

CODD. 1090/2334

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Creation Date : Apr. 19, 2001

Revision Date : May. 19, 2006

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: UB-200(08) Black [uni-ball VISION ELITE]

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 File No. : 066105A Rev. 2.5.02.04

2. COMPOSITION/INFORMATION ON INGREDIENTS

The chemical product is a substance or a preparation : Preparation

Chemical nature: Component parts : Ink

Chemical or generic name	CAS No.	TSCA	EINECSNo.	Concentration range (wt%)
Water	7732-18-5	Registered	2317912	50- 80
Ethylene glycol	107-21-1	Registered	2034733	10- 30
Resins	Registered	Registered	Polymer	10- 30
Carbon Black	1333-86-4	Registered	2156099	< 10
Additive	Registered	Registered	Registered	< 10

Other parts : Other parts are excluded from 'chemical substances'.

3. HAZARDS IDENTIFICATION

Most important hazards : Not available.

Specific hazards : Information of components.

<Ethylene glycol>

MAJOR HEALTH HAZARDS: respiratory tract irritation, skin irritation, eye irritation, central nervous system depression, nerve damage, kidney damage

<Carbon Black>

MAJOR HEALTH HAZARDS: suspect cancer hazard (in animals)

PHYSICAL HAZARDS: Dust/air mixtures may ignite or explode.

4. FIRST-AID MEASURES

Inhalation:

Not applicable.

(Due to its low vapor pressure. Inhalation is unlikely at room temperature.)

Skin contact:

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Eye contact:

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

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Ingestion:

If swallowed, seek medical advice, and show the MSDS to the physician then.
 [Ink quantity of refill(UBR-90(08)) : about 1.6g]

5. FIRE-FIGHTING MEASURES

Fire and explosion measures : Slight fire hazard.

Extinguishing media:

Suitable : regular dry chemical, carbon dioxide, water, regular foam.
 Large fires : Use regular foam or flood with fine water spray.
 Fire fighting : The Products is no flammable.
 Use extinguishing agents appropriate for surrounding fire.
 Avoid inhalation of material or combustion by-products.
 Stay upwind and keep out of low areas.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Not available.
 Environmental precautions : Do not wash away into shower or water way.
 Methods for cleaning up : Wipe off by dry cloth and wash with water.
 : In accordance with national, state and local regulations.

7. HANDLING AND STORAGE

Store and handle in accordance with all current regulations and standards.
 Keep separated from incompatible substances.

Handling:

Technical measures : Don't swallow ink.
 : Recap after use.
 : Don't shake.
 : Keep out of the reach of children.
 : Avoid contact with skin and eyes.

Precautions

: Not available.

Safe handling advice

: Not available.

Storage:

Technical measures : Keep away from oxidizing materials, ignition sources and high temperature.

Storage condition

: Avoid direct sunlight.
 : Do not leave the products in high temperature space.
 : Recommended temperature: 0-30 C.

Incompatible products

: (Information of components.)
 oxidizing materials, bases, acids, reducing agents, metals
 strong acids, alkalies, oxidizers, oxidizing materials,
 reducing agents
 oxidizing materials, halogens

Ethylene glycol
 Resin

Carbon Black

Packaging materials : Not applicable.

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8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	3.5mg/m ³	Carbon Black
ACGIH	100mg/m ³ ceiling (particulate)(acrosol)	Ethylene glycol
	3.5mg/m ³ (total dust) TWA	Carbon Black
	15mg/m ³ (Total dust)	Additive
EC	52mg/m ³ (20ppm) TWA,	Ethylene glycol
	104mg/m ³ (40ppm) STEL(skin)	
	3.5mg/m ³	Carbon Black

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

Physical state and form	: Low viscous liquid.
Colour	: Black.
Odour	: None odour.
pH	: about 7.5
Boiling point	: Not available. [Water/ 100 C]
Melting point	: <-10 C
Flash point	: Not applicable. [Ethylene glycol/ 111 C(CC)]
Autoignition temperature	: Not applicable. [Ethylene glycol/ 398 C]
Explosion limits	: Not applicable. [Lower flammable limit / 3.2% , Upper flammable limit / 15.3% <Ethylene glycol>]
Density	: about 1.1 / 25 C
Vapour density (air=1)	: Not available. [Ethylene glycol/ 2.1]
Solubility in water	: Soluble.
Evaporation rate	: Not available.
Volatile	: 69-72%

10. STABILITY AND REACTIVITY

Stability : Stability.

Hazardous reactions : Will not occur.

Conditions to avoid : Avoid heat, flames, sparks and other sources of ignition.
Avoid contact with incompatible materials.

Materials to avoid : (Information of components.)

oxidizing materials, bases, acids, reducing agents, metals	Ethylene glycol
strong acids, alkalies, oxidizers, oxidizing materials,	Resin
reducing agents	
oxidizing materials, halogens	Carbon Black

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
oxides of nitrogen.	Resin
miscellaneous decomposition products.	Additive

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11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	1650mg/kg-Cat, 4700mg/kg-Rat 1040mg/kg-Rabbit, >40000mg/kg-Mouse >8000mg/kg-Rat	Ethylene glycol Resin Carbon Black
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Inhalation LC50	Not available.	
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Skin LD50	9530uL/kg-Rabbit	Ethylene glycol
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Local effects	Irritant:inhalation, skin, eye Irritant:inhalation, skin	Ethylene glycol Carbon Black
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Chronic toxicity and long term toxicity

The substance may have effects on the central nervous system, resulting in abnormal eye movements (nystagmus).		Ethylene glycol
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Respiratory disorders.		Carbon Black
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Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation,cough irritation,pneumonitis irritation	Ethylene glycol Resin Carbon Black / Additive
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Skin contact	irritation,dry irritation,sensitization irritation	Ethylene glycol Resin Carbon Black / Additive
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Eye contact	irritation,redness irritation mechanical irritation, discoloration of lids	Ethylene glycol Resin / Additive Carbon Black
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Ingestion	nausea,vomiting diarrhea,pneumonitis	Ethylene glycol Resin
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Specific effects	IARC Group 3 IARC Group 2B	Resin Carbon Black
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12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATIONS

Waste from residues : Disposal in accordance with all current regulations and standards.

Contaminated packaging : Not applicable.

14. TRANSPORT INFORMATION

HS Code : 960810

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15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Ethylene glycol / Carbon Black

EU labeling

25%<=Xn;R22 : Ethylene glycol

R22 : Harmful if swallowed.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : Ethylene glycol / Carbon Black

Hazard and safety information

Products are manufactured in accordance with European regulation EN71 part 3

Products are manufactured in accordance with ELV directive of EU.

16. OTHER INFORMATION

This sheet completes the technical sheet of use but it doesn't replace it.

The information contained in this sheet are based knowledge of the products at the data : (May 19, 2006). They are given quite sincerely.

Moreover the attention of the users is drawn on the risks possibly taken, when a product is used for other utilization than these which it is intended.