



SAFETY DATA SHEET

Conforms to the requirements of the United States Hazard Communication regulation 29 CFR 1910.1200

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

PRODUCT NAME	KAOLIZER P200
PRODUCT CASRN	134900-46-2
PRODUCT DESCRIPTION	POLYTERTIARY AMINE GLYCOL
SDS DOCUMENT No.	K02287
RECOMMENDED USES	Product is intended for use as a raw material in chemical manufacturing

RESPONSIBLE PARTY

Kao Specialties Americas LLC
243 Woodbine Street
P. O. Box 2316
High Point, NC 27261
Telephone: 1-800-727-2214

Refer to SECTION 16 for information regarding the
MANUFACTURER(s) of this product

FOR ALL TRANSPORTATION ACCIDENTS, call Chemtrec at 800-424-9300 or 703-527-3887 for international collect calls.

SECTION 2: HAZARD(S) IDENTIFICATION

PRODUCT CLASSIFICATION per 29 CFR 1910.1200

HAZARD CLASSIFICATION	Substance or mixture corrosive to metals Category 1 Skin Corrosion/Irritation Category 1C Serious Eye Damage/Eye Irritation Category 1 Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2
SIGNAL WORD	Danger
HAZARD STATEMENTS	May be corrosive to metals. Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure (digestive tract)

**HAZARD
PICTOGRAMS**



RECOMMENDED SAFETY PRECAUTIONS

INJURY PREVENTION

Keep only in original container.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Wear chemical-resistant gloves and clothing, eye protection and face protection.

**EMERGENCY
RESPONSE**

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: 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.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

PRODUCT STORAGE

Store locked up.
Store in corrosive resistant container with a resistant inner liner.

PRODUCT DISPOSAL

Dispose of contents and container in accordance with local, national, and international regulations for hazardous wastes.

HAZARDS NOT OTHERWISE CLASSIFIED

PYROPHORIC GASES

Not applicable

**SIMPLE
ASPHYXIANTS**

Not applicable

COMBUSTIBLE DUST

Not applicable

Dust Classification	Minimum Ignition Energy (mJ)	Pmax (bar-g)	Rmax (bar/s)	Kst (bar-m/s)	Explosion Severity
Not Applicable					

Definitions for dust classifications are found in OSHA Instruction CPL 03-00-008 *Combustible Dust National Emphasis Program (reissued)* March 11, 2008, Appendix E, Section 5

**Other Known
Hazards**

None

FOR INFORMATION REGARDING ENVIRONMENTAL GHS CLASSIFICATION, REFER TO SECTION 12 BELOW

SECTION 3: COMPOSITION/INFORMATION on INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration (%)
1,6-Hexanediol, polymer with Methanamine	1,6-HEXANEDIOL, POLYMER WITH METHANAMINE	134900-46-2	~ 100

If any items in the table above are described as CONFIDENTIAL, Kao Specialties Americas LLC considers this information to constitute a Trade Secret.

SECTION 4: FIRST-AID MEASURES

EYES	Remove contact lens immediately, if present and easy to remove. Flush eyes immediately with large amounts of water. SEEK IMMEDIATE MEDICAL ATTENTION ONCE THE EXPOSED PERSON IS SAFE TO TRANSPORT.
SKIN	Immediately take off all contaminated clothing. Use emergency shower or other clean water source to flush affected area with copious quantities of water. SEEK MEDICAL ATTENTION IMMEDIATELY. If medical attention is not immediately available, contact POISON CONTROL CENTER (1-800-222-1222).
INGESTION	If the material is swallowed, get immediate medical attention or advice. Do not induce vomiting unless directed to do so by medical personnel.
INHALATION	Move person to non-contaminated air. Seek medical attention.
SYMPTOMS of EXPOSURE	None known.
NOTES to PHYSICIAN	Provide general supportive measures and treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES	Refer to SECTION 9: Physical and Chemical Properties
HAZARDOUS PRODUCTS of COMBUSTION	Decomposition products include ammonia, carbon monoxide, carbon dioxide and oxides of nitrogen.
PROPERTIES THAT COULD INCREASE FIRE or EXPLOSION HAZARD	No known hazards.
EXTINGUISHING MEDIA	Powder, alcohol-resistant foam, CO2 & sand

**FIRE-FIGHTING
INSTRUCTIONS**

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA ratings are found in SECTION 16

SECTION 6: ACCIDENTAL RELEASE MEASURES

FOR ALL TRANSPORTATION ACCIDENTS, call Chemtrec at 800-424-9300 or 703-527-3887 for international collect calls.

RESPONSE TO SMALL SPILLS OF PRODUCT

SPILL CONTAINMENT | Dike the spilled material, where this is possible.

**SPILL CLEANUP
PROCEDURES** | Collect the spilled material with an inert absorbent such as sand or vermiculite.
Place in properly labeled closed container.

**REQUIRED
EQUIPMENT** | Shovel the material into waste container.

**ADDITIONAL
INFORMATION** | No other spill procedures necessary.

RESPONSE TO LARGE SPILLS OF PRODUCT

SPILL CONTAINMENT | Dike the spilled material, where this is possible. Block any potential routes to water systems.

**SPILL CLEANUP
PROCEDURES** | Absorb spill with inert material. Shovel material into appropriate container for disposal. Thoroughly wash the area with water after a spill or leak clean-up. Dispose of spent absorbent in an approved industrial waste landfill.

**REQUIRED
EQUIPMENT** | Wear appropriate protective equipment and clothing during clean-up.

**ADDITIONAL
INFORMATION** | No other spill procedures necessary.

SECTION 7: HANDLING AND STORAGE

**HANDLING
REQUIREMENTS**

As with all chemicals, good industrial hygiene practices should be followed when handling this material. Avoid contact with skin and eyes. Wash thoroughly after handling. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or promptly disposed of.

**STORAGE
REQUIREMENTS**

Keep this material in a cool, dark, well-ventilated place.
Storage area should be protected by appropriately designed containment to prevent release to groundwater or sewers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING
CONTROLS**

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT**EYE/FACE
PROTECTION**

Wear chemical goggles and face shield.

HAND PROTECTION

Use impervious gloves.

SKIN PROTECTION

Normal work clothing (long sleeved shirts and long pants) is recommended.

**RESPIRATORY
PROTECTION**

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever there may be potential for airborne exposure.

OTHER

Eyewash fountains and emergency showers are required.

EXPOSURE LIMITS

CHEMICAL	CASRN	PERCENT	LIMITS	AGENCY
OSHA: No exposure limits established for this product				
ACGIH: No exposure limits established for this product				

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE @ 20°C	Pale yellow to dark brown liquid	ODOR	Amine odor
ODOR THRESHOLD	No data available	pH	11.5 (5% in ethyl alcohol)
VAPOR DENSITY	20 @ 25°C	VAPOR PRESSURE	0.75mmHg @ 60°C
EVAPORATION RATE	No data available	RELATIVE DENSITY	0.93g/mL @ 20°C
MELTING POINT (°C)	-30°C	WATER SOLUBILITY	Insoluble in water
INITIAL BOILING POINT (°C)	No data available	BOILING RANGE (°C)	No data available

PARTITION COEFFICIENT (N-OCTANOL/WATER)	No data available	VISCOSITY	600 mPa.s @ 40°C 200 mPa.s @ 60°C 85 mPa.s @ 80°C
DECOMPOSITION TEMPERATURE	No data available	FLAMMABILITY CLASSIFICATION	CLASS IIIB
FLASH POINT (°C)	290°C Cleveland Open Cup	AUTO-IGNITION TEMPERATURE	No data available
UPPER EXPLOSIVE LIMIT	No data available	LOWER EXPLOSIVE LIMIT	No data available
OTHER DATA	Density: 0.914g/mL @ 40°C Density: 0.900g/mL @ 60°C		

SECTION 10: STABILITY and REACTIVITY

CHEMICAL STABILITY	Stable under normal conditions.
CONDITIONS to AVOID	Avoid contact with acids.
INCOMPATIBLE MATERIALS (Reactivity)	None known.
INCOMPATIBLE MATERIALS (Storage & Transport)	No information available.
HAZARDOUS DECOMPOSITION PRODUCTS	None known.
HAZARDOUS POLYMERIZATION	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

EYE EFFECTS	This product causes eye burns. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
SKIN EFFECTS	Can cause chemical burn.

ACUTE ORAL EFFECTS (INGESTION)	This product is harmful if swallowed. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.		
ACUTE INHALATION EFFECTS	This product is irritating to the respiratory system. Inhalation of mists or vapors may produce upper airway edema, wheezing, pulmonary edema, pneumonitis and respiratory failure.		
TARGET ORGANS	No known effects.		
<u>CHRONIC EFFECTS</u>			
MUTAGENICITY	Ames Test TA98, TA100, TA1535, TA1537, WP2uvrA: Negative Chromosomal aberration test (CHL cells): (Absence of S9 mix): Negative Chromosomal aberration test (CHL cells): (Presence of S9 mix: D20=1.079 mg/kg): Positive Micronucleus test: Negative		
TERATOLOGY	No data available for this product.		
REPRODUCTIVE and DEVELOPMENTAL TOXICITY	No information available.		
<u>CARCINOGENICITY</u>			
CHEMICAL NAME	DATA	AGENCY	LIST
None of the components of this product are listed on the OSHA Possible or Select Carcinogens Lists. None of the components of this product are listed on the ACGIH Carcinogens List. No limits established for this product by the International Agency for Research on Cancer (IARC). None of the components of this product are listed on the NTP Known or Suspected Carcinogens List.			
<u>LETHAL DOSE (LD50 & LC50) DATA</u>			
LD50 ORAL	LD50 Oral Rat > 2000 mg/kg		
MEDICAL CONDITIONS AGGRAVATED by EXPOSURE	No information available.		
ROUTES of ENTRY	Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation.		
OTHER TOXICOLOGICAL INFORMATION	Specific Target Organ Toxicity (Repeated): Rat, 28 days repeated oral toxicity test: NOEL = 100mg/kg/day (male); 20mg/kg/day (female)		

SECTION 12: ECOLOGICAL INFORMATION

UN GHS AQUATIC TOXICITY CLASSIFICATION INFORMATION

AQUATIC TOXICITY CLASSIFICATION | Acute 1
Chronic 1

SIGNAL WORD | Warning

HAZARD PICTOGRAM



HAZARD STATEMENT | Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

PREVENTION | Avoid release to the environment.

RESPONSE | Collect spillage.

DISPOSAL | Dispose of contents and container in accordance with local, national, and international regulations for hazardous wastes.

ADDITIONAL ENVIRONMENTAL INFORMATION

AQUATIC TOXICITY | 48 hr LC50 Red Killfish : 1.08 mg/L

ECOTOX. INFORMATION | This material is expected to be harmful to aquatic life. Prevent discharges to natural bodies of water.

ENVIRONMENTAL FATE | Material is poorly biodegradable

BIOLOGICAL OXYGEN DEMAND (BOD5), g/g | No data available

CHEMICAL OXYGEN DEMAND (COD), g/g | No data available

PERSISTENCE & DEGRADABILITY | Modified MITI test (OECD301C) : Not readily biodegradable

BIOACCUMULATION | No information available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DESCRIPTION	Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.
GENERAL DISPOSAL CONSIDERATIONS	Clean up and dispose of waste in accordance with all federal, state, and local environmental regulations.
DISPOSAL of EMPTY CONTAINERS	Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

RCRA COMPONENT	CASRN	DATA
No limits established for this product.		

SECTION 14: TRANSPORT INFORMATION

	US DOT	IATA	IMDG
UN NUMBER	UN2735	UN2735	UN2735
UN PROPER SHIPPING NAME	Polyamines, liquid corrosive, n.o.s.	Polyamines, liquid corrosive, n.o.s.	Polyamines, liquid corrosive, n.o.s.
TECHNICAL NAME	containing polyaminohexanol	containing polyaminohexanol	containing polyaminohexanol
TRANSPORT HAZARD CLASS(ES)	8	8	8
PACKING GROUP	III	III	III
REPORTABLE QUANTITY (RQ)	No reportable quantity for this product		
EMERGENCY RESPONSE GUIDEBOOK (ERG) REFERENCE	153		
MARINE POLLUTANT	MARINE POLLUTANT		

SECTION 15: REGULATORY INFORMATION

**TOXIC SUBSTANCES
CONTROL ACT
(TSCA)**

This product is listed on the U.S. EPA TSCA Inventory.

**EXPORT
NOTIFICATIONS**

This product is not subject to TSCA 12B Export Notification requirements.

**SIGNIFICANT NEW
USE RULE (SNUR)**

This material is not subject to a Significant New Use Rule under the US Toxic Substances Control Act.

INTERNATIONAL CHEMICAL INVENTORIES

All of the components of this product are listed on the following inventories:

DSL	Canada	No	
NDSL	Canada	Yes	
ENCS	Japan	Yes	Registry No. 7-2522
EINECS	Europe	Yes	Polymer
ELINCS	Europe	No	
IECSC	China	Yes	
PICCS	Philippines	Yes	Polymer
ECL	Korea	No	
AICS	Australia	No	

EMERGENCY PLANNING and COMMUNITY RIGHT TO KNOW ACT (EPCRA)**40 CFR PART 355, APPENDIX A**

EHS COMPONENTS	CASRN	PERCENT	TPQ POUNDS and RQ
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No limits established for this product.

313 COMPONENTS	CASRN	PERCENT	REPORTING LIMIT
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No limits established for this product.

CERCLA/SARA COMPONENTS	CASRN	PERCENT	REPORTING LIMIT
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No limits established for this product.

**EPCRA SECTION
311/312
CLASSIFICATION**

ACUTE	Yes
CHRONIC	Yes
FIRE	Yes
PRESSURE	No

OTHER FEDERAL REGULATIONS

The following components are identified under the Clean Air Act HON-Rule for SOCM chemicals:

COMPONENT NAME	CASRN
No regulated components	

The following components are identified under the Clean Air Act (VOCs in SOCM chemicals):

COMPONENT NAME	CASRN
No regulated components	

The following components are identified under the Clean Air Act as Hazardous Air Pollutants (HAP)

COMPONENT NAME	CASRN
No regulated components	

The following components are identified under the Clean Air Act HON-Rule Hazardous Air Pollutants (HAP)

COMPONENT NAME	CASRN
No regulated components	

The following components are identified under the Clean Water Act:

COMPONENT NAME	CASRN	LIST NAME
No limits established for this product.		

STATE RIGHT-TO-KNOW INFORMATION:

COMPONENT NAME	CASRN	STATE	List Name
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If the STATE RIGHT-TO-KNOW INFORMATION table above is empty than none of the components of this product are included on the state right-to-know regulatory lists for California, Florida, Massachusetts, Michigan, Pennsylvania, or New Jersey.

SECTION 16: OTHER INFORMATION

To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor

assumes any liability (including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another, in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacturer cannot and does not guarantee that the hazards described herein are the only ones that exist.

SDS GENERATED BY	PSIMCOX
SDS VERSION DATE	6/1/2015 11:01:47 AM
SDS APPROVED BY	Patrick B. Simcox Manager – Health, Safety, & Environmental e-mail: psimcox@ksallc.com

MANUFACTURER(S)	Kao Corporation 1-3, Bunka 2-chome, Sumida-ku Tokyo, Japan 131-8501 Phone: 011-81-3-5630-7700
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NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS

HEALTH	3
FLAMMABILITY	1
REACTIVITY	0

Hazardous Material Identification System (HMIS) Hazard Ratings

HEALTH	3
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	H

The following components of this product are listed on the Canadian WHMIS Ingredient Disclosure List (IDL):

COMPONENT	CASRN	PERCENT	MINIMUM CONCENTRATION
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No regulatory limits established for this product.

END OF DOCUMENT