal Protection : Protective clothing, gloves and goggles should be worn if prolonged contact or use is anticipated.

Eye/Skin Protection

Respiratory Protection : None required in normal use.

c) Ventilation : General room ventilation is considered sufficient.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Clear pinkish liquid

Odour : Unscented

Solubility : Complete

Boiling Point : NA

Melting Point : NA

Vapour Pressure (mm of Hg at 255c) : NA

Percent Volatiles : >80%

Evaporation Rate : NA
Specific Gravity (26c) : ~1.06
Other Properties if Applicable : pH (1%W/W): 1.7-2.7

SECTION 10. STABILITY AND REACTIVITY

Conditions to Avoid : Do not mix with other chemicals.
Incompatible : Alkaline.
Decomposition Products : Hydrogen chloride.
Hazardous Polymerization : Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity Data : No data currently available
Carcinogenicity : No data currently available
Reproductive Effect : No data currently available
Effects of Over Exposure :

Route of Entry**Effects**

Eyes Contact : Can cause severe damage to cornea.
Skin Contact : May cause sensitisation to the skin.
Inhalation : Can cause irritation of nose, throat, and respiratory tract
In high vapour condition.
Ingestion : Can cause stomach discomfort, nausea, and vomiting.
Chronic Effects : No data currently available
Target Organs : No data currently available
Medical Conditions : No data currently available
General Aggravated by Exposure

SECTION 12. ECOLOGICAL INFORMATION

Mobility : Miscible with water.
Bioaccumulation : No data currently available.
Biodegradability : Easily biodegraded.
Aquatic Toxicity : Harmful to aquatic organisms in high concentration.

SECTION 13. DISPOSAL CONSIDERATION

Dispose in accordance with all applicable national environment laws and regulations.

SECTION 14. TRANSPORT INFORMATION

UN No. : NA
Classification : NA
Packing Group : NA

NA = Not Applicable

NDA = No Data Available

SECTION 15. REGULATORY INFORMATION

Kindly refer to local regulatory which applicable.

SECTION 16. OTHER INFORMATION

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of Marckem Sdn Bhd knowledge, information, and belief accurate as the data indicated.

The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.