

Issuing Date March 13, 2014

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name BEAR  
 Product Code(s) TSK2039  
 Recommended Use ink.

For further information, please contact

**Manufacturer:** Collins Inkjet Corporation  
 1201 Edison Drive  
 Cincinnati, Ohio 45216  
 PH: 513-948-9000  
 Info@collinsinkjet.com

Emergency telephone number Chemtrec 1-800-424-9300

**2. Hazards Identification**

**WARNING** Highly flammable

**EMERGENCY OVERVIEW**

Vapors may be irritating to eyes, nose, throat, and lungs  
 May cause central nervous system depression  
 Contains a known or suspected reproductive toxin

Appearance black

Physical state liquid

Odor Alcohol

**OSHA Regulatory Status** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential health effects

**Principle Routes of Exposure** Inhalation, Skin Contact, Eye Contact.

**Acute toxicity**

**EYES**  
**skin**

Contact with eyes may cause irritation. Vapor may cause irritation. Avoid contact with eyes. Prolonged skin contact may defat the skin and produce dermatitis. May cause eye/skin irritation. May be absorbed through the skin in harmful amounts. Avoid contact with skin.

**Inhalation**

Avoid breathing vapors or mists. May cause irritation of respiratory tract. May be harmful if inhaled.

**INGESTION**

Do NOT taste or swallow. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression. May cause adverse liver effects. **MAY BE HARMFUL IF SWALLOWED.**

**Chronic effects**

Contains a known or suspected reproductive toxin.

**Main Symptoms**

See Section 11 for additional Toxicological Information.

**Aggravated Medical Conditions**

Overexposure may cause female and male reproductive disorder(s). Liver disorders. Kidney disorders. central nervous system. Blood disorders. Respiratory disorders. Skin disorders. Preexisting eye disorders. Use of alcoholic beverages may enhance toxic effects.

**Interactions with Other Chemicals**

Use of alcoholic beverages may enhance toxic effects.

**Environmental hazard**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. See Section 12 for additional Ecological Information.

### 3. Composition/Information on Ingredients

Chemical name	CAS-No	Weight %
Ethyl alcohol	64-17-5	60 - 99
Chromium Complex azo dye mixture	PROPRIETARY	1 - 5
Isopropyl alcohol	67-63-0	1 - 5
Glycol Ether	-	1 - 5

#### Additional Notes

Chromium Complex azo dye mixture does not contain Chromium (VI). Remaining components are either not hazardous or below threshold limits.

### 4. 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). Immediate medical attention is required.
<b>Eye contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>IF ON SKIN</b>	Wash off immediately with plenty of water.
<b>Inhalation</b>	If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
<b>INGESTION</b>	Do NOT induce vomiting. Rinse mouth with water and afterwards drink plenty of water or milk. Call a physician or poison control center immediately. Rinse mouth.
<b>Protection of First-aiders</b>	Remove all sources of ignition.

### 5. Fire-fighting measures

<b>Flammable properties</b>	HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
<b>Flash Point</b>	< 20.9 °C
<b>Method</b>	Seta closed cup
<b>Suitable extinguishing media</b>	Use. Alcohol resistant foam. Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray.
<b>Hazardous combustion products</b>	Carbon oxides.
<b>Explosion data</b>	

<b>NFPA</b>	Health hazard 2	flammability 3	stability 0	Physical and chemical properties -
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### 6. Accidental release measures

<b>Personal precautions</b>	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation.
<b>Methods for cleaning up</b>	Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

### 7. Handling and Storage

<b>Handling</b>	Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product.
<b>Storage</b>	Keep tightly closed in a dry and cool place. Keep in properly labeled containers.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol 64-17-5	1000 ppm STEL	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
Isopropyl alcohol 67-63-0	400 ppm STEL TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup>
Glycol Ether	150 ppm STEL TWA: 100 ppm	TWA: 100 ppm TWA: 600 mg/m <sup>3</sup>	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m <sup>3</sup> STEL: 150 ppm STEL: 900 mg/m <sup>3</sup>

NIOSH IDLH: *Immediately Dangerous to Life or Health*

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

**Personal protective equipment****Eye/face Protection****Skin and body protection****Respiratory protection**

Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Goggles. For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.  
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**Hygiene Measures**

When using do not eat or drink. Regular cleaning of equipment, work area and clothing is recommended.

**9. Physical and Chemical Properties**

Appearance	black	Odor	Alcohol
Physical state	liquid	pH	5 - 7
Flash Point	< 20.9 °C	Method	Seta closed cup
Autoignition temperature	>200 °C	Boiling point / boiling range	>70 °C
Explosion Limits	No information available	Flammability Limits in Air	No information available
Specific gravity	0.80 - 0.90	Solubility	miscible
Evaporation Rate	No information available	Vapor Pressure	No information available
Vapor Density	No information available	Viscosity	< 15 cps

**10. Stability and Reactivity**

<b>stability</b>	Stable under normal conditions.
<b>Incompatible Products</b>	Strong oxidizing agents. Acids. Chlorinated compounds.
<b>Conditions to avoid</b>	Heating in air. Heat, flames and sparks.
<b>Hazardous decomposition products</b>	Carbon oxides.
<b>Hazardous Reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	None under normal processing.

**11. Toxicological Information****Acute toxicity**

**Product Information** The product has not been tested.

**Acute toxicity**

<b>EYES</b>	Contact with eyes may cause irritation. Vapor may cause irritation. Avoid contact with eyes. Prolonged skin contact may defat the skin and produce dermatitis. May cause eye/skin irritation. May be absorbed through the skin in harmful amounts. Avoid contact with skin. Avoid breathing vapors or mists. May cause irritation of respiratory tract. May be harmful if inhaled.
<b>skin</b>	
<b>Inhalation</b>	
<b>INGESTION</b>	Do NOT taste or swallow. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression. May cause adverse liver effects. <b>MAY BE HARMFUL IF SWALLOWED.</b>

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl alcohol	= 7060 mg/kg ( Rat )		= 124.7 mg/L ( Rat ) 4 h
Isopropyl alcohol	= 4396 mg/kg ( Rat )	= 12800 mg/kg ( Rabbit )	= 16000 ppm ( Rat ) 8 h
Glycol Ether	= 5230 mg/kg ( Rat )	= 9500 mg/kg ( Rabbit )	

**Chronic toxicity**

**Chronic toxicity** Contains a known or suspected reproductive toxin.

**carcinogenicity** This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). 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
Ethyl alcohol		Group 1	Known	X
Isopropyl alcohol		Group 1		X

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

A1 - Known Human Carcinogen

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

Group 1 - Carcinogenic to Humans

**NTP: (National Toxicity Program)**

Known - Known Carcinogen

**Target organ effects** EYES, Lungs, Respiratory System, skin, Central Nervous System (CNS), blood, kidney, liver, Reproductive System.

**Endocrine Disruptor Information** .? is a suspected endocrine disruptor.

## 12. Ecological Information

**ecotoxicity**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Ethyl alcohol		100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static
Isopropyl alcohol	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	1400000: 96 h Lepomis macrochirus µg/L LC50 11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 35390 mg/L 5 min	13299: 48 h Daphnia magna mg/L EC50

Glycol Ether	10000: 96 h Pimephales promelas mg/L LC50 static	1919: 48 h Daphnia magna mg/L LC50
<b>Chemical name</b>	<b>Log Pow</b>	
Ethyl alcohol	-0.32	
Isopropyl alcohol	0.05	
Glycol Ether	-0.064	

**13. Disposal Considerations**

**Waste treatment methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.

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

<b>Chemical name</b>	<b>California Hazardous Waste Status</b>
Ethyl alcohol	Toxic; Ignitable
Isopropyl alcohol	Toxic, Ignitable

**14. Transport Information**

**IATA**  
**UN-No** UN1210  
**Proper shipping name** Printing Ink  
**Hazard Class** 3  
**Packing group** II

**15. Regulatory Information**

**Acute health hazard** yes

**International Inventories**

Chemical name	TSCA	DSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS	NZIoC
Ethyl alcohol - 64-17-5	X	X	X	X	X	X	X	X	X
Isopropyl alcohol - 67-63-0	X	X	X	X	X	X	X	X	X
Glycol Ether -	X	X	X	X	X	X	X	X	X

International Inventory Note: All the components of this product are listed or are exempted on the Philippine Inventory of Chemicals and Chemical Substances (PICCS). No component of this product is listed on the Priority Chemical List (PCL). No component of this product is listed on the Chemical Control Order (CCO) list. No component of this product is regulated by the Philippine Drug Enforcement Agency (PDEA). No component of this product is regulated by the Philippine National Police (PNP).

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Isopropyl alcohol	67-63-0	1 - 5	1.0
Glycol Ether		1 - 5	1.0

**SARA 311/312 Hazard Categories**

**Chronic Health Hazard** yes  
**Fire hazard** yes  
**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).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Isopropyl alcohol 67-63-0 ( 1 - 5 )				X

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

Chemical name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Glycol Ether		1 - 5				

**CERCLA**

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

**International Regulations**

**Mexico - Grade** No information available

Chemical name	Carcinogen Status	Exposure Limits
Ethyl alcohol		Mexico: TWA 1000 ppm Mexico: TWA 1900 mg/m <sup>3</sup>
Isopropyl alcohol		Mexico: TWA 400 ppm Mexico: TWA 980 mg/m <sup>3</sup> Mexico: STEL 500 ppm Mexico: STEL 1225 mg/m <sup>3</sup>
Glycol Ether		Mexico: TWA 100 ppm Mexico: TWA 60 mg/m <sup>3</sup> Mexico: STEL 150 ppm Mexico: STEL 900 mg/m <sup>3</sup>

**CANADA**

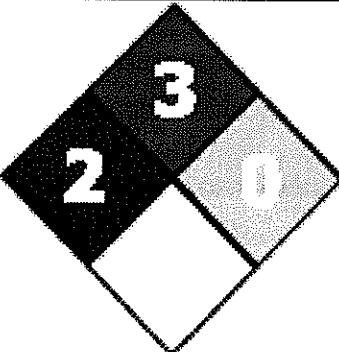
Chemical name	WHMIS Hazard Class
Ethyl alcohol - 64-17-5	0.1 % B2,D2B
Isopropyl alcohol - 67-63-0	1 % B2,D2B
Glycol Ether -	1 % B3

Chemical name	NPRI
Isopropyl alcohol	X

**Legend**

NPRI - National Pollutant Release Inventory

**16. Other Information**

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td>2</td> </tr> <tr> <td>Specific Hazard</td> <td>3</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	Health Hazard	2	Specific Hazard	3	Reactivity	0		
Health Hazard	2								
Specific Hazard	3								
Reactivity	0								

Issuing Date March 13, 2014

Revision note No information available.

**Disclaimer**

This product is intended to be used as a printing fluid. The information provided on this MSDS 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