



# 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

|                            |   |
|----------------------------|---|
| <b>PRODUCT NAME</b>        | <b>KALCOL 2098</b>  |
| <b>PRODUCT CASRN</b>       | <b>112-53-8</b>   |
| <b>PRODUCT DESCRIPTION</b> | ALIPHATIC FATTY ALCOHOL   |
| <b>SDS DOCUMENT No.</b>    | K00880  |
| <b>RECOMMENDED USES</b>    | 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

|                              |   |
|------------------------------|---|
| <b>HAZARD CLASSIFICATION</b> | Serious Eye Damage/Eye Irritation Category 2B |
| <b>SIGNAL WORD</b>           | Warning                                       |
| <b>HAZARD STATEMENTS</b>     | Causes eye irritation.                        |

### RECOMMENDED SAFETY PRECAUTIONS

**INJURY PREVENTION** | Wash thoroughly after handling.

|                           |   |
|---------------------------|---|
| <b>EMERGENCY RESPONSE</b> | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention.                         |
| <b>PRODUCT STORAGE</b>    | 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. |
| <b>PRODUCT DISPOSAL</b>   | DISPOSE of product and containers in accordance with all applicable local, state, federal, and international regulations.   |

**HAZARDS NOT OTHERWISE CLASSIFIED**

|                           |                |
|---------------------------|----------------|
| <b>PYROPHORIC GASES</b>   | Not applicable |
| <b>SIMPLE ASPHYXIANTS</b> | Not applicable |
| <b>COMBUSTIBLE DUST</b>   | 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

|                            |      |
|----------------------------|------|
| <b>Other Known Hazards</b> | 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-Dodecanol    | Lauryl alcohol   | 112-53-8   | ~ 100             |
| 1-Tetradecanol | Myristyl alcohol | 112-72-1   | TRACE             |

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**

|                             |   |
|-----------------------------|---|
| <b>EYES</b>                 | Immediately flush eyes with plenty of water for at least 15 minutes. If necessary, seek medical attention.  |
| <b>SKIN</b>                 | For skin contact, wash immediately with soap and water. If necessary, seek medical attention.   |
| <b>INGESTION</b>            | If the material is swallowed, get immediate medical attention or advice.  |
| <b>INHALATION</b>           | If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen.   |
| <b>SYMPTOMS of EXPOSURE</b> | Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms can include irritation, redness, scratching of the cornea, and tearing. |
| <b>NOTES to PHYSICIAN</b>   | Provide general supportive measures and treat symptomatically.  |

---



---

## SECTION 5: FIRE-FIGHTING MEASURES

---



---

|  |  |
|--|--|
| <b>FLAMMABLE PROPERTIES</b>                                    | <b>Refer to SECTION 9: Physical and Chemical Properties</b>  |
| <b>HAZARDOUS PRODUCTS of COMBUSTION</b>                        | Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |
| <b>PROPERTIES THAT COULD INCREASE FIRE or EXPLOSION HAZARD</b> | No information available.  |
| <b>EXTINGUISHING MEDIA</b>                                     | Powder, alcohol-resistant foam, CO2 & sand   |
| <b>FIRE-FIGHTING INSTRUCTIONS</b>                              | 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

|                                 |   |
|---------------------------------|---|
| <b>SPILL CONTAINMENT</b>        | Dike the spilled material, where this is possible.  |
| <b>SPILL CLEANUP PROCEDURES</b> | 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. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Stop the flow of material, if this is without risk. Block any potential routes to water systems.

**SPILL CLEANUP PROCEDURES** | Scrape up the spilled material. Thoroughly wash the area with water after a spill or leak clean-up.

**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** | Storage area should be protected by appropriately designed containment to prevent release to groundwater or sewers.  
Keep the container tightly closed and in a cool, well-ventilated place.  
If product is stored in bulk, nitrogen padding is recommended.

---

---

### **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. A full-face shield is recommended when handling this material at an elevated temperature.

**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**

|  |                             |                                    |                              |
|--|-----------------------------|------------------------------------|------------------------------|
| <b>APPEARANCE @ 20°C</b>                       | White solid                 | <b>ODOR</b>                        | Slightly characteristic odor |
| <b>ODOR THRESHOLD</b>                          | No data available           | <b>pH</b>                          | Not applicable               |
| <b>VAPOR DENSITY</b>                           | No data available           | <b>VAPOR PRESSURE</b>              | No data available            |
| <b>EVAPORATION RATE</b>                        | No data available           | <b>RELATIVE DENSITY</b>            | 0.83 @ 30°C                  |
| <b>MELTING POINT (°C)</b>                      | 24 °C                       | <b>WATER SOLUBILITY</b>            | Insoluble in water           |
| <b>INITIAL BOILING POINT (°C)</b>              | 264.0°C                     | <b>BOILING RANGE (°C)</b>          | No data available            |
| <b>PARTITION COEFFICIENT (N-OCTANOL/WATER)</b> | No data available           | <b>VISCOSITY</b>                   | 10mPa-s @ 37°C               |
| <b>DECOMPOSITION TEMPERATURE</b>               | No data available           | <b>FLAMMABILITY CLASSIFICATION</b> | CLASS IIIB                   |
| <b>FLASH POINT (°C)</b>                        | 136°C<br>Cleveland Open Cup | <b>AUTO-IGNITION TEMPERATURE</b>   | No data available            |
| <b>UPPER EXPLOSIVE LIMIT</b>                   | 2.6%                        | <b>LOWER EXPLOSIVE LIMIT</b>       | 0.3%                         |

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

**CHEMICAL STABILITY** | Stable under normal conditions.

|   |                           |
|---|---------------------------|
| <b>CONDITIONS to AVOID</b>                              | None known                |
| <b>INCOMPATIBLE MATERIALS (Reactivity)</b>              | None known.               |
| <b>INCOMPATIBLE MATERIALS (Storage &amp; Transport)</b> | No information available. |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS</b>                 | None known.               |
| <b>HAZARDOUS POLYMERIZATION</b>                         | Will not occur.           |

## SECTION 11: TOXICOLOGICAL INFORMATION

### ACUTE EFFECTS

|                                       |  |
|---------------------------------------|--|
| <b>EYE EFFECTS</b>                    | This product is irritating to the eyes.  |
| <b>SKIN EFFECTS</b>                   | Not expected to be a primary skin irritant.  |
| <b>ACUTE ORAL EFFECTS (INGESTION)</b> | No significant adverse effects are expected upon ingestion of the product.           |
| <b>ACUTE INHALATION EFFECTS</b>       | Low vapor pressure makes inhalation unlikely at standard temperatures and pressures. |
| <b>TARGET ORGANS</b>                  | No known effects.  |

### CHRONIC EFFECTS

|  |  |
|--|--|
| <b>MUTAGENICITY</b>                            | Ames Test (Salmonella typhimurium TA98, TA100, TA1535, TA1537, TA1538 ):<br>Negative |
| <b>TERATOLOGY</b>                              | No data available for this product.  |
| <b>REPRODUCTIVE and DEVELOPMENTAL TOXICITY</b> | No information available.  |

### CARCINOGENICITY

| 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.

#### LETHAL DOSE (LD50 & LC50) DATA

|  |  |
|--|--|
| <b>LD50 ORAL</b>                                 | LD50 Oral Rat > 5000 mg/kg   |
| <b>LD50 DERMAL</b>                               | No information available   |
| <b>LC50 INHALATION</b>                           | No information available   |
| <b>MEDICAL CONDITIONS AGGRAVATED by EXPOSURE</b> | No information available.  |
| <b>ROUTES of ENTRY</b>                           | Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. |
| <b>OTHER TOXICOLOGICAL INFORMATION</b>           | Skin Sensitization: Guinea Pig, Guinea Pig Maximization Test: Negative                         |

## SECTION 12: ECOLOGICAL INFORMATION

#### UN GHS AQUATIC TOXICITY CLASSIFICATION INFORMATION

|  |   |
|--|---|
| <b>AQUATIC TOXICITY CLASSIFICATION</b> | Acute 1<br>Chronic 2  |
| <b>SIGNAL WORD</b>                     | Warning   |
| <b>HAZARD PICTOGRAM</b>                |  |
| <b>HAZARD STATEMENT</b>                | Very toxic to aquatic life.<br>Toxic to aquatic life with long lasting effects.     |
| <b>PREVENTION</b>                      | Avoid release to the environment.   |
| <b>RESPONSE</b>                        | Collect spillage.   |

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

**ADDITIONAL ENVIRONMENTAL INFORMATION**

|   |  |
|---|--|
| <b>AQUATIC TOXICITY (fish)</b>              | 96 hr LC50 Fathead Minnow = 1.01 mg/L [flow-through]<br>96 hr LC50 Fathead Minnow = 0.1855 mg/L<br>96 hr LC50 Rainbow Trout > 1 mg/L |
| <b>AQUATIC TOXICITY (crustacean)</b>        | 48 hr EC50 daphnia magna = 320 mg/L  |
| <b>AQUATIC TOXICITY (algae)</b>             | No information available   |
| <b>ECOTOXICITY INFORMATION</b>              | None determined  |
| <b>ENVIRONMENTAL FATE</b>                   | CO2 Evolution Test (OECD301B): 50% (28 days)   |
| <b>BIOLOGICAL OXYGEN DEMAND (BOD5), g/g</b> | No data available  |
| <b>CHEMICAL OXYGEN DEMAND (COD), g/g</b>    | No data available  |
| <b>PERSISTENCE &amp; DEGRADABILITY</b>      | CO2 evolution test (OECD301B) : 50 % (28 days)   |
| <b>BIOACCUMULATION</b>                      | No information available   |

---



---

**SECTION 13: DISPOSAL CONSIDERATIONS**

---



---

|  |   |
|--|---|
| <b>WASTE DESCRIPTION</b>               | Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. |
| <b>GENERAL DISPOSAL CONSIDERATIONS</b> | Clean up and dispose of waste in accordance with all federal, state, and local environmental regulations.                             |
| <b>DISPOSAL of EMPTY CONTAINERS</b>    | 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  |
|---|---|---|---|
| <b>UN NUMBER</b>                                    | UN3077  | UN3077  | UN3077  |
| <b>UN PROPER SHIPPING NAME</b>                      | Environmentally hazardous substances, solid, n.o.s. | Environmentally hazardous substances, solid, n.o.s. | Environmentally hazardous substances, solid, n.o.s. |
| <b>TECHNICAL NAME</b>                               | 1-dodecanol   | 1-dodecanol   | 1-dodecanol   |
| <b>TRANSPORT HAZARD CLASS(ES)</b>                   | 9   | 9   | 9   |
| <b>PACKING GROUP</b>                                | III   | III   | III   |
| <b>REPORTABLE QUANTITY (RQ)</b>                     | No reportable quantity for this product             |   |   |
| <b>EMERGENCY RESPONSE GUIDEBOOK (ERG) REFERENCE</b> | 171   |   |   |
| <b>MARINE POLLUTANT</b>                             | MARINE POLLUTANT                                    |   |   |

## SECTION 15: REGULATORY INFORMATION

|  |   |
|--|---|
| <b>TOXIC SUBSTANCES CONTROL ACT (TSCA)</b> | This product is listed on the U.S. EPA TSCA Inventory.  |
| <b>EXPORT NOTIFICATIONS</b>                | This product is not subject to TSCA 12B Export Notification requirements.                             |
| <b>SIGNIFICANT NEW USE RULE (SNUR)</b>     | 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:

|               |        |     |           |
|---------------|--------|-----|-----------|
| <b>DSL</b>    | Canada | Yes |           |
| <b>NDSL</b>   | Canada | No  |           |
| <b>ENCS</b>   | Japan  | Yes | 2-217     |
| <b>EINECS</b> | Europe | Yes | 203-982-0 |
| <b>ELINCS</b> | Europe | No  |           |

|              |             |     |          |
|--------------|-------------|-----|----------|
| <b>IECSC</b> | China       | Yes |          |
| <b>PICCS</b> | Philippines | Yes |          |
| <b>ECL</b>   | Korea       | Yes | KE-12888 |
| <b>AICS</b>  | Australia   | Yes |          |
| <b>TCSI</b>  | Taiwan      | Yes |          |

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

| <b>EHS COMPONENTS</b>                   | <b>CASRN</b> | <b>PERCENT</b> | <b>TPQ POUNDS and RQ</b> |
|---|--------------|----------------|--------------------------|
| No limits established for this product. |              |                |                          |

| <b>313 COMPONENTS</b>                   | <b>CASRN</b> | <b>PERCENT</b> | <b>REPORTING LIMIT</b> |
|---|--------------|----------------|------------------------|
| No limits established for this product. |              |                |                        |

| <b>CERCLA/SARA COMPONENTS</b>           | <b>CASRN</b> | <b>PERCENT</b> | <b>REPORTING LIMIT</b> |
|---|--------------|----------------|------------------------|
| No limits established for this product. |              |                |                        |

|   |                 |     |
|---|-----------------|-----|
| <b>EPCRA SECTION<br/>311/312<br/>CLASSIFICATION</b> | <b>ACUTE</b>    | Yes |
|   | <b>CHRONIC</b>  | No  |
|   | <b>FIRE</b>     | No  |
|   | <b>PRESSURE</b> | No  |
|   | <b>REACTIVE</b> | No  |

**OTHER FEDERAL REGULATIONS**

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

| <b>COMPONENT NAME</b>   | <b>CASRN</b> |
|-------------------------|--------------|
| No regulated components |              |

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

| <b>COMPONENT NAME</b>   | <b>CASRN</b> |
|-------------------------|--------------|
| No regulated components |              |

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

| <b>COMPONENT NAME</b>   | <b>CASRN</b> |
|-------------------------|--------------|
| 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 |
|----------------|-------|-------|-----------|
|----------------|-------|-------|-----------|

*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 Florida, Massachusetts, Michigan, Pennsylvania, or New Jersey.*

**CALIFORNIA SAFE WATER and TOXIC ENFORCEMENT ACT of 1986 (Proposition 65)**

| COMPONENT NAME | CASRN | CONCENTRATION <sup>‡</sup> | LIST DATA |
|----------------|-------|----------------------------|-----------|
|----------------|-------|----------------------------|-----------|

This product contains no components which are listed on California's Proposition 65 lists.

<sup>‡</sup> CONCENTRATIONS EXPRESSED IN % UNLESS UNITS ARE SPECIFIED

**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.

|                         |  |
|-------------------------|--|
| <b>SDS GENERATED BY</b> | PSIMCOX  |
| <b>SDS VERSION DATE</b> | 4/1/2016 9:22:18 AM  |
| <b>SDS APPROVED BY</b>  | Patrick B. Simcox<br>Manager – Health, Safety, & Environmental<br>e-mail: psimcox@ksallc.com |

**MANUFACTURER(S)** | P.I.P.I.N.A.S K.A.O., I.N.C.  
 Jasaan Misamis Oriental Ecozone  
 9003 Jasaan, Mis. Or.  
 P.O. Box 15  
 Cagayan de Oro City PHILIPPINES  
 Telephone: 011-63-8822-760-256

FATTY CHEMICALS (MALAYSIA) SDN. BHD.  
 2510 Lorong Perusahaan Satu,  
 Prai Industrial Complex  
 13600 Prai, Penang, MALAYSIA  
 Phone: 011-60-4-399-8500

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

|                     |   |
|---------------------|---|
| <b>HEALTH</b>       | 1 |
| <b>FLAMMABILITY</b> | 1 |
| <b>REACTIVITY</b>   | 0 |

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

|                     |   |
|---------------------|---|
| <b>HEALTH</b>       | 1 |
| <b>FLAMMABILITY</b> | 1 |
| <b>REACTIVITY</b>   | 0 |

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

| <b>COMPONENT</b> | <b>CASRN</b> | <b>PERCENT</b> | <b>MINIMUM CONCENTRATION</b> |
|------------------|--------------|----------------|------------------------------|
| Lauryl alcohol   | 112-53-8     | ~ 100          | 1 %                          |

**END OF DOCUMENT**