

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

Product identifier

Product name MJHRPH/BLK-5

Other means of identification

Product Code(s) MJHRPH/BLK-5

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

Supplier Address

LOVESHAW
2206 Easton Turnpike
South Canaan, PA 18459
PH: 570-937-4921
Fax: 570-937-4370

Company Name

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

EMERGENCY OVERVIEW

Danger

Hazard statements

May damage fertility or the unborn child



Appearance Black

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

3.07525% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

Chemical Name	CAS-No	Weight-%	Trade secret
Triethanolamine	102-71-6	1 - 5	*
Lactam	Proprietary	0.1 - 3	*
Ethyl alcohol	64-17-5	0.1 - <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**General advice**

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Immediate medical attention is not required.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

IF ON SKIN

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water.

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Ingestion

Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth.

Self-protection of the first aider

Use personal protective equipment as required.

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

Hives.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

May cause sensitization of susceptible persons. Use of epinephrine may be indicated.

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. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons.

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 protective equipment as required. Avoid contact with skin and eyes.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. 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 Prevent further leakage or spillage if safe to do so.

Methods for cleaning up After cleaning, flush away traces with water. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Prevent product from entering drains.

7. Handling and Storage

Precautions for safe handling

Handling Use personal protective equipment as required. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place.

Incompatible materials Strong oxidizing agents.

8. Exposure Controls/Personal Protection

Control parameters

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Triethanolamine 102-71-6	TWA: 5 mg/m ³	-	-

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.

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. When using do not eat or drink.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state	liquid	Odor	Acrylic
Appearance	Black	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	8 - 10	
Melting point / freezing point		
Boiling point/range (°C) VALUE	No information available	
Flash point	> 100 °C	Seta closed cup
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	1.0 - 1.1	Not applicable
Water solubility	Practically insoluble (~0.4 ug/mL)	
Solubility(ies)	No information available	
Partition coefficient	No information available	
Autoignition temperature	>200 °C	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content	No information available
Density	No information available
Bulk density	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.
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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**

Product Information	The product has not been tested
Inhalation	May cause irritation of respiratory tract. Avoid breathing vapors or mists.
Eye contact	Contact with eyes may cause irritation. Avoid contact with eyes. May cause irreversible damage to eyes.
IF ON SKIN	May cause sensitization by skin contact. May cause irritation. Avoid contact with skin.
Ingestion	May be harmful if swallowed. May cause gastrointestinal discomfort if consumed in large amounts. Do NOT taste or swallow.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Triethanolamine 102-71-6	= 4190 mg/kg (Rat)	> 16 mL/kg (Rat) > 20 mL/kg (Rabbit)	-
Lactam	= 3914 mg/kg (Rat)	= 8 g/kg (Rabbit)	= 3.1 mg/L (Rat) 4 h
Ethyl alcohol 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 list below indicates any ingredient listed 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
Ethyl alcohol 64-17-5	-	Group 1	Known	X

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
Target organ effects blood, Eyes, Skin, Gastrointestinal tract (GI).
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 3.07525% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral)	52530 mg/kg
ATEmix (dermal)	109768 mg/kg
ATEmix (inhalation-dust/mist)	155.3 mg/l

12. Ecological Information

ecotoxicity

3.376036% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Triethanolamine 102-71-6	169: 96 h Desmodesmus subspicatus mg/L EC50 216: 72 h Desmodesmus subspicatus mg/L EC50	1000: 96 h Pimephales promelas mg/L LC50 static 450 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 10600 - 13000: 96 h Pimephales promelas mg/L LC50 flow-through	1386: 24 h Daphnia magna mg/L EC50
Lactam	500: 72 h Desmodesmus subspicatus mg/L EC50	832: 96 h Lepomis macrochirus mg/L LC50 static 1400: 96 h Poecilia reticulata mg/L LC50 static 4000: 96 h Leuciscus idus mg/L LC50 static 1072: 96 h Pimephales promelas mg/L LC50 static	4897: 48 h Daphnia magna mg/L EC50
Ethyl alcohol 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	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

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Triethanolamine 102-71-6	-2.53
Lactam	-0.46
Ethyl alcohol 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
Ethyl alcohol 64-17-5	Toxic; Ignitable

14. Transport Information

DOT Not regulated

IATA Not regulated

15. Regulatory Information

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Triethanolamine 102-71-6	X	X	X	X	X	X	X	X
Lactam	X	X	X	X	X	X	X	X
Ethyl alcohol 64-17-5	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

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 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	SARA 313 - Threshold Values %
Lactam -	1.0

SARA 311/312 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CAS-No	Weight-%	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Triethanolamine	102-71-6	1 - 5		Group I		

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level

pertaining to releases of this material

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical Name	California Prop. 65
Lactam -	Developmental
Ethyl alcohol - 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Triethanolamine 102-71-6	X	X	X
Lactam	X	X	X
Ethyl alcohol 64-17-5	X	X	X

U.S. EPA Label Information

EPA Pesticide registration number Not applicable

16. Other Information

<u>NFPA</u>	Health hazard 2	flammability 1	Instability 1	Physical and chemical properties -
<u>HMIS</u>	Health hazard 2	flammability 1	Physical hazards 1	Personal precautions X

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Issuing Date 21-Nov-2014
Revision date 21-Oct-2015

Revision note

No information available

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