

MATERIAL SAFETY DATA SHEET

[1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : AMBROXAN
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
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RECOMMENDED USE :
AND RESTRICTIONS ON USE :

[2.HAZARDS IDENTIFICATION]

MOST IMPORTANT HAZARDS AND EFFECTS :

GHS CLASSIFICATION

PHYSICAL AND CHEMICAL HAZARDS : Not classified

HEALTH HAZARDS

ACUTE TOXICITY (Oral) : Not classified
ACUTE TOXICITY (Dermal) : Not classified
ACUTE TOXICITY (Inhalation) : Classification not possible(Vapours)
SKIN CORROSION / IRRITATION : Not classified
SERIOUS EYE DAMAGE / EYE IRRITATION : Not classified
RESPIRATORY SENSITIZATION : Classification not possible
SKIN SENSITIZATION : Not classified
GERM CELL MUTAGENICITY : Classification not possible
CARCINOGENICITY : Classification not possible
REPRODUCTIVE TOXICITY : Classification not possible
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY
- SINGLE EXPOSURE : Classification not possible
- REPEATED EXPOSURE : Classification not possible
ASPIRATION HAZARD : Classification not possible

ENVIRONMENTAL HAZARDS

HAZARDOUS TO THE AQUATIC ENVIRONMENT

- ACUTE TOXICITY : Not classified
- CHRONIC TOXICITY : Not classified

GHS LABEL ELEMENTS

PICTOGRAMS OR SYMBOLS : Not applicable
SIGNAL WORD : Not applicable
HAZARD STATEMENTS : Not applicable

PRECAUTIONARY STATEMENTS

PREVENTION : Wash thoroughly after handling.
If needed, use personal protective equipment as required.
RESPONSE : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Gently wash with plenty of soap and water.
Call a POISON CENTER/doctor/physician if you feel unwell.
STORAGE : Store in well-ventilated place.
DISPOSAL :

SAFE HANDLING ADVICE : Refer to MSDS.

[3.COMPOSITION / INFORMATION ON INGREDIENTS]

SUBSTANCE OR MIXTURE : Substance
INGREDIENTS AND CONCENTRATION : Ambroxide
RANGE
CAS RN : 6790-58-5

[4.FIRST-AID MEASURES]

IN CASE OF INHALATION : Remove to fresh air and keep at rest in a position comfortable for breathing.
IN CASE OF SKIN CONTACT : Gently wash with plenty of soap and water.
IN CASE OF EYE CONTACT : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IN CASE OF INGESTION : Call a POISON CENTER or doctor/physician if you feel unwell.

[5.FIRE-FIGHTING MEASURES]

EXTINGUISHING MEDIA : Water spray, powder
NOT SUITABLE EXTINGUISHING MEDIA : No information available
SPECIFIC HAZARDS : No information available
SPECIFIC METHODS : Keep away from sources of ignition and use appropriate extinguishing media.Fight fire from upwind position if possible.
PROTECTION OF FIRE FIGHTERS : Use goggles in combination with dust mask, and another protections as appropriate to situation.

[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 : Do not discharge into the drains, surface waters or ground water directly.
METHODS FOR CLEANING UP : Sweep or vacuum spills to drums or containers.
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.
SAFE HANDLING ADVICE : Use an adequate ventilation.
Wash thoroughly after handling.
If needed, use personal protective equipment as required.
STORAGE
SUITABLE STORAGE CONDITIONS : Store container tightly closed in well-ventilated place.
Keep away from source of ignition.
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.
LIMIT VALUES

ACGIH (TLV)	: Not established
OSHA (PEL)	: Not established
PERSONAL PROTECTIVE EQUIPMENT	
RESPIRATORY PROTECTION	: Use as appropriate to situation.
HAND PROTECTION	: Rubber gloves
EYE PROTECTION	: Safety glasses
SKIN AND BODY PROTECTION	: Full-body suit
HYGIENE MEASURES	: No information available

[9. PHYSICAL AND CHEMICAL PROPERTIES]

PHYSICAL STATES

FORM	: Flakes
COLOUR	: White
ODOUR	: Characteristic odour
pH	: Not applicable

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

BOILING POINT	: No information available
MELTING POINT	: 67 - 77 °C (152.6 - 170.6 °F)
FLASH POINT	: 164 °C (327.2 °F) (CLEVELAND open cup method)

FLAMMABILITY OR EXPLOSIVE PROPERTIES

FLAMMABILITY OR EXPLOSIVE LIMITS	: UPPER LIMIT : No information available LOWER LIMIT : No information available
VAPOUR PRESSURE	: No information available
VAPOUR DENSITY	: No information available
SPECIFIC GRAVITY (DENSITY)	: No information available
SOLUBILITY	
WATER SOLUBILITY	: Soluble
SOLVENT SOLUBILITY	: Soluble in ethyl alcohol
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	: Stable in general.
POSSIBILITY OF HAZARDOUS REACTIONS	: Stable in general.
CONDITIONS TO AVOID	: No information available
INCOMPATIBLE MATERIALS	: No information available
HAZARDOUS DECOMPOSITION PRODUCTS	: Carbon dioxide
OTHERS	: No information available

[11. TOXICOLOGICAL INFORMATION]

ACUTE TOXICITY

Oral	
INFORMATION ON PRODUCT	: Rat, LD50 : > 2000 mg/kg
Dermal	
INFORMATION ON PRODUCT	: No information available
Inhalation	
INFORMATION ON PRODUCT	: No information available
SKIN CORROSION / IRRITATION	
INFORMATION ON PRODUCT	: Non-irritating for skin. (OECD404)
SERIOUS EYE DAMAGE / IRRITATION	
INFORMATION ON PRODUCT	: Non-irritating to the eyes. (OECD405)
RESPIRATORY OR SKIN SENSITIZATION	
RESPIRATORY	
INFORMATION ON PRODUCT	: No information available
SKIN	
INFORMATION ON PRODUCT	: Non-sensitizer for skin. (OECD406)
MUTAGENICITY (GERM CELL MUTAGENICITY)	
INFORMATION ON PRODUCT	: Non-mutagenic (OECD471)
CARCINOGENICITY	
INFORMATION ON PRODUCT	: No information available
IARC	: Not listed
NTP	: Not listed
EU	: Not listed
OSHA	: Not listed
REPRODUCTIVE TOXICITY	
INFORMATION ON PRODUCT	: No information available
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY	
- SINGLE EXPOSURE	
INFORMATION ON PRODUCT	: No information available
- REPEATED EXPOSURE	
INFORMATION ON PRODUCT	: No information available
ASPIRATION HAZARD	
INFORMATION ON PRODUCT	: No information available
OTHER INFORMATION	: No information available

[12.ECOLOGICAL INFORMATION]

ECOTOXICITY	: Fish, 96h, LC50 : > 100 mg/L
PERSISTENCE / DEGRADABILITY	: Inherent
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.

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 : 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.

[15.REGULATORY INFORMATION]

Follow all regulations in your country or region.

INVENTORIES	:	ENCS(Japan)	5-3339
		TSCA(USA)	Yes
		EINECS(EU)	229-861-2
		AICS(Australia)	Yes
		DSL(Canada)	Yes
		ECL(Korea)	KE-12821
		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)

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