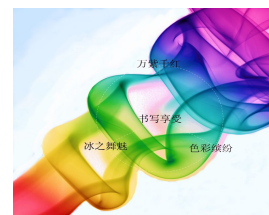


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Safety Data Sheet

Regulation(EC) No 1907/2006,1272/2008

Date:Mar.5th,2015

1. Identification of the Substance/Preparation/Company

Product details

Trade name: Permanent Marking Ink / BLACK

Substance/Mixture: Mixture/preparation

Form:Fluid

Relevant identified uses advised against

Identified uses: Laboratory chemicals, Manufacture of the substance/mixture

Product type: _

Information in case of emergency:

Tel: 86-13761677741

2. Hazards identification



Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

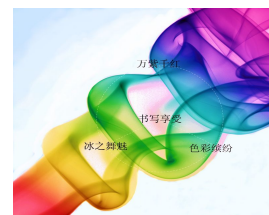
R 11 Highly flammable

Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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3. Composition /information on ingredients

Chemical characterization

Mixture of the following substances , containing non-hazardous substances and colouring agents.

Description : Mixture of substances listed below with nonhazardous additions

Dangerous components		
CAS:64-17-5	ETHANOL	30%
EINECS:200-578-6	Flam. Liq.2, H225 	
CAS:67-63-0	ISOPROPANOL	37%
EINECS:	Flam. Liq.2, H225  	
CAS:111-46-6	DIETHYLENE GLYCOL	30%
EINECS:	Acute Tox, 4,H302 	
CAS:12237-22-8	C.I. Solvent Black 27	3%
EINECS:	 Eye Dam.1, H318;  Acute Tox.4, H312;  Acute Tox.4, H332;	

Additional information :

4. First –aid measures

After inhalation : Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

After skin contact : Wash affected area off with water or shower. Get immediate medical attention.

After eye contact : Flush eyes with generous amounts of water for at least 15 minutes, and get consult a doctor.

After swallowing: If swallowed, do not induce vomiting. Dilute with water or salt water and call a physician immediately

5. Fire –fighting measures

FIRE PERIPHERICAL: Move containers to safety place. If it is unable to move it, cool containers with water spray

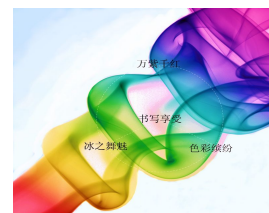
FIRE: Off the fire with dry chemical foams or water spray. Firefighters should be equipped with protective apparatus and never do it under the lee

EXTINGUISHING MEDIA: Chemical foam, dry powder, CO2, water, dry sand

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6. Accidental release measure

Shut off all sources of ignition; No flares, smoking or flames in area

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container with covers for disposal, using no sparking tools and wash off with a plenty of water. Wear a protective clothes and gloves while working and never do it under the lee. Exercise reasonable care and attention not to drain waste water into the river.

7. Handling and storage

HANDLING:

No flares, smoking or flames in area. Avoid spark and contact with strong acid.

Sufficient ventilation should be done in the working zone, should close the container tightly after working.

Avoid to leaking, flooding, scattering and evaporation

Take precautionary measures against static discharge. Wear an electric conductor type clothe and shoes.

Don't handle the containers roughly

STORAGE:

The protective type electrical appliances should be used and appliances should be earthed.

It should be stored in a cool place and be kept in a tightly closed container, protected from physical damage, and away from oxidizing materials and sources of ignition.

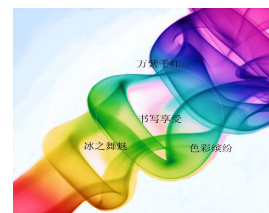
OTHERS: Follow all federal, provincial and local requirements and regulations.

Store in cool , dry conditions in well sealed receptacles.

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8. Exposure controls / personal protection

	<u>Ethanol</u>	propan-2-ol
Managed density	___	400ppm
Permissible density by Japan		
Society for Occupational Health	___	400ppm(980g/m ³)
ACGIH (TLV)	TWA 1000ppm	TWA 400ppm
OSHA (PEL)	air TWA 1000ppm	air TWA 400ppm

ENGINEERING MEASURES

Close the container tightly in case of using in room or doing sufficient ventilation.

Install the safety shower, hand washing apparatus and eyes washable apparatus near to working area.

STORAGE:

Close the container tightly in case of using in room or doing sufficient ventilation.

Install the safety shower, hand washing apparatus and eyes washable apparatus near to working area.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION: NIOSH/MSHA-Approved organic vapor respirator

EYE PROTECTION: Chemical goggles.

HAND, SKIN AND BODY PROTECTION: Gloves, Coveralls, apron, Boots

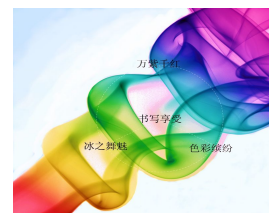
9. Physical and chemical properties

General Information
Form : liquid
Colour : BLACK
Odour : Solvent odor
Change in condition
Melting point /Melting range: N/A
Boiling point /Boiling range: 78 °C
Flash point: 12°C
Self-igniting : product is not selfigniting
Vapour pressure : N/A
Density: Not determined
Solubility in /Miscibility with
Water : Mixed
Viscosity :
Dynamic at 25°C : 7.0±1.5 mPa · s

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10. Stability and reactivity

HAZARDOUS DATA OF SOLVENT	ETHANOL	propan-2-ol
Flash point	19°C(closed)	12°C(closed)
Explosion limit:		
Upper	19	11.8
Lower	3.3	2.0
Ignition Point	371~427°C	399°C
Note) Explosion limit: volume%		

STABILITY AND REACTIVITY: Stable under room temperature.

React to strong acid and may occur fire and explosion.

11. Toxicological information

	ETHANOL	propan-2-ol
ACUTE TOXICITY		
ORAL-Rat LD50	7060mg/kg	5040mg/kg
STIMULUS EFFECTS		
EYE-Rabbit	500mg Heavy	10mg Middle
SKIN-Rabbit	400mg Middle	500mg Slight
TERATOGENICITY	N/A	N/A
CARCINOGENIC	N/A	N/A

CHRONIC TOXICITY: Repetition or contact on the prolonged skin may start dermatitis.

12. Ecological information

BIODEGRADABILITY: N/A

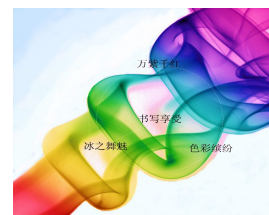
FISH TOXICITY: N/A

ACCUMULATION NATURE: Ethanol ; Octanol/Water distribution coefficient log Pow: 0.32

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13. Disposal considerations

Treatment should be done in accordance with the method noted on Chapter 7.

When discarding, in accordance with an industrial-waste-treatment standard, it destroys by fire. In outsourcing, it specifies that it is waste oil (flammable), and it commissions it to the industrial waste treatment company who obtained permission of authorities.

14. Transport information

On the occasion of transportation, it confirms that there is no leak in a container and package, it loads that there may not be a fall, drop, and damage, and collapse-of-cargo-piles prevention is ensured.

In addition, the place set to statutes, such as labor security and hygiene law and Fire Service Law, permission is followed.

15. Regulatory information

Labeling according to EU guidelines:

The preparation is classified Highly Flammable according European Directive about hazardous preparations 99/45/EC with his adaptations".

Code letter and hazard designation of product:



16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Others: Containers carry a tactile warning of danger

National regulations: