

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

Product identifier

Product Code(s) TWK1818
Product name TWK-1818H
Substance or Preparation Preparation

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
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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

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

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

Full text of R-phrases: see section 16

Symbol(s)

Not dangerous

Label elements

Product identifier

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Signal word

None

EUH210 - Safety data sheet available on request

Other Hazards

combustible liquid.

General Hazards

May cause skin and eye irritation.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not Applicable

3.2 Mixtures

Chemical name	EC No	CAS-No	Weight %	Classification	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Lactam	Listed	-	1 - 10	Xi;R36/38	Eye Irrit. 2 (H319)	No data available
Black Dye	Listed	-	1 - 5	-	No data available	No data available
Glycol Ether 1	Listed	-	1 - 5	Repr.Cat.3; R63	Repr. 2 (H361d)	No data available
Carbon black	EEC No. Present Present	1333-86-4	1 - 5	-	No data available	No data available

Full text of R-phrases: see section 16

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

NOTE

Remaining components are either not hazardous or below threshold limits.

Section 4: FIRST AID MEASURES

Description of first aid measures**General advice**

Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. If symptoms persist, call a physician. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation

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. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician immediately. If symptoms persist, call a physician.

IF ON SKIN

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Immediate medical attention is not required.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Clean mouth with water and afterwards drink plenty of water. Consult a physician. Do not induce vomiting without medical advice.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES**Extinguishing media****Suitable extinguishing media**

Use. Carbon dioxide (CO₂). Dry chemical. Alcohol resistant foam.

Unsuitable extinguishing media

None

Special hazards arising from the substance or mixture

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

Advice for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Section 6: ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures****Personal precautions**

Use personal protection recommended in Section 8. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Advice for Emergency Responders

Use personal protection recommended in Section 8.

Environmental Precautions

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

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

Dam up. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading.

Reference to other sections

See section 7 for more information.

Section 7: HANDLING AND STORAGE**Precautions for safe handling****Handling**

Use personal protective equipment as required. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.

Hygiene Measures

When using do not eat or drink. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage

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

Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	Eu	United Kingdom	France	Spain	Germany
Humectant		STEL: 30 mg/m ³ TWA: 10 mg/m ³	TWA: 10 mg/m ³	VLA-ED: 10 mg/m ³ VLA-ED	TWA: 50 mg/m ³ Ceiling / Peak: 100 mg/m ³
Glycol Ether 1	TWA: 10 ppm TWA: 50.1 mg/m ³	TWA: 10 ppm TWA: 50.1 mg/m ³ Skin	TWA: 10 ppm TWA: 50.1 mg/m ³	S* VLA-ED: 10 ppm VLA-ED; 50.1 mg/m ³ VLA-ED	TWA: 10 ppm TWA: 50 mg/m ³
Carbon black 1333-86-4		STEL: 7 mg/m ³ TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	VLA-ED: 3.5 mg/m ³ VLA-ED	
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Humectant		TWA: 10 mg/m ³	MAC: 10 mg/m ³ MAC (mist)	TWA: 20 mg/m ³	
Glycol Ether 1			Skin MAC: 9 ppm MAC; 45 mg/m ³ MAC	TWA: 10 ppm TWA: 50 mg/m ³ Skin	TWA: 10 ppm TWA: 50.1 mg/m ³ Skin
Carbon black 1333-86-4		TWA: 3.5 mg/m ³	MAC: 3.5 mg/m ³ MAC	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3.5 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Humectant		STEL: 100 mg/m ³	NDS: 10 mg/m ³		TWA: 10 mg/m ³
Glycol Ether 1			NDS: 50 mg/m ³		TWA: 10 ppm TWA: 50.1 mg/m ³
Carbon black 1333-86-4			NDS: 4.0 mg/m ³	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³

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** Tight sealing safety goggles. Face protection shield.
- Hand protection** For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.
- Skin and body protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Suitable protective clothing. Apron. For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.
- Respiratory protection** Use only with adequate ventilation. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant

concentrations. Respiratory protection must be provided in accordance with current local regulations.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

General information

Physical state	liquid	Appearance	black
Odor	Acrylic		
Important health, safety and environmental information			
Flash Point	> 70 °C	Method	Seta closed cup.
Boiling point / boiling range	No information available	pH	
PH	8.5 - 10.5	Autoignition temperature	>200 °C
Vapor Pressure	No information available	VOC Content	No information available
Viscosity	< 15 cps	Solubility	Soluble in water
Specific gravity	0.9 - 1.1	Evaporation Rate	No information available
Vapor Density	Heavier than air		
		Flammability Limit in Air	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

Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

Conditions to avoid

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides.

Section 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity**Product Information**

The product has not been tested.

Inhalation	May cause irritation of respiratory tract. Avoid breathing vapors or mists.
Eye contact	Avoid contact with eyes. May cause irritation.
IF ON SKIN	May cause skin irritation and/or dermatitis. May discolor the skin. Avoid contact with skin.
Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Do NOT taste or swallow.

Unknown acute toxicity 6.130982% 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)	34,047.00 mg/kg
ATEmix (dermal)	18,828.00 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Lactam	> 3200 mg/kg (Rat)		
Glycol Ether 1	= 4 mL/kg (Rat)	= 650 mg/kg (Rabbit) = 2500 µL/kg (Rabbit)	
Carbon black	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Sensitization	No information available.
Mutagenic effects	Contains: Black Dye. This material has tested positive in mutagenicity studies, however the relevance of these data to human health is uncertain.
Carcinogenic effects	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target organ effects	EYES, kidney, Respiratory System, skin.
Aspiration hazard	No information available.

Section 12: ECOLOGICAL INFORMATION

Toxicity**Ecotoxicity effects**

Not Established.

9.10138% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Lactam	250: 72 h Desmodesmus subspicatus mg/L EC50 84: 96 h	4600 - 10000: 96 h Brachydanio rerio mg/L LC50 static	3.4: 96 h Daphnia magna mg/L LC50

	Desmodesmus subspicatus mg/L EC50		
Glycol Ether 1	500: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	7500: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 5741: 96 h <i>Pimephales promelas</i> mg/L LC50 7500: 96 h <i>Lepomis macrochirus</i> mg/L LC50	500: 48 h <i>Daphnia magna</i> mg/L EC50
Carbon black			5600: 24 h <i>Daphnia magna</i> mg/L EC50

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Chemical name	Log Pow
Lactam	-0.71
Glycol Ether 1	-0.682

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

No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods**Waste from residues/unused products**

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

Contaminated packaging

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

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1 UN-No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

RID

14.1 UN-No	Not Regulated
14.2 Proper shipping name	Not Regulated
14.3 Hazard Class	Not Regulated
14.4 Packing group	Not Regulated
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

ADR

14.1 UN-No	Not Regulated
14.2 Proper shipping name	Not Regulated
14.3 Hazard Class	Not Regulated
14.4 Packing group	Not Regulated
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

ICAO

14.1 UN-No	Not Regulated
14.2 Proper shipping name	Not Regulated
14.3 Hazard Class	Not Regulated
14.4 Packing group	Not Regulated
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

IATA

14.1 UN-No	Not Regulated
14.2 Proper shipping name	Not Regulated
14.3 Hazard Class	Not Regulated
14.4 Packing group	Not Regulated
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

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/NDL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Lactam	X	X	X	X	X	X	X	X
Black Dye	X	X	X	X	X	X	X	X
Glycol Ether 1	X	X	X	X	X	X	X	X
Carbon black 1333-86-4	X	X	X	X	X	X	X	X

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - 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

Chemical safety assessment

No information available

Section 16: OTHER INFORMATION

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

R63 - Possible risk of harm to the unborn child
R36/38 - Irritating to eyes and skin

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

H361d - Suspected of damaging the unborn child
H319 - Causes serious eye irritation

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Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Disclaimer

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End of Safety Data Sheet