

**1. Identification of the Substance/Preparation and of the Company/Undertaking**

Product identifier

Description Reliable Yellow Ink

Other means of identification

Part Number 053003  
Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use ink.  
Uses advised against No information available

Details of the supplier of the safety data sheet

Company Name

Kao Collins Inc.  
1201 Edison Drive  
Cincinnati, OH 45216  
PH: 513-948-9000  
Info@kaocollins.com

Emergency telephone number Chemtrec 1-800-424-9300

Emergency Telephone International Chemtrec: +1 703-527-3887

**2. Hazards Identification**

Classification

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive toxicity

Category 1B

Label Elements

**EMERGENCY OVERVIEW**

Danger

**Hazard statements**

May damage fertility or the unborn child



Appearance yellow

Physical state liquid

Odor Acrylic

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

• Causes mild skin irritation

Unknown acute toxicity

23.3 % of the mixture consists of ingredient(s) of unknown toxicity

**3. Composition/information on Ingredients**

Chemical name	CAS No	Weight-%	Trade secret
Alcohol	Proprietary	1 - 5	*
Lactam	Proprietary	0.1 - <1	*
Ethanol	64-17-5	0.01 - <0.1	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**NOTE**

Remaining components are either not hazardous or below threshold limits.

**4. First aid measures****Description of first aid measures**

<b>General advice</b>	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
<b>Inhalation</b>	None under normal use conditions. Move to fresh air in case of accidental inhalation of vapors. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Most important symptoms and effects, both acute and delayed**

Symptoms Hives.

**Indication of any immediate medical attention and special treatment needed**

Notes to Physician Treat symptomatically.

**5. Fire-fighting measures****Suitable extinguishing media**

Use Carbon dioxide (CO2) Dry chemical Alcohol resistant foam

Unsuitable extinguishing media None.

**Specific hazards arising from the chemical**

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

**Explosion data**

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Methods and material for containment and cleaning up**

**Methods for containment** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** After cleaning, flush away traces with water.

**7. Handling and Storage**

**Precautions for safe handling**

**Handling** Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents.

**8. Exposure Controls/Personal Protection**

**Control parameters**

**Exposure guidelines**

NIOSH IDLH: *Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Tight sealing safety goggles. Wear safety glasses with side shields (or goggles). If splashes are likely to occur.

**Skin and body protection** For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

**Respiratory protection** None under normal use conditions.

**Hygiene Measures** Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid		
<b>Appearance</b>	yellow	<b>Odor</b>	Acrylic
<b>Color</b>	No information available	<b>Odor Threshold</b>	No information available
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
pH	8.5 - 10.5		
<b>Melting point / freezing point</b>			
<b>Boiling point / boiling range</b>	> 90 °C		
<b>Flash point</b>	> 100 °C	Seta Closed Cup	
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available		
<b>Vapor density</b>	No information available		
<b>Specific gravity</b>	1.0 - 1.1	Not applicable	
<b>Water solubility</b>	No information available		
<b>Solubility(ies)</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	>200 °C		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available		
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	No information available		
<b>Oxidizing properties</b>	No information available		

### Other Information

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. Stability and Reactivity

### Reactivity

no data available

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

### Conditions to avoid

Extremes of temperature and direct sunlight.

### Incompatible materials

Strong oxidizing agents.

**Hazardous Decomposition Products**

Carbon oxides.

**11. Toxicological Information****Information on likely routes of exposure**

<b>Product Information</b>	The product has not been tested
<b>Inhalation</b>	May cause irritation of respiratory tract. Avoid breathing vapors or mists.
<b>Eye contact</b>	Contact with eyes may cause irritation. Avoid contact with eyes.
<b>IF ON SKIN</b>	May cause irritation. Avoid contact with skin.
<b>Ingestion</b>	May be harmful if swallowed. Do NOT taste or swallow.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Lactam	= 1350 mg/kg ( Rat )	-	-
Ethanol 64-17-5	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**irritation** May cause irritation of respiratory tract. May cause skin and eye irritation.  
**Sensitization** No information available.  
**Mutagenic effects** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains Ethanol which is classified as a possible carcinogen when ingested in the form of an alcoholic beverage. This is irrelevant as this product is used for ink jet ink applications not an alcoholic beverage.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	X

**IARC: (International Agency for Research on Cancer)**

*Group 1 - Carcinogenic to Humans*

**NTP: (National Toxicity Program)**

*Known - Known Carcinogen*

**Reproductive toxicity** Possible risk of impaired fertility. May impair fertility. May cause harm to the unborn child.  
Possible risk of harm to the unborn child.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown acute toxicity** 23.3 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	49941 mg/kg
<b>ATEmix (dermal)</b>	149883 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	26 mg/l
<b>ATEmix (inhalation-vapor)</b>	709.8 mg/l

**12. Ecological Information****Ecotoxicity**

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Lactam	-	464 - 999: 96 h Danio rerio mg/L LC50 static	-
Ethanol 64-17-5	-	13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static	2: 48 h Daphnia magna mg/L EC50 Static 9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

**Mobility**

No information available.

Chemical name	Partition coefficient
Ethanol 64-17-5	-0.32

**Other adverse effects**

No information available

### 13. Disposal Considerations

**Waste treatment methods****Waste treatment methods**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Ethanol 64-17-5	Toxic; Ignitable

### 14. Transport Information

**DOT** Not regulated**TDG** Not regulated**MEX** Not regulated**ICAO** Not regulated**IATA** Not regulated**IMDG/IMO** Not regulated**RID** Not regulated**ADR** Not regulated**ADN** Not regulated

**15. Regulatory Information**

**International Inventories**

Chemical name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Alcohol	X	X	X	X	X	X	X	X
Lactam	X	X	X	X	X	-	X	-
Ethanol 64-17-5	X	X	X	X	X	X	X	X

**Legend Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Prop. 65
Ethanol - 64-17-5	Carcinogen Developmental

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	X	X	X

**U.S. EPA Label Information**

EPA Pesticide registration number Not applicable

**16. Other Information**

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<u>NFPA</u>	Health hazard 1	flammability 1	Instability 0	Physical and chemical properties -
<u>HMIS</u>	Health hazard 1	flammability 1	Physical hazards 0	Personal precautions X

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Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**