

# MATERIAL SAFETY DATA SHEET

## [1.PRODUCT AND COMPANY IDENTIFICATION]

**PRODUCT NAME** : PERANAT  
**SUPPLIER** : Kao Corporation  
**ADDRESS** : 1-3,Bunka 2-chome,Sumida-ku,Tokyo 131-8501 Japan  
**DIVISION** : Global Chemical Business  
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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)** : Not applicable(Vapours)  
**SKIN CORROSION / IRRITATION** : Not classified  
**SERIOUS EYE DAMAGE / EYE IRRITATION** : Not classified  
**RESPIRATORY SENSITIZATION** : Classification not possible  
**SKIN SENSITIZATION** : Classification not possible  
**GERM CELL MUTAGENICITY** : Classification not possible  
**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 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 RANGE : Pentanoic acid, 2-methyl-, 2-methylpentyl ester  
 CAS RN : 90397-38-9

### [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 : Powder, alcohol-resistant foam, carbon dioxide, sand  
 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 : 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.  
 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 : Liquid  
 COLOUR : Colorless clear  
 ODOUR : Characteristic odour  
 pH : Not applicable

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

BOILING POINT : No information available  
 MELTING POINT : No information available  
 FLASH POINT : 99 °C ( 210.2 °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  
 DENSITY (SPECIFIC GRAVITY) : 0.857 g/mL ( 25 °C) ( 77 °F)  
 SOLUBILITY  
 WATER SOLUBILITY : Poor  
 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 : &gt; 2000 mg/kg

Dermal

INFORMATION ON PRODUCT : No information available

Inhalation

INFORMATION ON PRODUCT : No information available

## SKIN CORROSION / IRRITATION

INFORMATION ON PRODUCT : Slightly hazardous in case of skin contact (irritant).

## SERIOUS EYE DAMAGE / IRRITATION

INFORMATION ON PRODUCT : Non-irritating to the eyes.

## RESPIRATORY OR SKIN SENSITIZATION

RESPIRATORY

INFORMATION ON PRODUCT : No information available

SKIN

INFORMATION ON PRODUCT : No information available

## MUTAGENICITY (GERM CELL MUTAGENICITY)

INFORMATION ON PRODUCT : Non-mutagenic

## 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 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 : Brachydanio rerio (zebra-fish), 96h, LC50 : &gt; 100 mg/L

PERSISTENCE / DEGRADABILITY : Readily biodegradable

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)	2-782
		TSCA(USA)	Yes
		EINECS(EU)	291-418-4
		AICS(Australia)	Yes
		DSL(Canada)	Yes
		ECL(Korea)	KE-24711
		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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