

1. Designation of Product and Firm

Trade name: EBS Ink-Jet Black Ink
Symbol: TS4A005
Product: printing ink

Manufacturer/ Supplier
Name: EBS Ink-Jet Systeme GmbH
Address: Alte Ziegelei 19-25
D-51588 Nümbrecht Germany
Tel: ++49(0) 2293 9 39-0
Fax: ++49(0) 2293 9 39-3
Emergency Contact: Resuscitation Centre of the Free University of Berlin,
telephone ++49 (0) 30 3035-3466

2. Chemical Composition/Data on Components

Component name	CAS-No.	WE-No.	Contens [%]	Symbol
Acetone	67 – 64 – 1	200-662-2	60-85 %	F; Xi R: 11-36-66-67
Chromium (III) as complex dye	—	—	—	N R: 51-53
Cyclohexanon	108-94-1	203-631-1	—	Xn R: 10-20

3. Hazards identification

Classification : Highly flammable, Irritant

F Highly flammable
Xi Irritant
Xn Harmful
N Dangerous for environment
R 10 Flammable
R 11 Highly flammable
R 20 Harmful by inhalation
R 36 Irritating to eyes
R 51 Toxic to aquatic organisms
R 53 May cause long-term adverse effects in the aquatic environment
R 66 Repeated exposure may cause skin dryness or cracking
R 67 Vapours may cause drowsiness and dizziness
S 2 Keep out of the reach of children
S 9 Keep container in a well -ventilated place
S 16 Keep away from sources of ignition– no smoking
S 25 Avoid contact with eyes
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Chemical name	Effects and symptoms
Acetone	May cause irritation of respiratory tract, coughing, shortness of breath. Irritating to skin. Absorbed through skin. Severely irritating to eyes. Ingestion may cause severe gastric disturbances. Inhalation and ingestion : can cause CNS depression. Can cause dizziness, lightheadedness, headache, nausea and blurred vision. May cause loss of consciousness/ coma and death. Repeated or prolonged contact with may cause dermatitis.

4. First Aid

- General hints:** Carry the victim out of the hazardous area and lay them down. Should respiration become irregular or standstill, give artificial respiration. If the clothing is contaminated with the product, take it off immediately.
- Contact with eyes:** Rinse wide open eyes with running water for a few minutes and consult a doctor.
- Contact with skin:** Take off contaminated clothing and wash affected spots on the skin with soap and a lot of water; do not use any solvents.
- When swallowed:** Make the victim drink a lot of water – consult a doctor immediately.
- When inhaled:** Ensure a supply of fresh air – if the suffering persists, consult a doctor.

5. Fire Precautions

- Fire extinguishing agents:** Fire powder, carbon dioxide (CO₂), foam, sprayed water jet.
- Hazardous decomposition products:** CO, CO₂ in the case of fire.

6. Spill or leak procedures

Personal precautions :	Splash goggles. Full suit. Vapour respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product.
Environmental precautions and cleanup methods :	Flammable liquid, insoluble in water. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with dry earth, sand or noncombustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas ; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate.

7. Handling and storage

- Handling:** Do not eat or drink while handling the product. Handle the product with care and keep clean. Avoid contact with eyes. Do not inhale the vapours. Keep containers in a well ventilated room and away from ignition sources.
- Explosion Hazard:** Do not smoke. Take action to protect it against static electricity.
- Storage:** Protect against heat and exposure to sun radiation in compliance with Inflammable Fluid Regulations. Store in a cool place, otherwise pressure may rise and a risk of disruption occur.

8. Exposure Control and Personal Protection Equipment

Exposure limits according to Hazardous Material Regulations:

Product	TLV [ppm]	TLV [mg/m ³]
Acetone	500	1200
Cyclohexanon	50	500

- Airways protection:** Ensure good ventilation if major amounts of the product are used
- Hand Protection:** Wear solvent resistant gloves of Latex or the like
- Eye Protection:** Wear tight protective glasses

9. Physical and Chemical Properties

State and appearance:	fluid
Colour:	black
Smell:	acetone like
Boiling point:	56°C at 1013 hPa
Vapour pressure:	247 hPa / 20°C
Explosion limits:	lower 2,5%Vol. upper: 13,0 %Vol.
pH:	n.a.
Auto-ignition point:	540°C
Ignition point:	< -20°C
Water solubility:	partially miscible
Organic solvent solubility:	miscible with almost all such solvents

10. Stability and Reactivity

Stability:	The product is stable.
Thermal decomposition:	no decomposition occurs, if it is stored and handled appropriately
Hazardous decomposition products:	CO, CO ₂ in the case of fire
Hazardous reactions:	no hazardous reactions, if it is used for purposes it is designed for

11. Toxicological Data

Chemical name	Toxicological Information
Acetone	LD ₅₀ Oral Rat : 4050 mg/kg LD ₅₀ Oral Mouse : 3000 mg/kg
Cyclohexanon	LD ₅₀ Oral Mouse: 1400 mg/kg

Inhalation:	Vapour concentration exceeding exposure limits can cause dizziness and headache and can affect the central nervous system.
Contact with skin:	Irritation can occur. Longer or repeated contact with skin makes the skin lose natural fat and can cause dermatitis.
Pregnant women:	should avoid any contact with the product.

12. Environmental Data

Poses a hazard to water if major amounts infiltrate into ground or surface water. Do not allow it to get into a sewerage system; an explosion hazard can occur.

13. Waste disposal

Waste code: 08 03 12 – Printing ink waste products which contain dangerous material

The waste code numbers are recommendations based on standard use. For special use or disposal, other waste code numbers may be applicable. Observe respective environment regulations.

14. Transport Details

14.1. By road

Class / Packing Group: 3 / II
UN No.: UN 1210
Transport Description: UN 1210
Sign:



14.2. By sea

Class / Packing Group: 3 / II
UN No.: UN 1210
Transport Description: Printing ink related material, UN 1210
Sign:



14.3. By air

Class / Packing Group: 3 / II
UN No.: UN 1210
Transport Description: Printing ink related material, UN 1210
Sign:

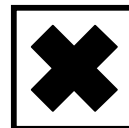


15. Regulations

Symbol:



F
Highly flammable



Xi
Irritant

Contains:

R-Designation:

Acetone
R 36/37 Irritating to eyes and respiratory system
R 52 Harmful to aquatic organisms
R 53 May cause long-term adverse effects in the aquatic environment
R 66 Repeated exposure may cause skin dryness or cracking
R 67 Vapours may cause drowsiness and dizziness



S-Designation :

S 7	Keep container tightly closed
S 9	Keep container in a well-ventilated place
S 16	Keep away from sources of ignition – no smoking
S 33	Take precautionary measures against static discharges.
S 43	In case of fire use CO ₂ (carbon dioxide) and foam extinguisher.

Class as per Inflammable Fluid Regulations: A I

16.Other data

The data is based on the current state of our knowledge. Nevertheless it should not be considered a promise of Product properties or make grounds for any legal relation.