

MATERIAL SAFETY DATA SHEET

IDENTIFICATION OF THE SUBSTANCE / PREPARATION, REVISION NUMBER AND DATE

Product Name : 295 D-C Black Ink

Product Code : C/122/***/***

Revision No : B

COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS (nl - not listed in CHIP)

Chemical Name	%	CAS Number	EEC No	Hazard Symbol	Risk Phrases
Lactic Acid Ethyl Ester	55 - 70	687-47-8	211-694-1	St Andrews Cross	R41
Cyclohexanone	20 - 30	108-94-1	200-631-1	St Andrews Cross	R10, R20
Metal Complex Dye	>10	-	-	N	R51/53

R10 = Flammable; R20 = Harmful by inhalation; R41 = Risk of serious damage to eyes; R51/53 = Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

The remaining ingredients, do not present a health hazard within the meaning of the EC/ CHIP2 regulations.

HAZARDOUS IDENTIFICATION

Classification (CHIP) : Flammable and harmful

Main Health Hazards : Not expected to present any hazards to health under normal conditions of anticipated use.

FIRST AID

Inhalation : Move casualty to fresh air immediately. If there is respiratory distress, give oxygen and seek medical attention.

Skin Contact : Wash affected area with soap and water

Eye Contact : Rinse immediately with copious amounts of water. If redness or soreness persists, seek medical advice.

Ingestion : DO NOT induce vomiting. Encourage the casualty to drink water to dilute in stomach. Avoid alcoholic drinks as this will enhance toxic effects. Seek medical advice.

Do not use :

FIRE FIGHTING MEASURES

Flammability : Flammable

Combustion products : Oxides of Carbon

Extinguishing media : Water spray, dry powder, carbon dioxide or vaporising liquids.

Do not use : Water Jet.

Measures :

ACCIDENTAL RELEASE MEASURE

Shut off all sources of ignition and wear protective clothing. Mop or soak up small spills onto paper. Absorb large spills with inert material such as sand and remove to a safe place for disposal. Flush contaminated area with plenty of water.

HANDLING AND STORAGE

Handling : Avoid contact with skin and eyes. Avoid inhaling vapour.

Fire Prevention : Keep away from all sources of ignition. No smoking

Storage : Normal cool warehouse conditions. Keep in closed container.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection : Keep work area well ventilated.

Eye and Skin protection : Wear safety glasses and gloves if splashing is likely.

EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

OCCUPATIONAL EXPOSURE LIMITS :

Substance listed in EH40/92	Long term (8Hrs)		Short term (10min)	
	ppm	mg/m ³	ppm	mg/m ³
Lactic Acid Ethyl Ester	Not assigned by HSE (1) or ACGIH (2)			
Cyclohexanone	25	100	100	400

PHYSICAL AND CHEMICAL PROPERTIES (n.d.a = No data available)

Form : Coloured liquid.	pH : Not applicable	Boiling Point : ~ 154°C
Flashpoint : ~53°C	Melting Point : n.d.a.	
Vapour Pressure : ~ 2.2 mm Hg	Vapour Density : ~ 3.8 (Air = 1)	
Solubility in Water : Partially soluble in water	Density : ~1.0 gm/cm ³	
Autoignition Point : 405°C.	Explosive Limits: Lower : 1.8% upper : 12.0%	

STABILITY AND REACTIVITY

Chemical reactivity : None known.

Decomposition products : None.

Materials / conditions to avoid : Avoid all sources of heat and ignition.

TOXICOLOGICAL INFORMATION

Acute toxicity :

Lactic Acid Ethyl Ester: LD₅₀ /oral/rat > 5000mg/Kg; Cyclohexanone: LD₅₀ /oral/rat 1620mg/Kg**ECOLOGICAL INFORMATION**Lactic Acid Ethyl Ester: Readily biodegradable; Bioaccumulation unlikely, hydrolyses in presence of water, acids, bases

EC50/48h/Daphnia = 683mg/l

LC50/48h/Fish = 320mg/l

EC50/Algae = 2200mg/l

Cyclohexanone: Practically non-toxic to living resources LC50(96hr.) = 100-1000mg/l; No evidence of bioaccumulation or tainting of seafood**DISPOSAL CONSIDERATIONS**

Consult Local Authorities for approved method of disposal.

TRANSPORT REGULATIONS

Proper shipping name : Printing Ink, Flammable

UN Number : UN1210

IMDG code :

ICAO/IATA class : 3

Marine Pollutant :

Packing group : III

IMDG class : 3.2

RID/ADR : ADR Item (5b)

Hazard warning sign : Flammable Liquid

REGULATORY INFORMATIONCHIP labelling -

St Andrews Cross

Symbol :

Risk Phrases : R10, R20, R41

Hazard : Flammable & Harmful Contains : Lactic Acid Ethyl Ester &

Cyclohexanone

Safety phrases : S16, S23

Other suggested labelling : R10 = Flammable ; R20 = Harmful by inhalation; R41 = Risk of serious damage to eyes

S16 = Keep away from sources of ignition - no smoking; S23 = Do not breath fumes

OTHER INFORMATION

This safety data sheet has been updated to comply with CHIP regulations. The information is based solely on the data provided by the suppliers of the materials used and/or recognised technical sources, not on the mixture itself and is believed to be correct as of this date. No warranty is expressed or implied regarding the accuracy of the data.

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