

NO.BY50-110908

Material Safety Data Sheet
<<BY-50 CERAMIC WATER SOLUTION >>

(Material of final processing)

BAN-YU CO.,LTD.

Material Safety Data Sheet

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name : BY-50 Ceramic Water Solution
Manufacturer's Name : BAN-YU CO., LTD.
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2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE : MIXTURE

CHEMICAL NAME : Inorganic polymerized acids and their hydrated ions.

Anti-bacterial / anti-mould chemicals.

INGREDIENT	Wt%
Water	99.0 wt% or over
Aqueous alkaline solution of soluble SiO ₂	< 0.5 wt%
P ₂ O ₅	< 0.5 wt%
Al ₂ O ₃	< 0.5 wt%
TiO ₂	< 0.5 wt%
Poly hexamethylene biguanide and 2-Phridinothiol-1-oxide sodium salt as anti-mould agent	< 0.05 wt%

3. HAZARDS IDENTIFICATION

CLASS NAME OF HAZARDS CHEMICALS: Irritating action to eye, skin and mucous membrane due to alkaline solution

4. FIRST-AID MEASURES

EYE CONTACT: Immediately flush eyes with large amounts of water for at least 15 minutes. Get medical attention if irritation persists.

SKIN CONTACT : Wash affected areas thoroughly with water and remove contaminated clothing promptly. Get medical attention if irritation persists.

INHALATION: Remove to fresh air. Get medical attention if cough or other symptoms develop.

INGESTION: If swallowed, rinse mouth with water and induce vomiting. Get medical attention.

5. FIRE-AID MEASURES

EXTINGUISHING MEDIA: Unnecessary because of incombustible solution

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid contact with skin, eyes and clothing.

CLEAN UP METHODS: Soak up with inert absorbent material. Sweep up and shovel into suitable disposal.

7. HANDLING & STORAGE

STORAGE TEMPERATURE (min/max): 5~40°C

HANDLING: Do not flush to sewer or waterway.

STORAGE: Store in cool and dry location. Keep container upright and tightly closed when not in used.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Dust repellent mask is necessary when mist coating method is adopted. When dip coating, it is unnecessary.

EYE PROTECTION: Safety glass or face shield

HAND, SKIN AND BODY PROTECTION: Impervious clothing, chemical-resistant gloves, apron and impervious boots.

9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: Transparent aqueous solution

VAPORIZATION: Slightly vaporize due to water vapor pressure

DENSITY: 1~1.1g/cc(20°C)

SOLUBILITY: Soluble in water

10. PHYSICAL HAZARDS (STABILITY & REACTIVITY)

STABILITY: This product is considered a stable material under normal condition.

INCOMPATIBILITY: Hydrofluoric acid (Intense reaction to produce SiF₄ toxic gas)

CORROSIVE PROPERTIES: React slightly with metallic compound because of alkaline property of this product.

11. TOXICOLOGICAL INFORMATION

IRRITATING PROPERTY: Repetitive or prolonged period of contact with eyes or skins may make you irritated.

ACUTE ORAL TOXICITY: LD₅₀ is larger than 2,000mg/kg (rat) (Japan Food Research Laboratory : JFRL)

MUTAGENESITY: Negative (JFRL)

IRRITATION FOR EYE AND MUCOUS MEMBRANE: No difference (JFRL)

PRIMARY IRRITATION FOR SKIN: No difference (JFRL)

SENSITIZING PROPERTY FOR SKIN: No data

CYTOTOXICITY: No data

TOTAL CHLORINITY: Non-halogen

As for chemicals added for anti-bacterial and anti-mould purpose, following items had been tested by JFRL. The results are as follows:

Acute oral toxicity: LD50=20,000mg/kg and over (rat)

Mutagenicity: Negative (JFRL)

Irritation for eye and mucous membrane: No difference (JFRL)

Primary irritation for skin: No difference (JFRL)

Sensitizing property for skin: No difference (JFRL)

Cytotoxicity: Harmless (JFRL)

Total chlorinity: Non-halogen (JFRL)

12. ECOLOGICAL INFORMATION HANDLING & STORAGE

BIODEGRADABILITY: No data

BIOACCUMULATION: No data

FISH TOXICITY: No data

13. DISPOSAL INFORMATION

WASTE DISPOSAL METHOD: Consider disposal via licensed waste company.

Scrap may be incinerated under properly controlled condition. Follow all Regulations in your country.

14. TRANSPORT INFORMATION

Ensure no leak of aqueous solution from container. Keep container upright during transportation.

15. REGULATORY INFORMATION

Ensure this product in compliance with federal requirements and ensure conformity to Local Regulation.

16. OTHER INFORMATION

To the best of our knowledge, the information contained herein is based on data considered to be accurate. While the information is believed to be reliable, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Since the use of this information and the conditions and use of this product are controlled by the user, it is the user's obligation to determine the conditions of safe use of the product.