

# Safety data sheet for chemical products

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: UMN-207 Black [ uni-ball Signo 207 ]

Creation Date : August 18, 2003  
 Revision Date : April 17, 2006  
 File No. : 068170A Rev. 2.5.01.04

## 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
Diethylene glycol	111-46-6	Registered	2038722	10- 30
Additives	Registered	Registered	Polymer Registered	10- 30
Carbon Black	1333-86-4	Registered	2156099	< 10
Ethylene glycol	107-21-1	Registered	2034733	< 10

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

## 3. HAZARDS IDENTIFICATION

Most important hazards : Not available.

Specific hazards : Information of components.

<Diethylene glycol>

MAJOR HEALTH HAZARDS: central nervous system depression, 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.

2/5

Creation Date : August 18, 2003

Revision Date : April 17, 2006

**Ingestion:**

If swallowed, seek medical advice, and show the MSDS to the physician then.

[Ink quantity of refill(UMR-87) : about 1.1g]

**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.  
: 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.)
 

acids, bases, oxidizing materials	Diethylene glycol
strong oxidizers, oxidizing materials	Additive
oxidizing materials, halogens	Carbon Black
oxidizing materials, bases, acids, reducing agents, metals	Ethylene glycol
  - Packaging materials : Not applicable.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	3.5mg/m <sup>3</sup>	Carbon Black
ACGIH	15mg/m <sup>3</sup> (Total dust) 3.5mg/m <sup>3</sup> (total dust) TWA 100mg/m <sup>3</sup> ceiling (particulate)(aerosol)	Additive Carbon Black Ethylene glycol
EC	3.5mg/m <sup>3</sup> 52mg/m <sup>3</sup> (20ppm) TWA(skin),	Carbon Black Ethylene glycol
DFG	44mg/m <sup>3</sup> (10ml/m <sup>3</sup> ) MAK (peak limitation category-II, 2)	Diethylene glycol

Personal protective equipment : Not required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

[ ] : Information of components.

Physical state and form : Liquid.  
 Colour : Black.  
 Odour : None odour.  
 pH : 7.3±0.2  
 Boiling point : Not available. [Water/ 100 C]  
 Melting point : <-10 C  
 Flash point : Not applicable. [Ethylene glycol/ 111 C(CC)]  
 Autoignition temperature : Not applicable. [Diethylene glycol/ 224 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 : 80-83%

## 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.)

acids, bases, oxidizing materials	Diethylene glycol
strong oxidizers, oxidizing materials	Additive
oxidizing materials, halogens	Carbon Black
oxidizing materials, bases, acids, reducing agents, metals	Ethylene glycol

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
corrosive acrolein, miscellaneous decomposition products.	Additive
oxides of sulfur.	Carbon Black

## 11. TOXICOLOGICAL INFORMATION

(Information of components)

### Acute toxicity

Ingestion LD50	3300mg/kg-Cat, 7800mg/kg-Guinea pig 334mg/kg-Rat, >8000mg/kg-Rat 1650mg/kg-Cat, 4700mg/kg-Rat	Diethylene glycol  Additive Carbon Black Ethylene glycol
----------------	--	--

Inhalation LC50	Not available.	
-----------------	----------------	--

Skin LD50	11890mg/kg-Rabbit >2000mg/kg-Rat 9530uL/kg-Rabbit	Diethylene glycol Additive Ethylene glycol
-----------	---	--

### Local effects

dehydration	Additive
Irritant:inhalation, skin	Carbon Black
Irritant:inhalation, skin, eye	Ethylene glycol

### Chronic toxicity and long term toxicity

The substance irritates the eyes, the skin and the respiratory tract. The substance may cause effects on the central nervous system, liver, and kidneys. Exposure may result in unconsciousness.

Respiratory disorders.

The substance may have effects on the central nervous system, resulting in abnormal eye movements (nystagmus).

### Signs and Symptoms of overexposure and aggravated by exposure

Inhalation	nausea,cough irritation irritation,cough	Diethylene glycol Additive / Carbon Black Ethylene glycol
Skin contact	irritation,redness irritation,sensitization irritation irritation,dry	Diethylene glycol Additive Carbon Black Ethylene glycol
Eye contact	irritation,redness irritation mechanical irritation, discoloration of lids	Diethylene glycol / Ethylene glycol Additive Carbon Black
Ingestion	nausea,vomiting	Diethylene glycol / Ethylene glycol

Specific effects IARC Group 2B Carbon Black

## 12. ECOLOGICAL INFORMATION

Not available.

## 13. DISPOSAL CONSIDERATIONS

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

Contaminated packaging : Not applicable.

5/5

Creation Date : August 18, 2003

Revision Date : April 17, 2006

---

## 14. TRANSPORT INFORMATION

---

HS Code : 960810

---

## 15. REGULATORY INFORMATION

---

### Regulations (Information of components)

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

### EU labeling

25%&lt;=Xn;R22 : Diethylene glycol / Ethylene glycol

R22 : Harmful if swallowed.

### CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : Carbon Black / Ethylene glycol

### 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 : (April 17, 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.