

Cationic Slow Setting Asphalt Emulsion (ASPPC 212)

DESCRIPTION

ASPPC 212 is a Cationic Slow Setting (CSS-1/CSS-1H), cold applied fluid asphalt emulsion. Complies with the standard specifications ASTM D2397.

FEATURES

- Excellent adhesion on all kinds of gravel.
- Can be applied easily and rapidly.
- Energy saving as it is used without heating.
- Environmental friendly.
- Have sufficient fluidity to facilitate mixing and coating the aggregate.
- Have good attraction or wetting power for the aggregate surface.
- Low enough viscosity to permit handling and placement.
- No flowing off the aggregate.
- Provides resistance to wash off from rain within two hour after placement.

RECOMMENDED USES

ASPPC 212 is ideal for tack coat, cold mix, seal coat, slurry seal, full depth reclamation (FDR) and cold asphalt mix recycling (CIR).

PRECAUTION FOR SUCCESSFUL PROJECTS

1. COLD ASPHALT MIX/RECYCLING

- As with any project, correct design, normal good construction procedures and proper emulsion handling will give the best results.
- **ASPPC 212** formulated for local aggregates, climate, job conditions and performance requirements to make sure your project will be successful.
- Using of high technology emulsion manufacturing improve the quality of the finished application.
- Permits normal traffic immediately after compaction for cold mix, and within 24 hours for CIR under average curing conditions of temperature and humidity.

2. TACK COAT

- Clean surface to be sprayed and remove any loose material.
- Spray **ASPPC 212** at a specified rate using an asphalt emulsion distributor.
- Spraying must be done uniformly and pressurized.
- **ASPPC 212** gives a dark brown color immediately after being sprayed.
- After breaking color is changed into black in about 30 minutes.
- **ASPPC 212** darkness increases with the final setting time.
- Wearing course can be laid on **ASPPC 212** after the full setting process is occurring (about 2 hrs.).

- The best results of the adhering between the asphaltic layers (core test) using **ASPPC 212** is present after at least 48 hrs. from laying the wearing course.

COVERAGE

1. COLD ASPHALT MIX/RECYCLING

- Percent weight of asphalt emulsion is normally:
 - 7-9 %wt of the aggregate, based on weight of clean graded aggregate in the designed cold mix.
 - 3-5 %wt of the recycled aggregate, based on weight of black aggregate in the designed cold mix.

2. TACK COAT

- About 0.30 - 0.40 kg/m², depending on the nature of the substrate.

SPECIFICATIONS

Physical Properties	Test Methods	Specifications
Viscosity Saybolt Furol at 25°C, sec.	ASTMD 88	20-100
Storage stability, 24 hr, %	ASTMD 6930	1 max
Sieve test, %wt	ASTMD 6933	0.1 max
Cement mixing test, %	ASTM D6935	2.0 max
Particle charge test	ASTMD 244	Positive
pH	ASTM E70	2.0 – 4.0
Distillation test:		
Oil distillate, volume of emulsion, %	ASTMD 6997	----
Residue by distillation, %		57 min
Tests on residue from distillation:		
Penetration, dmm	ASTMD 5	40 - 90 100-250
Ductility, 25°C, cm	ASTM D113	40 min
Solubility in trichloroethylene, % mass	ASTMD2042	97.5 min

HEALTH & SAFETY

- **ASPPC 212** is non-toxic.
- Workers should wear protective masks, gloves and goggles during application.
- No special precautions are needed since it is water based non-flammable material.
- **ASPPC 212** must not be swallowing.
- If swallowed, CALL PHYSICIAN IMMEDIATELY.
- In case of eye contact, open eyelids wide and flush immediately with plenty of water for at least 15 minutes. Get medical advice.

STORAGE

- Store **ASPPC 212** in a dry and shaded area in original packing.
- Store **ASPPC 212** in clean tanks or drums free from any chemical products or impurities, avoiding air contacts, for about four months.
- Gently stir **ASPPC 212** twice every week for at least two hours using a circulating pump.

PRECAUTIONS

- When **ASPPC 212** is in contact with air, an asphaltic skin will be formed on the surface, and this skin must be removed before reusing the product.
- **ASPPC 212** after complete drying not affected by water (re-emulsification not occur).
- Working temperature of **ASPPC 212** is the ambient temperature; in all cases the working temperature not exceeding 50°C.
- Don't use **ASPPC 212** if the temperature during application is less than 5°C.

PACKING

- **ASPPC 212** is supplied in bulk and/or 200 liter steel drums.

DISCLAIMER

This Product Data Sheet summarizes our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this PDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. ASPPC co. does not accept any liability either directly or indirectly for any losses suffered in connection with the use or storage or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.