MATERIAL SAFETY DATA SHEET

SECTION 1. Identification

- 1.1 Product name : Poster color White 250ml
- 1.2 Recommended use of the chemical and restrictions on use : Marking, Painting
- 1.3 Supplier's details
 - Name : monami co.,Ltd
 - Address : #854-2, Dongcheon-dong, Suji-gu, Yongin-si, Gyeonggi-do, Korea
 - Phone number : 82-31-270-5278

SECTION 2. Hazard identification

2.1 Classification of the substance or mixture

Not classified as hazardous (Not a hazardous mixture)

2.2 Label elements

Hazard pictograms : None Signal word : None Hazard statements : None Precautionary statements : Prevention None Response None Storage None

Disposal None

2.3 Other hazards which do not result in classification : Health 0, Flammability 0, instability 0 (NEFA)

SECTION 3. Composition/information on ingredients

Ingredient name	CAS No.
Diaments	
Pigments	-
Calcium carbonate	471-34-1
Titanium dioxide	13463-67-7
Glycerin	56-81-5
Arabic gum	9000-01-5
Water	7732-18-5

SECTION 4. First-aid measures

4.1 Description of first aid measures

Inhalation : Move exposed person to fresh air.

In case of indisposition, seek medical advice.

Ingestion : Symptomatic treatment.

In case of indisposition, seek medical advice.

Skin contact : Wash with water.

Eye contact : Rinse with plenty of water.

In case of irritation, seek medical advice

- 4.2 Most important symptoms/effects, acute and delayed : in section 11
- 4.3 Indication of immediate medical attention and special treatment needed, if necessary : No data available

SECTION 5. Fire-fighting measures

- 5.1 Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
- 5.2 Specific hazards arising from the chemical : Non flammable, non combustible substanc
- 5.3 Special protective actions for fire-fighters :

Fire-fighters should wear appropriate protective equipment and self contained breathing apparatus

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures :

Eliminate all ignition sources. Stop leak if safe to do so. Avoid breathing vapour or mist.

6.2 Environmental precautions :

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods and materials for containment and cleaning up :

Small spill -Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

Large spill - Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas.

SECTION 7. Handling and storage

7.1 Precautions for safe handling : Do not breathe vapour or mist. Avoid contact with eyes, skin and clothing.

7.2 Conditions for safe storage, including any incompatibilities :

Keep in the original container. Store under dry conditions. Do not store with acids.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters (Exposure limit values in the air of the work place or biological limit value) : No data available

- 8.2 Appropriate engineering controls : Use with adequate ventilation
- 8.3 Individual protection measures, such as personal protective equipment (PPE)
 - Eye protection : Not applicable
 - Skin protection : Not applicable
 - Body protection : Not applicable
 - Respiratory protection : Not applicable

SECTION 9. Physical and chemical properties

- 9.1 Appearance (physical state, colour etc) : Colored liquid
- 9.2 Odour : Odourless
- 9.3 Odour threshold : No data available
- 9.4 pH : No data available
- 9.5 Melting point/freezing point : < -5 °C
- 9.6 Initial boiling point and boiling range : No data available
- 9.7 Flash point : > 110 $^{\circ}$ C

- 9.8 Evaporation rate : No data available
- 9.9 Flammability (solid, gas) : No data available
- 9.10 Upper/lower flammability or explosive limits : No data available
- 9.11 Vapour pressure : No data available
- 9.12 Vapour density : No data available
- 9.13 Relative density : No data available
- 9.14 Solubility (ies) : soluble in water
- 9.15 Partition coefficient n-octanol/water : No data available
- 9.16 Auto-ignition temperature : No data available
- 9.17 Decomposition temperature : No data available
- 9.18 Viscosity : No data available

SECTION 10. Stability and reactivity

- 10.1 Reactivity : This material is considered to be non reactive under normal use conditions
- 10.2 Chemical stability : stable
- 10.3 Possibility of hazardous reactions : No data available
- 10.4 Conditions to avoid : heat, sparks, open flames, hot surfaces
- 10.5 Incompatible materials : Avoid contact with acids
- 10.6 Hazardous decomposition products :

Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11. Toxicological information

11.1 Information on the likely routes of exposure : No data available

11.2 Information on toxicological effects

Acute toxicity (Oral) : LD50 > 10000mg/kg Rat (Titanium dioxide), LD 6450mg/kg Rat (Calcium carbonate), LD50 27200mg/kg Rat (Glycerin), LD50 > 16000mg/kg Rat (Arabic gum), LD50 90000mg/kg Rat (Water) Acute toxicity (Dermal) : LD50 > 10000mg/kg Rat (Titanium dioxide), LD50 > 10000 mg/kg Rat (Glycerin) Acute toxicity (Inhalation) : No data available Skin corrosion/irritation : No data available Serious eye damage/irritation : Non irritating Respiratory or skin sensitization : Not sensitizing Germ cell mutagenicity : No data available Carcinogenicity : No data available Reproductive toxicity : No data available Specific target organ toxicity-single exposure : No data available Specific target organ toxicity-repeated exposure : No data available Aspiration hazard : No data available

SECTION 12. Ecological information

12.1 Toxicity : fish - LC50 > 56000mg/l 96hr (Calcium carbonate), LC50 5000mg/l 24hr Carassius auratus (Glycerin)

- 12.2 Persistence and degradability : No data available
- 12.3 Bioaccumulative potential : No data available
- 12.4 Mobility in soil : No data available
- 12.5 Other adverse effects : No data available

SECTION 13. Disposal considerations

13.1 Disposal methods

Dispose of contents/container to in accordance with local/regional/national/international regulation

SECTION 14. Transport information

14.1 UN Number : Not regulated (Not dangerous for transport)

- 14.2 UN Proper Shipping Name : Not dangerous goods
- 14.3 Transport hazard classes : Not regulated (Not dangerous for transport)
- 14.4 Packing group, if applicable : Not regulated (Not dangerous for transport)
- 14.5 Environmental hazards : Not regulated (Not dangerous for transport)
- 14.6 Special precautions for user : Not regulated (Not dangerous for transport)

SECTION 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture : Not classified as hazardous

SECTION 16. Other information

16.1 Reference : Korea occupational safety and health agency (KOSHA)

National Chemicals Information System (NCIS)

Korea dangerous material inventory management system

HSDB, IUCLID, ECB-ESIS, ECOTOX, IATC, ACGIH, ICSC, SIDS, SIAM

16.2 Number of revision and Date of revision : 2014-12-19 (ver.2)