

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

1.1. Product identifier

Product Code(s) TWK1818
Product name Complete H
Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use ink
Uses advised against No information available

1.3. 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
For further information, please contact

1.4. Emergency telephone number

Emergency telephone number Chemtrec 1-800-424-9300
Emergency Telephone International Chemtrec: +1 703-527-3887

Section 2: HAZARD IDENTIFICATION

2.1. 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]

2.2. 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

2.3. 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 according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
Lactam	Listed	-	1 - 10	Eye Irrit. 2 (H319)	No data available
Black Dye	Listed	-	1 - 5	No data available	No data available
Diethylene glycol monomethyl ether	EEC No. Present	111-77-3	1 - 5	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 H- and EUH-phrases: see section 16

NOTE

Remaining components are either not hazardous or below threshold limits.

Section 4: FIRST AID MEASURES

4.1. 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.
Skin Contact	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 drink afterwards plenty of water. Call a physician. Do not induce vomiting without medical advice.
Self-protection of the first aider	Use personal protective equipment as required.

4.2. Most important symptoms and effects, both acute and delayed

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

None

5.2. 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

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Section 6: ACCIDENTAL RELEASE MEASURES**6.1. 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.

For emergency responders

Use personal protection recommended in Section 8.

6.2. 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. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.3. 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 non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading.

6.4. Reference to other sections

See section 7 for more information.

Section 7: HANDLING AND STORAGE**7.1. 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.

7.2. 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.

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

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical Name	European Union	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	
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 H*
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.

8.2. 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

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		

Property	Values	Remarks • Method
pH		No information available
Melting point / freezing point		No information available
Boiling point/range (°C) VALUE		No information available

Flash point	> 70 °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
Relative density	0.9 - 1.1	No information available
Water solubility		No information available
Solubility(ies)	Soluble in water	No information available
Partition coefficient		No information available
Autoignition temperature	>200 °C	No information available
Decomposition temperature		No information available
Kinematic viscosity		No information available
Dynamic viscosity	< 15 cps	No information available
Explosive properties	No information available	
Oxidizing properties	No information available	

9.2. 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

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

10.3. Possibility of hazardous reactions

Hazardous polymerization

Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides.

Section 11: TOXICOLOGY INFORMATION

11.1. 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.

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

Unknown acute toxicity

6.130982 % of the mixture consists of ingredient(s) of unknown toxicity.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Lactam	= 328 mg/kg (Rat)		
Diethylene glycol monomethyl ether	= 4 mL/kg (Rat)	= 2500 µL/kg (Rabbit) = 650 mg/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	May impair fertility. Possible risk of impaired 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.
Target organ effects	Eyes, kidney, blood, Skin.
Aspiration hazard	No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects

Not Established.

Contains 9.10138 % of components with unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Lactam	250: 72 h Desmodemus subspicatus mg/L EC50 84: 96 h Desmodemus subspicatus mg/L EC50	4600 - 10000: 96 h Brachydanio rerio mg/L LC50 static	3.4: 96 h Daphnia magna mg/L LC50
Diethylene glycol monomethyl ether	500: 72 h Desmodemus subspicatus mg/L EC50	5741: 96 h Pimephales promelas mg/L LC50 7500: 96 h Lepomis macrochirus mg/L LC50 static 7500: 96 h Lepomis macrochirus mg/L	500: 48 h Daphnia magna mg/L EC50

		LC50	
Carbon black			5600: 24 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Chemical Name	Partition coefficient
Lactam	-0.71
Diethylene glycol monomethyl ether	-0.682

12.4. Mobility in soil**Mobility in soil**

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. 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

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

15.1. 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

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical Name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Diethylene glycol monomethyl ether - 111-77-3	54.	

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories

Component	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Lactam (1 - 10)	X	X	X	X	X	X	X	X
Black Dye (1 - 5)	X	X	X	X	X	X	X	X
Diethylene glycol monomethyl ether 111-77-3 (1 - 5)	X	X	X	X	X	X	X	X
Carbon black 1333-86-4 (1 - 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

15.2. Chemical safety assessment

No information available

Section 16: OTHER INFORMATION**Full text of H-Statements referred to under section 3**

H361d - Suspected of damaging the unborn child

H319 - Causes serious eye irritation

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

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

Issuing Date 21-Jul-2016

Revision date 10-Apr-2015

Reason for revision No information available.

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

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