Material Safety Data Sheet

Date: Jul. 24. 2014

1. Product Identification

Product name	Water Pigment Ink
	(TWP-W)
Manufacturer	VISCOSMO Co.
Address	4F, #1589-6, Chungryongdong, Kwanakgu, Seoul, - KOREA Phone: +82 2 875 1770

2. Composition/Information on Ingredients

Ingredient	CAS No	%
Pigment	-	30-40%
Diethylene glycol	111-46-6	10-15%
Ethylene Glycol	107-21-1	15-25%
Water	7732-18-5	10-20%

3. Hazards Identification

3.1 Emergency Overview

Harmful if swallowed, inhaled or absorbed through skin.

Causes irritation to eyes and respiratory tract.

Health Rating : 1 Reactivity Rating : 0

Flammability: 0 Remaining components unknown, or <1%

3.2 Potential Health Effects

Inhalation: Inhalation of vapors may cause irritation, headache, dizziness, fatigue,

nausea, vomiting, and loss of appetite. Weakness, incoordination

and tremors may occur.

Ingestion: Swallowing may cause nausea, vomiting, abdominal pain, breathing

difficulties, weakness. Liver and kidney damage may result from swallowing

large quantities of the material.

Skin Contact: May be absorbed through the skin with possible systemic effects.

Eye Contact: May cause irritation, redness and pain.

4. First Aid Measures

Inhalation: Not applicable.

Ingestion: Induce vomiting immediately as directed by medical personnel.

Skin Contact: Immediately flush skin with plenty of soap and water for at least 15minutes while

removing contaminated clothing and shoes. Wash clothing before reuse.

Eye Contact : Flush eyes thoughly with water, seek medical attention of irritation persist.

5. Fire-Fighting Measures

Extinguishing Media:

Water fog or fine spray. Carbon dioxide. Dry chemical fire extinguishers.

Foam. Alcohol resistant foams are preferred. General purpose synthetic foams or protein foams may function, but will be less effective.

Special procedures:

Wear self-contained breathing apparatus and protective clothing

Unsual Fire and Expolsion Hazards:

None Known.

6. Accidental Release Measures

Personal Precautions:

Respiratory protection, hand protection

Environmental Precautions:

Do not let product enter drains.

7. Handling and Storage

Handling:

Wash thoroughly after handling.

Avoid contact with eyes, skin, and clothing. Keep container tightly closed.

Storage:

Store in a tightly closed container.

Keep container closed.

8. Exposure Controls/Personal Protection

Exposure Guidelines:

A "skin" notation following the exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by by contact with vapors or by direct skin contact.

Engineering Controls:

Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Personal Protective Equipment:

Respiratory Protection: For Most conditions no respiratory protection should be needed; however,

if discomfort is experienced, use an approved air-purifying respirator.

In misty atmospheres, use an approved particulate respirator.

For emergency conditions, use and approved positive-pressure self-contained

breathing apparatus.

Protective Clothing: Use protective clothing chemically resistant to this material. Selection of

specific items such as face shield, gloves, boots, apron, or full body-suit

will depend on operation.

Remove contaminated clothing immediately, wash shin area with soap and

water, and launder clothing before reuse or dispose of properly.

Hand/Skin Protection: Wear gloves made butyl rubber, Neoprene...

Eye/Face Protection: Use safety glasses. If exposure causes eye discomfort, use a full-face respirator.

9. Physical and Chemical Properties

Appearance/Odor: Colored liquid, Fruity odor

Boiling Point, ℃ : 115 ℃ Vapor Pressure mmHg : 0.001 mmHg

Melting Point, $^{\circ}$ C : -10 $^{\circ}$ C Specific Gravity : 1.0

Flash Point, $^{\circ}$ C : non Water Solubility : Complete Vapor Density (Air=1) : Evaporation Rate : < Butyl Acetate

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Conditions to Avoid : Flammable vapors can be released at ambient temperatures. **Materials to Avoid :** Avoid contact with metals such as :Zinc, Magnesium, Aluminum,

Avoid contact with oxidizing materials

11. Toxicological Information

Toxicological Data: Not data available

Irritation: Skin: Prolonged contact is essentially nonirritating to skin.

Eyes: May cause slight eye irritation. Effects may include: Discomfort. Redness.

Inhalation : Excessive exposure may cause irritation to upper respiratory tract

12. Ecological Information

Environmental Fate:

When released into the soil, this material may evaporate to a moderate extent,

may leach into groundwater, may biodegrade to a moderate extent.

This material is harmful to aquatic organisms.

13. Disposal Considerations

Any disposal practice must be in compliance with all local and national laws and regulations.

Disposal:

Incinerate under controlled conditions in accordance with all local and national laws and regulations.

Contaminated Packaging:

Empty containers can only be disposed of when the remaining product adhering to the container walls has been removed. Remove all labels.

14. Transport Information

Any transportation's practice must be in compliance with local, state or federal laws and regulations. Not classified as hazardous under transport regulations

15. Regulatory Information

R-Codes

Harmful by inhalation and in contact with skin and if swallowed.

S-Codes

46 If swallowed, seek medical advice immediately and show this container of label.

16. Other Information

The information herein is given in good faith, but no warranty express or implied, is made. Recipients of our product must take responsibility for observing existing laws and regulations.