

## SAFETY DATA SHEET

## [1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : KAOLIZER NO.12  
 SUPPLIER : Kao Corporation  
 ADDRESS : 1-3,Bunka 2-chome,Sumida-ku,Tokyo 131-8501 Japan  
 DIVISION : Global Chemical Business  
 TELEPHONE NUMBER : 81-3-5630-7700  
 FAX NUMBER : 81-3-5630-7889  
 E-MAIL ADDRESS : chemical@kao.co.jp  
 EMERGENCY TELEPHONE NUMBER : 81-3-5630-7700  
 RECOMMENDED USE :  
 AND RESTRICTIONS ON USE :

## [2.HAZARDS IDENTIFICATION]

## GHS CLASSIFICATION

## PHYSICAL AND CHEMICAL HAZARDS

FLAMMABLE LIQUIDS : Category 4

CORROSIVE TO METALS : Category 1

## HEALTH HAZARDS

ACUTE TOXICITY (Oral) : Category 4

ACUTE TOXICITY (Dermal) : Category 3

ACUTE TOXICITY (Inhalation) : Not applicable(Vapours)

SKIN CORROSION / IRRITATION : Category 1

SERIOUS EYE DAMAGE / EYE IRRITATION : Category 1

RESPIRATORY SENSITIZATION : Classification not possible

SKIN SENSITIZATION : Classification not possible

GERM CELL MUTAGENICITY : Not classified

CARCINOGENICITY : Classification not possible

REPRODUCTIVE TOXICITY : Classification not possible

## SPECIFIC TARGET ORGAN TOXICITY

- SINGLE EXPOSURE : Classification not possible

- REPEATED EXPOSURE : Classification not possible

ASPIRATION HAZARD : Classification not possible

## ENVIRONMENTAL HAZARDS

## HAZARDOUS TO THE AQUATIC ENVIRONMENT

- ACUTE HAZARD : Category 3

- LONG-TERM HAZARD : Not classified

- HAZARDOUS TO THE OZONE LAYER : Classification not possible

## GHS LABEL ELEMENTS

## PICTOGRAMS OR SYMBOLS :



SIGNAL WORD : Danger

HAZARD STATEMENTS : Combustible liquid  
 May be corrosive to metals  
 Harmful if swallowed  
 Toxic in contact with skin  
 Causes severe skin burns and eye damage  
 Harmful to aquatic life

## PRECAUTIONARY STATEMENTS

- PREVENTION** : Keep away from open flames or hot surfaces. No smoking.  
Keep only in original container.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Avoid release to the environment.  
Do not eat, drink or smoke when using this product.  
Wash thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.
- RESPONSE** : IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Immediately wash material off the skin thoroughly with 2% acetic acid and plenty of water until slimy feeling disappears.  
Immediately call a POISON CENTER or doctor.  
In case of fire : Keep away from sources of ignition and use appropriate extinguishing media.  
Absorb spillage to prevent material damage.  
Take of immediately all contaminated clothing.
- STORAGE** : Store in corrosive resistant/container with a resistant inner liner.  
Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.
- DISPOSAL** : Passed to a licensed waste contractor.
- SAFE HANDLING ADVICE** : Refer to SDS.

## [3.COMPOSITION / INFORMATION ON INGREDIENTS]

SUBSTANCE OR MIXTURE : Mixture

## INGREDIENTS AND CONCENTRATION RANGE

Ingredients	Concentration Range(%)	CAS RN
Bis (2-dimethylaminoethyl) ether	65 - 75	Confidential
Dipropylene glycol	25 - 35	Confidential

## [4.FIRST-AID MEASURES]

- IN CASE OF INHALATION** : Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.
- IN CASE OF SKIN CONTACT** : Immediately call a POISON CENTER or doctor.  
Remove/take off immediately all contaminated clothing. Immediately wash material off the skin thoroughly with 2% acetic acid and plenty of water until slimy feeling disappears.
- IN CASE OF EYE CONTACT** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
- IN CASE OF INGESTION** : Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

## [5.FIRE-FIGHTING MEASURES]

- EXTINGUISHING MEDIA** : Powder, alcohol-resistant foam, water spray, carbon dioxide,sand
- NOT SUITABLE EXTINGUISHING MEDIA** : No information available
- SPECIFIC HAZARDS** : Produce irritating or toxic gases in a fire.

- SPECIFIC METHODS** : Keep away from sources of ignition and use appropriate extinguishing media. Fight fire from upwind position if possible.  
Do not flow the materials causing adverse effects into the environment with effluent fire extinguishing agents.
- PROTECTION OF FIRE FIGHTERS** : Use goggles in combination with dust mask, and other protections as appropriate to situation.  
Risk of producing harmful gases such as carbon monoxide and nitrogen oxides. Avoid inhalation of smoke or gases.

**[6.ACCIDENTAL RELEASE MEASURES]**

- PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE** : Use goggles and protective gloves.  
Large spills : Remove person to safety.  
Ensure adequate ventilation.
- ENVIRONMENTAL PRECAUTIONS** : Avoid release to the environment.
- METHODS FOR CLEANING UP** : Small spills: Absorb spills with sand, inert absorbent, waste cloth or sawdust. Then wipe up remainder in waste cloth.  
Large spills: Dike spills and dispose of in safe area.
- PREVENTION OF SECONDARY HAZARDS** : Keep away from sources of ignition and prepare extinguishing media.

**[7.HANDLING AND STORAGE]****HANDLING**

- TECHNICAL MEASURES** : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- PRECAUTIONS** : Keep away from source of ignition.  
Avoid contact with eyes and skin.
- SAFE HANDLING ADVICE** : Use an adequate ventilation.  
Wash thoroughly after handling.  
Use personal protective equipment as required.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Do not eat, drink or smoke when using this product.  
Avoid contact with acids.

**STORAGE**

- SUITABLE STORAGE CONDITIONS** : Store container tightly closed in well-ventilated place.  
Store in corrosive resistant/container with a resistant inliner.  
Store locked up.  
Keep away from source of ignition.  
Keep under nitrogen.  
Do not store with acids.
- SAFE PACKAGING MATERIALS** : No information available

**[8.EXPOSURE CONTROLS / PERSONAL PROTECTION]**

- ENGINEERING MEASURES** : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Use an adequate ventilation.  
Iron is apt to rust. Plant equipment should be treated with rust-resist.
- LIMIT VALUES**
- ACGIH (TLV)** : TWA 0.05 ppm, STEL 0.15 ppm (Skin)  
bis(2-Dimethylaminoethyl)ether (DMAEE)
- OSHA (PEL)** : Not established
- PERSONAL PROTECTIVE EQUIPMENT**
- RESPIRATORY PROTECTION** : Use chemical cartridge respirator for alkalines, as appropriate to situation.
- HAND PROTECTION** : Gloves (alkali-resistant)

EYE PROTECTION : Safety goggles or Face shield  
 SKIN AND BODY PROTECTION : Alkali-resistant protective clothing  
 HYGIENE MEASURES : No information available

## [9. PHYSICAL AND CHEMICAL PROPERTIES]

## APPEARANCE

PHYSICAL STATE : Liquid  
 COLOUR : Colorless to light yellow clear  
 ODOUR : Amine-like odour  
 pH : 11.5 (5% solution)

SPECIFIC TEMPERATURES / TEMPERATURE RANGES  
AT WHICH CHANGES IN PHYSICAL STATE OCCUR

BOILING POINT : 189 °C ( 372.2 °F)  
 MELTING POINT : -70 °C ( -94 °F)  
 FLASH POINT : 73 °C ( 163.4 °F) (TAG closed cup method)

## FLAMMABILITY OR EXPLOSIVE PROPERTIES

FLAMMABILITY OR EXPLOSIVE LIMITS : UPPER LIMIT : No information available LOWER LIMIT : No information available  
 VAPOUR PRESSURE : 2000 Pa ( 88 °C) ( 190.4 °F)  
 VAPOUR DENSITY : No information available  
 DENSITY (SPECIFIC GRAVITY) : 0.90 g/mL ( 20 °C) ( 68 °F)  
 SOLUBILITY  
 WATER SOLUBILITY : Soluble  
 SOLVENT SOLUBILITY : Soluble in acetone  
 Soluble in methanol and ethanol.  
 PARTITION COEFFICIENT: n-OCTANOL / WATER (log Pow) : No information available  
 AUTO-IGNITION TEMPERATURE : No information available  
 DECOMPOSITION TEMPERATURE : No information available  
 ODOUR THRESHOLD : No information available  
 EVAPORATION RATE : No information available  
 FLAMMABILITY (SOLID,GAS) : No information available  
 VISCOSITY : No information available  
 OTHER DATA : No information available

## [10. STABILITY AND REACTIVITY]

CHEMICAL STABILITY : No information available  
 POSSIBILITY OF HAZARDOUS REACTIONS : Reacts with acids.  
 CONDITIONS TO AVOID : No information available  
 INCOMPATIBLE MATERIALS : No information available  
 HAZARDOUS DECOMPOSITION PRODUCTS : No information available  
 OTHERS : No information available

## [11. TOXICOLOGICAL INFORMATION]

## ACUTE TOXICITY

Oral  
 INFORMATION ON PRODUCT : No information available  
 INFORMATION ON INGREDIENTS : Bis (2-dimethylaminoethyl) ether: Category 4; Ref.(1)  
 Dermal

INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: Bis (2-dimethylaminoethyl) ether: Category 3; Ref.(1)
Inhalation	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
SKIN CORROSION / IRRITATION	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: Bis (2-dimethylaminoethyl) ether: Category 1; Ref.(1)
SERIOUS EYE DAMAGE / IRRITATION	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: Bis (2-dimethylaminoethyl) ether: Category 1; Ref.(1)
RESPIRATORY OR SKIN SENSITIZATION	
RESPIRATORY	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
SKIN	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
MUTAGENICITY (GERM CELL MUTAGENICITY)	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
CARCINOGENICITY	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
IARC	: Not listed
NTP	: Not listed
EU	: Not listed
OSHA	: Not listed
REPRODUCTIVE TOXICITY	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
SPECIFIC TARGET ORGAN TOXICITY	
- SINGLE EXPOSURE	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
- REPEATED EXPOSURE	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
ASPIRATION HAZARD	
INFORMATION ON PRODUCT	: No information available
INFORMATION ON INGREDIENTS	: No information available
OTHER INFORMATION	: No information available
[12.ECOLOGICAL INFORMATION]	
ECOTOXICITY	: No information available
PERSISTENCE / DEGRADABILITY	: No information available
MOBILITY IN SOIL	: No information available
BIOACCUMULATIVE POTENTIAL	: No information available
OTHER ADVERSE EFFECTS	: No information available

## [13.DISPOSAL CONSIDERATIONS]

Review "HANDLING AND STORAGE (Section 7)".  
Passed to a licensed waste contractor.  
Incinerate with little portions.  
Risk of producing harmful gases such as carbon monoxide and nitrogen oxides.

Dispose of waste in accordance with local,state and federal regulations.

## [14.TRANSPORT INFORMATION]

Follow all regulations in your country or region

## INTERNATIONAL REGULATIONS

UN CLASS / UN NUMBER	:	Class 8 / UN2735	
IATA	:	UN Number	UN2735
		Proper Shipping Name	Amines, Liquid, Corrosive, n.o.s.(containing N,N,N',N'-Tetramethyl-2,2-oxybis(ethylamine))
		Class	8
		Packing Group	III
IMDG	:	UN Number	UN2735
		Proper Shipping Name	Amines, Liquid, Corrosive, n.o.s.(containing N,N,N',N'-Tetramethyl-2,2-oxybis(ethylamine))
		Class	8
		Packing Group	III
		Additional Information	Not applicable
SPECIAL PRECAUTIONS FOR USER	:	Review "ACCIDENTAL RELEASE MEASURES (Section 6)". Review "HANDLING AND STORAGE (Section 7)". Ensure containers without breakage or leakage. Ensure containers tightly fixed. Follow all regulations in your country or region. Keep away from source of ignition. Emergency Response Guide(ERG) Numbers : 153	

## [15.REGULATORY INFORMATION]

Follow all regulations in your country or region.

INVENTORIES	:	ENCS(Japan)	Yes
		TSCA(USA)	Yes
		EINECS(EU)	Yes
		AICS(Australia)	Yes
		DSL(Canada)	Yes
		ECL(Korea)	Yes
		PICCS(Philippines)	Yes
		IECSC(China)	Yes

KAO Corporation is not able to check up the regulatory information in regard to the substances in your country or region,therefore,we request this matter would be filled by your responsibility.

## [16.OTHER INFORMATION]

REFERENCE : -Safety data sheet for chemical products - Part 1: Content and order of sections(ISO 11014-1)  
-International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994)  
(1)GHS Classification Database, National Institute of Technology and Evaluation (NITE)

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