

Issuing Date 11-Feb-2015

Revision date 28-Jan-2015

**Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**Product identifier**

Product Code(s) TSK2039

Product name BEAR

**Relevant identified uses of the substance or mixture and uses advised against**

Recommended Use ink

Uses advised against No information available

**Details of the supplier of the safety data sheet**

**Manufacturer:**

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

For further information, please contact

Emergency telephone number Chemtrec 1-800-424-9300

**Section 2: HAZARDS IDENTIFICATION**

**Classification of the substance or mixture**

*Regulation (EC) No 1272/2008*

<b>Chronic aquatic toxicity</b>	Category 2 - (H411)
<b>Flammable Liquids</b>	Category 2 - (H225)

**Classification according to Directive 67/548/EEC or 1999/45/EC**

*Full text of R-phrases: see section 16*

**Symbol(s)**

F - Highly flammable

**R-code(s)**

F;R11 - R52/53

**Label elements**

**Product identifier****Signal word**

DANGER

**Hazard statements**

H411 - Toxic to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapor

**Precautionary Statements - EU (§28, 1272/2008)**

P370 + P378 - In case of fire: Use dry sodium carbonate to extinguish

P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking

**Other Hazards**

Toxic to aquatic life.

**General Hazards**

May cause skin and eye irritation. MAY CAUSE RESPIRATORY TRACT IRRITATION.

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Chemical name	EC No	CAS-No	Weight %	Classification	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Ethyl alcohol	EEC No. Present	64-17-5	60 - 99	F; R11	Flam. Liq. 2 (H225)	
Chromium Complex azo dye mixture	-	PROPRIETARY	1 - 5	N;R51/53	Aquatic Chronic 2 (H411)	
Isopropyl alcohol	EEC No. Present	67-63-0	1 - 5	F; R11 Xi; R36 R67	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225)	
Glycol Ether	Listed	-	1 - 5	-	No data available	

**Full text of R-phrases: see section 16****Full text of H- and EUH-phrases: see section 16****NOTE**

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

### Section 4: FIRST AID MEASURES

**Description of first aid measures****General advice**

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Immediate medical attention is required.

**Inhalation**

If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

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<b>IF ON SKIN</b>	Wash off immediately with plenty of water.
<b>Eye contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<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>Self-protection of the first aider</b>	Remove all sources of ignition.
<b><u>Most important symptoms and effects, both acute and delayed</u></b>	
<b><u>Indication of any immediate medical attention and special treatment needed</u></b>	
<b>Notes to Physician</b>	Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

### Extinguishing media

#### **Suitable extinguishing media**

Use. Alcohol resistant foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray.

#### **Unsuitable extinguishing media**

No information available

### Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

**Hazardous combustion products** Carbon oxides.

### Advice for fire-fighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

## Section 6: ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation.

#### **Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

### Methods and material for containment and cleaning up

#### **Methods for containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for cleaning up**

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.

### Reference to other sections

## Section 7: HANDLING AND STORAGE

### Precautions for safe handling

**Handling**

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.

**Hygiene Measures**

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

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

Keep tightly closed in a dry and cool place. Keep in properly labeled containers.

**Specific end use(s)****Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical name	Eu	United Kingdom	France	Spain	Germany
Ethyl alcohol 64-17-5		TWA: 1000 ppm TWA: 1920 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> STEL: 5000 ppm STEL: 9500 mg/m <sup>3</sup>	VLA-ED: 1000 ppm VLA-ED; 1910 mg/m <sup>3</sup> VLA-ED	TWA: 500 ppm TWA: 960 mg/m <sup>3</sup> Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m <sup>3</sup>
Isopropyl alcohol 67-63-0		STEL: 1250 mg/m <sup>3</sup> STEL: 500 ppm TWA: 400 ppm TWA: 999 mg/m <sup>3</sup>	STEL: 400 ppm STEL: 980 mg/m <sup>3</sup>	VLA-EC: 500 ppm VLA-EC; 1250 mg/m <sup>3</sup> VLA-EC VLA-ED: 400 ppm VLA-ED; 998 mg/m <sup>3</sup> VLA-ED	TWA: 200 ppm TWA: 500 mg/m <sup>3</sup> Ceiling / Peak: 400 ppm Ceiling / Peak: 1000 mg/m <sup>3</sup>
Glycol Ether		STEL: 150 ppm STEL: 924 mg/m <sup>3</sup> TWA: 308 mg/m <sup>3</sup> TWA: 50 ppm Skin	TWA: 50 ppm TWA: 308 mg/m <sup>3</sup>	S* VLA-ED: 50 ppm VLA-ED; 308 mg/m <sup>3</sup> VLA-ED	TWA: 50 ppm TWA: 310 mg/m <sup>3</sup> Ceiling / Peak: 50 ppm Ceiling / Peak: 310 mg/m <sup>3</sup>
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Ethyl alcohol 64-17-5		TWA: 1000 ppm	MAC: 500 ppm MAC; 1000 mg/m <sup>3</sup> MAC	TWA: 1900 mg/m <sup>3</sup> TWA: 1000 ppm STEL: 2500 mg/m <sup>3</sup> STEL: 1300 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
Isopropyl alcohol 67-63-0		STEL: 500 ppm STEL: 400 ppm TWA: 200 ppm	MAC: 250 ppm MAC; 650 mg/m <sup>3</sup> MAC	TWA: 500 mg/m <sup>3</sup> TWA: 200 ppm STEL: 620 mg/m <sup>3</sup> STEL: 250 ppm	TWA: 200 ppm TWA: 490 mg/m <sup>3</sup>
Glycol Ether	TWA: 308 mg/m <sup>3</sup> TWA: 50 ppm	STEL: 150 ppm TWA: 100 ppm	MAC: 50 ppm MAC; 300 mg/m <sup>3</sup> MAC	TWA: 310 mg/m <sup>3</sup> TWA: 50 ppm Skin	TWA: 300 mg/m <sup>3</sup> TWA: 50 ppm Skin
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Ethyl alcohol 64-17-5	STEL 2000 ppm STEL; 3800 mg/m <sup>3</sup> STEL MAK: 1000 ppm MAK; 1900 mg/m <sup>3</sup> MAK	STEL: 1000 ppm STEL: 1920 mg/m <sup>3</sup>	NDS: 1900 mg/m <sup>3</sup>	TWA: 500 ppm TWA: 950 mg/m <sup>3</sup> STEL: 1187.5 mg/m <sup>3</sup> STEL: 625 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

Isopropyl alcohol 67-63-0	STEL 800 ppm STEL; 2000 mg/m <sup>3</sup> STEL MAK: 200 ppm MAK; 500 mg/m <sup>3</sup> MAK	STEL: 400 ppm STEL: 1000 mg/m <sup>3</sup>	NDSch: 1200 mg/m <sup>3</sup> NDS: 900 mg/m <sup>3</sup> Skin	TWA: 100 ppm TWA: 245 mg/m <sup>3</sup> STEL: 150 ppm STEL: 306.25 mg/m <sup>3</sup>	TWA: 200 ppm Skin
Glycol Ether	Skin STEL 100 ppm STEL; 614 mg/m <sup>3</sup> STEL (isomers mixtures) MAK: 50 ppm MAK (mixed isomers); 307 mg/m <sup>3</sup> MAK (mixed isomers)	STEL: 50 ppm STEL: 300 mg/m <sup>3</sup>	NDSch: 480 mg/m <sup>3</sup> NDS: 240 mg/m <sup>3</sup>	TWA: 300 mg/m <sup>3</sup> TWA: 50 ppm Skin STEL: 375 mg/m <sup>3</sup> STEL: 75 ppm	TWA: 308 mg/m <sup>3</sup> TWA: 50 ppm Skin

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available.

#### Exposure controls

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

#### **Personal Protective Equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Goggles.  
**Skin and body protection** Antistatic boots. Wear fire/flame resistant/retardant clothing. For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.  
**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**Environmental exposure controls** No information available.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

#### General information

<b>Physical state</b>	liquid	<b>Appearance</b>	black
<b>Odor</b>	Alcohol		

#### Important health, safety and environmental information

<b>Flash Point</b>	< 20.9 °C	<b>This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials)</b>	Seta closed cup.
<b>Boiling point / boiling range</b>	> 70 °C	<b>pH</b>	
PH	5 - 7	<b>Autoignition temperature</b>	>200 °C
<b>Vapor Pressure</b>	No information available	<b>VOC Content</b>	No information available
<b>Viscosity</b>	< 15 cps	<b>Solubility</b>	miscible
<b>Specific gravity</b>	0.80 - 0.90	<b>Evaporation Rate</b>	No information available
<b>Vapor Density</b>	No information available		
		<b>Flammability Limit in Air</b>	No information available

#### OTHER INFORMATION

**Melting point / melting range** No information available

## Section 10: STABILITY AND REACTIVITY

#### Reactivity

No data available.

**Chemical stability**

Stable under normal conditions.

**Explosion data**

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

**Possibility of hazardous reactions****Hazardous polymerization**

None under normal processing.

**Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heating in air. Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Acids. Chlorinated compounds.

**Hazardous decomposition products**

Carbon oxides.

**Section 11: TOXICOLOGICAL INFORMATION****Information on toxicological effects****Acute toxicity****Product Information**

The product has not been tested.

<b>Inhalation</b>	May cause irritation of respiratory tract. Avoid breathing vapors or mists.
<b>Eye contact</b>	Avoid contact with eyes. May cause irritation.
<b>IF ON SKIN</b>	Avoid contact with skin. May cause irritation.
<b>Ingestion</b>	MAY BE HARMFUL IF SWALLOWED. Do NOT taste or swallow.

**Unknown acute toxicity** 0.891% 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>	7,291.00 mg/kg
<b>ATEmix (dermal)</b>	78,896.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	147.00 mg/l

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl alcohol	= 7060 mg/kg ( Rat )		= 124.7 mg/L ( Rat ) 4 h
Isopropyl alcohol	= 1870 mg/kg ( Rat )	= 4059 mg/kg ( Rabbit )	= 72600 mg/m <sup>3</sup> ( Rat ) 4 h
Glycol Ether	= 5230 mg/kg ( Rat )	= 9500 mg/kg ( Rabbit )	

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	No information available.
<b>Carcinogenic effects</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target organ effects</b>	EYES, Lungs, Respiratory System, skin, Central Nervous System (CNS), blood, kidney, liver, Reproductive System.
<b>Aspiration hazard</b>	No information available.

## Section 12: ECOLOGICAL INFORMATION

### Toxicity

Toxic to aquatic life Toxic to aquatic life with long lasting effects

### Ecotoxicity effects

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

0.891% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Ethyl alcohol		12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50
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 9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static	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

### Persistence and degradability

No information available.

### Bioaccumulative potential

No information available.

Chemical name	Log Pow
Ethyl alcohol	-0.32
Isopropyl alcohol	0.05
Glycol Ether	-0.064

### Mobility in soil

#### **Mobility in soil**

No information available.

**Results of PBT and vPvB assessment**

This substance is considered to be persistent, bioaccumulating and toxic (PBT).

**Other adverse effects**

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<b>Section 13: DISPOSAL CONSIDERATIONS</b>
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**Waste treatment methods**

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

<b>Section 14: TRANSPORT INFORMATION</b>
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**IMDG/IMO**

14.1	
14.2 Proper shipping name	No information available
14.3	
14.4	
14.5 Marine pollutant	Lead compounds
14.6	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

**RID**

14.1	
14.2 Proper shipping name	No information available
14.3	
14.4	
14.5	
14.6 Special Provisions	274, 561

**ADR**

14.1	
14.2 Proper shipping name	No information available
14.3	
14.4	
14.5	
14.6 Special Provisions	[DOT]: 101

**ICAO**

14.1	
14.2 Proper shipping name	No information available
14.3	
14.4	
14.5	
14.6	

**IATA**

14.1 UN-No	UN1210
14.2 Proper shipping name	No information available



14.3 Hazard Class	3
14.4 Packing group	II
14.5	
14.6 Special Provisions	A112

## Section 15: REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

#### International Inventories

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

#### 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 Commercial Chemical Substances/EU 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 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).

**AICS** - Australian Inventory of Chemical Substances

#### Chemical safety assessment

No information available

## Section 16: OTHER INFORMATION

#### Full text of R-phrases referred to under sections 2 and 3

R11 - Highly flammable

R67 - Vapors may cause drowsiness and dizziness

R36 - Irritating to eyes

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R36/38 - Irritating to eyes and skin

#### Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapor

H411 - Toxic to aquatic life with long lasting effects

**Issuing Date** 11-Feb-2015

**Revision date** 28-Jan-2015

**Reason for revision** Not Applicable.

**This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006**

**End of Safety Data Sheet**