MATERIAL SAFETY DATA SHEET

IBM® Homo Polymer Emulsion

Overview

The degree of polymerization of poly (vinyl acetate) is typically 100 to 5000, while its ester groups are sensitive to base hydrolysis and slowly convert PVAc into polyvinyl alcohol and acetic acid. PVAc emulsions such as Glue-All contain polyvinyl alcohol as a protective colloid. In alkaline conditions, boron compounds such as boric acid or borax cause the polyvinyl alcohol to cross-link, forming testifying precipitates or toys, such as Slime and Flabbier.

A number of microorganisms can degrade polyvinyl acetate. Most commonly, damage is caused by filamentous fungi—however algae, yeasts, lichens, and bacteria can also degrade polyvinyl acetate.

• PVA is a vinyl polymer. Polyvinyl acetate is prepared by the polymerization of vinyl acetate monomer (free radical vinyl polymerization of the monomer vinyl acetate).

• Eye or skin contact with these products can result in slight irritation. Inhalation of vapor or mist can cause headache, nausea, and irritation of nose, throat, and lungs.

• These products are stable under recommended storage and normal use conditions. They do not undergo any known hazardous reactions.

Description

As an emulsion in water, PVAc emulsions are used as adhesives for porous materials, particularly for wood, paper, and cloth, and as a consolidator for porous building stone, in particular sandstone.

Uses

• Wood glue, PVAc is known as "white glue" and the yellow as "carpenter's glue".

• Paper adhesive during paper packaging conversion in bookbinding and book arts, due to its flexible strong bond and non-acidic nature (unlike many other polymers).

Examples of uses for these emulsions include:

– **Architectural binder coatings**
– **Cement mortar and concrete additives**
– **Wall putty making**
– **Concrete sealing**
– **Roof maintenance coatings**
– **Wood glue and coating applications**

TECHNICAL DATA SHEET

IBM® Homo Polymer Emulsion

Technical Details

Homo Polymer Emulsion is a medium viscosity, Poly vinyl alcohol stabilized, plasticized Homo Polymer Emulsion of Vinyl Acetate. Intended to use as a base for general purpose adhesive. Homo Polymer Emulsion can be used in various adhesive applications as cost-effective base to produce wood / paper adhesives, wall putty and tile adhesive recipes.

SPECIFICATION:

- **Solid Content** : 49 – 51 %
- **Brookfield viscosity Spdl# 7/20 rpm @ 25ºC** : 450 - 750 Poise
- **pH** : 4.0 - 6.0
- **Specific Gravity** : 1.06±0.01
- **Free monomer** : <0.1%
- **MFFT** : 16 ±1°C

Handling & Safety

Homo Polymer Emulsion is water-based material and is non-toxic under normal use conditions.

Storage Condition

Homo Polymer Emulsion should be stored under shade for maximum 6 months at temperature range of 5 – 40°C, should avoid Exposure to direct sunlight for long time as extreme temperatures may affect quality and cause skin formation, since Homo Polymer Emulsion contains biocide for protection during storage, it is also recommended that additional biocide is added to formulated products to get proper protection.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your IBM Technical Representative for more information.

Chemical Registration

Many countries require the registration of chemicals, either imported or produced locally, prior to their commercial use. Violation of these regulations may lead to substantial penalties imposed upon the user, the importer or manufacturer, and/or cessation of supply. It is in your interests to ensure that all chemicals used by you are registered. IBM does not supply unregistered products unless permitted under limited sampling procedures as a precursor to registration.

Product Stewardship

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