

## 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 PRODUCT CASRN PRODUCT DESCRIPTION SDS DOCUMENT No. RECOMMENDED USES

PERANAT 90397-38-9 Acyclic ester K80040 This product is intended for use in fragrance applications.

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<br>CLASSIFICATION | This product does not satisfy any of the criteria for a hazardous material per the guidelines established by the United Nations (Globally Harmonized System of Classification and Labelling of Chemicals) as specified in 29 CFR 1910.1200 Hazard Communication (2012). |
|--------------------------|---|
| SIGNAL WORD              | Not Applicable  |
| HAZARD<br>STATEMENTS     | Not Applicable  |

#### **RECOMMENDED SAFETY PRECAUTIONS**

| INJURY PREVENTION     | Good industrial hygiene practices should be followed when handling this material.<br>Avoid contact with eyes and skin. Do not breathe dusts/fumes/vapors of this<br>material.<br>Wash thoroughly after handling.<br>When necessary, use appropriate personal protective equipment to prevent injury. |
|-----------------------|--|
| EMERGENCY<br>RESPONSE | IF IN EYES: rinse cautiously with water for 15 minutes. Remove contact lens, if present and easy to do. Continue rinsing. Seek medical attention if necessary  |
|                       | IF ON SKIN: gently wash with plenty of soap and water.<br>Call a POISON CONTROL CENTER or doctor if symptoms develop or you feel unwell.   |
| PRODUCT STORAGE       | The storage area must be protected by properly designed containment to prevent the release of product to groundwater or sewers.<br>Keep container tightly closed when not in use.<br>Store in a well ventilated area.  |
| PRODUCT DISPOSAL      | DISPOSE of product and containers in accordance with all applicable local, state, federal, and international regulations.  |

#### HAZARDS NOT OTHERWISE CLASSIFIED

PYROPHORIC GASES Not applicable

SIMPLE Not applicable

**COMBUSTIBLE DUST** Not applicable

| Dust Classification | Minimum<br>Ignition Energy<br>(mJ) | Pmax<br>(bar-g) | Rmax<br>(bar/s) | Kst<br>(bar-m/s) | Explosion<br>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 (%) |
|---|---|------------|-------------------|
| Pentanoic acid, 2-methyl-, 2-<br>methylpentyl ester | Pentanoic acid, 2-methyl-, 2-<br>methylpentyl ester | 90397-38-9 | ~ 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   | Immediately flush eyes with plenty of water for at least 15 minutes. If necessary, seek medical attention. |  |  |  |  |
|--|--|--|--|--|--|
| SKIN   | For skin contact, wash immediately with soap and water. If necessary, seek medical attention.              |  |  |  |  |
| INGESTION  | If the material is swallowed, get immediate medical attention or advice.                                   |  |  |  |  |
| INHALATION If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. |  |  |  |  |  |
| SYMPTOMS of<br>EXPOSURE  | None known.  |  |  |  |  |
| NOTES to PHYSICIAN   | Provide general supportive measures and treat symptomatically.   |  |  |  |  |

### **SECTION 5: FIRE-FIGHTING MEASURES**

| FLAMMABLE<br>PROPERTIES  | Refer to SECTION 9: Physical and Chemical Properties   |  |  |  |
|--|--|--|--|--|
| HAZARDOUS<br>PRODUCTS of<br>COMBUSTION                           | Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |  |  |  |
| PROPERTIES THAT<br>COULD INCREASE<br>FIRE or EXPLOSION<br>HAZARD | No known hazards.  |  |  |  |
| EXTINGUISHING<br>MEDIA   | Powder, alcohol-resistant foam, CO2 & sand   |  |  |  |
| FIRE-FIGHTING<br>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** Stop the flow of material, if this is without risk. Contain the discharged material.

| SPILL CLEANUP<br>PROCEDURES | Absorb spill with inert material. Shovel material into appropriate container for disposal. |
|-----------------------------|--|
| REQUIRED<br>EQUIPMENT       | Shovel the material into waste container.  |
| ADDITIONAL<br>INFORMATION   | No other spill procedures necessary.   |

#### **RESPONSE TO LARGE SPILLS OF PRODUCT**

| SPILL CONTAINMENT   | Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent liquid from entering sewers. Keep out of drains and water courses. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. |
|---|---|
| SPILL CLEANUP<br>PROCEDURESAbsorb spill with inert material. Shovel material into appropriate cor<br>disposal. Wear appropriate protective equipment and clothing during<br>Thoroughly wash the area with water after a spill or leak clean-up. Di<br>absorbent in an approved industrial waste landfill. |   |
| REQUIRED<br>EQUIPMENT   | No additional information on equipment.   |
| ADDITIONAL<br>INFORMATION   | Surfaces may become slippery after spillage. Have emergency equipment readily available. Remove soiled clothing and launder before reuse.   |

### **SECTION 7: HANDLING AND STORAGE**

| HANDLING<br>REQUIREMENTS | As with all chemicals, good industrial hygiene practices should be followed when<br>handling this material. Do not get this material in your eyes, on your skin, or on your<br>clothing. Wash thoroughly after handling. Empty drums should be completely<br>drained, properly bunged and promptly returned to a drum reconditioner, or<br>promptly disposed of. Keep away from sources of ignition. |  |  |
|--------------------------|--|--|--|
| STORAGE<br>REQUIREMENTS  | Do not store this material in open or unlabeled containers.<br>To protect purity, store under dry nitrogen gas.<br>Eliminate all sources of ignition.  |  |  |

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

| ENGINEERING | Provide adequate local exhaust ventilation to maintain worker exposure below |
|-------------|--|
| CONTROLS    | exposure limits.   |

#### PERSONAL PROTECTIVE EQUIPMENT

| EYE/FACE<br>PROTECTION    | Wear chemical goggles.   |
|---------------------------|--|
| HAND PROTECTION           | Use impervious gloves.   |
| SKIN PROTECTION           | Normal work clothing (long sleeved shirts and long pants) is recommended.  |
| RESPIRATORY<br>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**

| СН  | EMICAL | CASRN                                      | PERCENT                  | LIMITS | AGENCY |
|---|--------|--|--------------------------|--------|--------|
| OSHA: No exposure limits established for this product |        |  |                          |        |        |
| ACCUL   | NI     | Reality of the second second second second | de tre service als seats |        |        |

ACGIH: No exposure limits established for this product

### **SECTION 9: PHYSICAL and CHEMICAL PROPERTIES**

| APPEARANCE @ 20°C                              | Clear, colorless liquid    | ODOR                           | Characteristic odor      |
|--|----------------------------|--------------------------------|--------------------------|
| ODOR THRESHOLD                                 | No data available          | рН                             | No information available |
| VAPOR DENSITY                                  | No data available          | VAPOR PRESSURE                 | No data available        |
| EVAPORATION RATE                               | No data available          | RELATIVE<br>DENSITY            | 0.86g/mL @ 25°C          |
| MELTING POINT (°C)                             | No data available          | WATER<br>SOLUBILITY            | Poor in Water.           |
| INITIAL BOILING<br>POINT (°C)                  | No data available          | BOILING RANGE<br>(°C)          | No data available        |
| PARTITION<br>COEFFICIENT (N-<br>OCTANOL/WATER) | No data available          | VISCOSITY                      | No data available        |
| DECOMPOSITION<br>TEMPERATURE                   | No data available          | FLAMMABILITY<br>CLASSIFICATION | CLASS IIIB               |
| FLASH POINT (°C)                               | 99°C<br>Cleveland Open Cup | AUTO-IGNITION<br>TEMPERATURE   | No data available        |
| UPPER EXPLOSIVE<br>LIMIT                       | No data available          | LOWER<br>EXPLOSIVE LIMIT       | No data available        |

-

### **SECTION 10: STABILITY and REACTIVITY**

| CHEMICAL STABILITY                                 | Stable under normal conditions. |
|--|---------------------------------|
| CONDITIONS to<br>AVOID                             | None known                      |
| INCOMPATIBLE<br>MATERIALS<br>(Reactivity)          | None known.                     |
| INCOMPATIBLE<br>MATERIALS (Storage<br>& Transport) | No information available.       |
| HAZARDOUS<br>DECOMPOSITION<br>PRODUCTS             | None known.                     |
| HAZARDOUS<br>POLYMERIZATION                        | Will not occur.                 |

### SECTION 11: TOXICOLOGICAL INFORMATION

| ACUTE EFFECTS                                 |  |
|---|--|
| EYE EFFECTS                                   | No significant eye irritation can be expected from contact with this product.    |
| SKIN EFFECTS                                  | Prolonged and/or repeated skin contact may result in mild irritation or redness. |
| ACUTE ORAL<br>EFFECTS<br>(INGESTION)          | Not a likely route of entry.   |
| ACUTE INHALATION<br>EFFECTS                   | This product may cause slight irritation to the respiratory system.              |
| TARGET ORGANS                                 | No known effects.  |
| CHRONIC EFFECTS                               |  |
| TERATOLOGY                                    | No data available for this product.  |
| REPRODUCTIVE and<br>DEVELOPMENTAL<br>TOXICITY | No information available.  |

#### CARINOGENICITY

| CHEMICAL   | NAME  | DATA                              | AGENCY         | LIST                |
|--|---|-----------------------------------|----------------|---------------------|
| None of the componer                               | None of the components of this product are listed on the OSHA Possible or Select Carcinogens Lists. |                                   |                |                     |
| None of the componer                               | nts of this product a   | re listed on the ACGIH Carcino    | gens List.     |                     |
| No limits established for                          | or this product by th   | ne International Agency for Res   | search on Can  | cer (IARC).         |
| None of the componer                               | nts of this product a   | re listed on the NTP Known or     | Suspected Ca   | rcinogens List.     |
|  |   |                                   |                |                     |
|  |   |                                   |                |                     |
| LETHAL DOSE (LD50 &                                | LC50) DATA  |                                   |                |                     |
| LD50 ORAL  | LD50 Oral Rat > 2   | 500 mg/kg                         |                |                     |
|  |   |                                   |                |                     |
|  |   |                                   |                |                     |
| MEDICAL<br>CONDITIONS<br>AGGRAVATED by<br>EXPOSURE | No information av   | vailable.                         |                |                     |
| ROUTES of ENTRY                                    | Routes of entry fo<br>inhalation.   | or solids and liquids include eye | e and skin con | tact, ingestion and |

### SECTION 12: ECOLOGICAL INFORMATION

#### UN GHS AQUATIC TOXICITY CLASSIFICATION INFORMATION

| AQUATIC TOXICITY<br>CLASSIFICATION | Not classified as hazardous to aquatic environment |
|------------------------------------|--|
| SIGNAL WORD                        | Not applicable                                     |
| HAZARD<br>PICTOGRAM                | Not applicable                                     |
| HAZARD STATEMENT                   | Not applicable                                     |
| PREVENTION                         | Not applicable                                     |
| RESPONSE                           | Not applicable                                     |
| DISPOSAL                           | Not applicable                                     |

#### ADDITIONAL ENVIRONMENTAL INFORMATION

AQUATIC TOXICITY 96 hr LC50 Zebrafish > 100 mg/L

| ECOTOX.<br>INFORMATION                     | None determined                     |
|--|-------------------------------------|
| ENVIRONMENTAL<br>FATE                      | No data available for this product. |
| BIOLOGICAL<br>OXYGEN DEMAND<br>(BOD5), g/g | No data available                   |
| CHEMICAL OXYGEN<br>DEMAND (COD), g/g       | No data available                   |
| PERSISTENCE &<br>DEGRADABILITY             | No information available.           |
| BIOACCUMLATION                             | No information available            |

I

### **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<br>CONSIDERATIONS | Clean up and dispose of waste in accordance with all federal, state, and local environmental regulations.                             |
| DISPOSAL of EMPTY<br>CONTAINERS    | Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.                               |

| RCRA COMPONENT                         | CASRN | DATA |
|--|-------|------|
| No limits established for this product |       |      |

No limits established for this product.

### **SECTION 14: TRANSPORT INFORMATION**

|                               | US DOT                 | ΙΑΤΑ                   | IMDG                   |
|-------------------------------|------------------------|------------------------|------------------------|
| UN NUMBER                     | Not applicable         | Not applicable         | Not applicable         |
| UN PROPER<br>SHIPPING NAME    | Non-hazardous material | Non-hazardous material | Non-hazardous material |
| TRANSPORT HAZARD<br>CLASS(ES) | Not applicable         | Not applicable         | Not applicable         |
| PACKING GROUP                 | Not applicable         | Not applicable         | Not applicable         |
|                               |                        | l                      | I                      |

| REPORTABLE<br>QUANTITY (RQ)                           | No reportable quantity for this product |
|---|---|
| EMERGENCY<br>RESPONSE<br>GUIDEBOOK (ERG)<br>REFERENCE | Not applicable                          |
| MARINE POLLUTANT                                      | None                                    |

### **SECTION 15: REGULATORY INFORMATION**

| TOXIC SUBSTANCES<br>CONTROL ACT<br>(TSCA) | This product is listed on the U.S. EPA TSCA Inventory.  |
|---|---|
| EXPORT<br>NOTIFICATIONS                   | This product is not subject to TSCA 12B Export Notification requirements.                             |
| SIGNIFICANT NEW<br>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      | Yes |                        |
|--------|-------------|-----|------------------------|
| NDSL   | Canada      | No  |                        |
| ENCS   | Japan       | Yes | Registry No. 2-782     |
| EINECS | Europe      | Yes | Registry No. 291-418-4 |
| ELINCS | Europe      | No  |                        |
| IECSC  | China       | Yes |                        |
| PICCS  | Philippines | Yes |                        |
| ECL    | Korea       | Yes | Registry No. KE-24711  |
| AICS   | Australia   | Yes |                        |

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

| EHS COMPONENTS                          | CASRN | PERCENT | TPQ POUNDS and RQ |
|---|-------|---------|-------------------|
| No limits established for this product. |       |         |                   |
|   |       |         |                   |
| 313 COMPONENTS                          | CASRN | PERCENT | REPORTING LIMIT   |
|   |       |         |                   |

No limits established for this product.

| CERCLA/SARA CO            | MPONENTS | CASRN | PERCENT | <b>REPORTING LIMIT</b> |
|---------------------------|----------|-------|---------|------------------------|
| No limits established     | for this |       |         |                        |
| product.                  |          |       |         |                        |
|                           | ACUTE    | No    |         |                        |
| EPCRA SECTION             | CHRONIC  | No    |         |                        |
| 311/312<br>CLASSIFICATION | FIRE     | No    |         |                        |
|                           | PRESSURE | No    |         |                        |
|                           | REACTIVE | No    |         |                        |

#### **OTHER FEDERAL REGULATIONS**

#### The following components are identified under the Clean Air Act HON-Rule for SOCMI chemicals: COMPONENT NAME CASRN

No regulated components

#### The following components are identified under the Clean Air Act (VOCs in SOCMI 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 ostablished for this produc | <b>~</b> t |           |

No limits established for this product.

STATE RIGHT-TO-KNOW INFORMATION:

| COMPONENT NAME CASRN STATE List Name | COMPONENT NAME | CASRN | STATE | List Name |
|--------------------------------------|----------------|-------|-------|-----------|
|--------------------------------------|----------------|-------|-------|-----------|

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 | 5/7/2015 8:52:24 PM  |
| SDS APPROVED BY  | Patrick B. Simcox<br>Manager – Health, Safety, & Environmental<br>e-mail: psimcox@ksallc.com |

| MANUFACTURER(S) | Kao Corporation<br>1-3, Bunka 2-chome, Sumida-ku<br>Tokyo, Japan 131-8501<br>Phone: 011-81-3-5630-7700 |  |
|-----------------|--|--|
|                 | 1-3, Bunka 2-chome, Sumida-ku  |  |
|                 | Tokyo, Japan 131-8501  |  |
|                 | Phone: 011-81-3-5630-7700  |  |

#### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS

| HEALTH       | 1 |
|--------------|---|
| FLAMMABILITY | 1 |
| REACTIVITY   | 0 |

#### Hazardous Material Identification System (HMIS) Hazard Ratings

| HEALTH       | 1 |
|--------------|---|
| FLAMMABILITY | 1 |
| REACTIVITY   | 0 |

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

| COMPONENT | CASRN  | PERCENT | MINIMUM       |
|-----------|--------|---------|---------------|
| COMPONENT | CASKIN | PERCENT | CONCENTRATION |

No regulatory limits established for this product.

D

#### END OF DOCUMENT