DA-910/920/930

EVCL Emulsion

Application Non-woven Fabrics and Paper Binder, Paper and Fabric Impregnation Binder, Flocking Binder, Car Sheet and Carpet Back Coating, Adhesive for High Frequency Curing.

Composition Vinyl Chloride-Ethylene Copolymer

Technical Data

Grade	DA-910	DA-920	DA-930
Solid Content (wt%)	49-51	49-51	49-51
Viscosity(cP)*	10-50	10-50	10-50
pH	5-9	5-9	5-9
Tg(^{o}C)	-2~2	18~22	28~32
Stabilization	Surfactant	Surfactant	Surfactant
Cross-linkability	Self Crosslinking	Self Crosslinking	Self Crosslinking
MFFT(^{o}C)	2	30	40
Appearance of dry film	Opaque	Opaque	Opaque

* Brookfield Viscometer, Model LVDV, #1, 60RPM, 25 ^{o}C

Characteristics EVCL emulsions are self crosslinkable copolymers of vinyl chloride and ethylene with amide functionality. From DA-910 to DA-920 to DA-930, due to their increasing content of vinyl chloride, increasing self-quenching effect, but also increasing hardness of the films is observed. Concerning their application, mentioned above, DA-910 is used for fabrics with a desired "soft feeling" while in the range given, DA-930 results in the hardest film and hand feeling.

All products show low surface tack, very good resistance against water, solvent, even alkali, light and general aging. As the films of EVCL offer good heat-sealing properties, the emulsions play an important role in several industrial areas.

Taipei Head Office : 9 th Floor, 301 Songkiang Rd. Taipei, Taiwan, R.O.C TEL: 886-2-25020238 FAX : 886-2-25099619
Malaysia Plant : Plo 18, Tanjung Langsat Industrial Estate, Mukim Sungai Tiram 81700 Pasir Gudang, Johor , Malaysia
TEL : 607-2565800 FAX : 607-2565799

DA-910/920/930

EVCL Emulsion

Compounding

The EVCL emulsions readily accept calcium carbonate, clay, shell or wood flours; additional dispersant agent shall be added when high load of fillers have to be used. For special applications, viscosity can be increased by blending in PVA or HEC as thickeners (Figure 1).Very high viscosity result when polyurethane/ polyacrylic based thickeners are used (Figure 2). Because of the relatively high MFFT of DA-920(30^{o}C) and DA-930(40^{o}C), it is necessary to use a suitable coalescing solvent if film forming has to take place at lower temperatures than those MFFT.

The emulsions being stabilized by anionic surfactants are miscible with all other non- and anionic stabilized emulsions of our DA- series, but trials should always be carried out before mixing them with other polymer dispersions. Dry films may become hazy due to different refractive indices.

EVCL can cross-link without any additives (110~130 ^{o}C, 2~5min). However, at lower temperatures the self-crosslinking effect can be promoted by addition of $AlCl_3$ or weak acids, e.g. citric acid.

Cleaning

Machines, tools and equipments should be immediately cleaned up with warm water.

Packaging

220 kg Iron Drum.

Safety & Storage

In general, EVCL emulsions are considered safe for their intended use. However, since these products contain minor amounts of residual monomer, it is recommended that adequate ventilation is provided in room where EVCL emulsions are handled. Usual protective measures when handling emulsion such as wearing gloves and goggles should be observed. Splashes on the skin or in eyes should be immediately removed by irrigation with clean water.

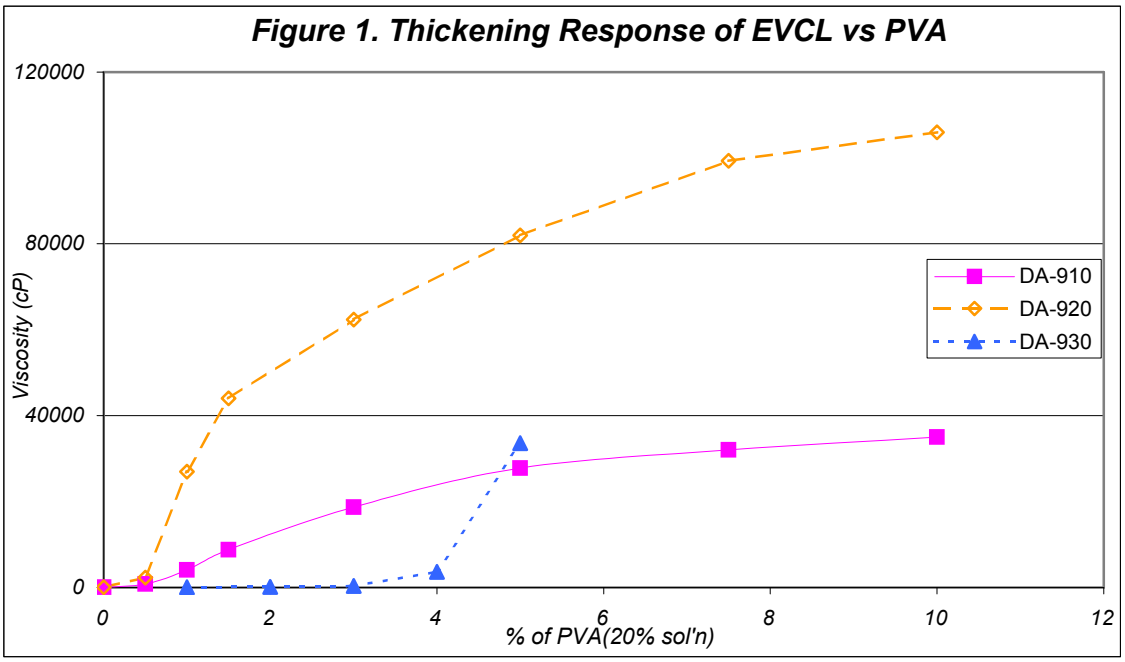
After delivery ex production site the emulsion must be stored in its properly closed original containers in sheltered areas at cool temperatures (5-30 ^{o}C). For maximum shelf life, please refer to the label. Protection against frost is mandatory.

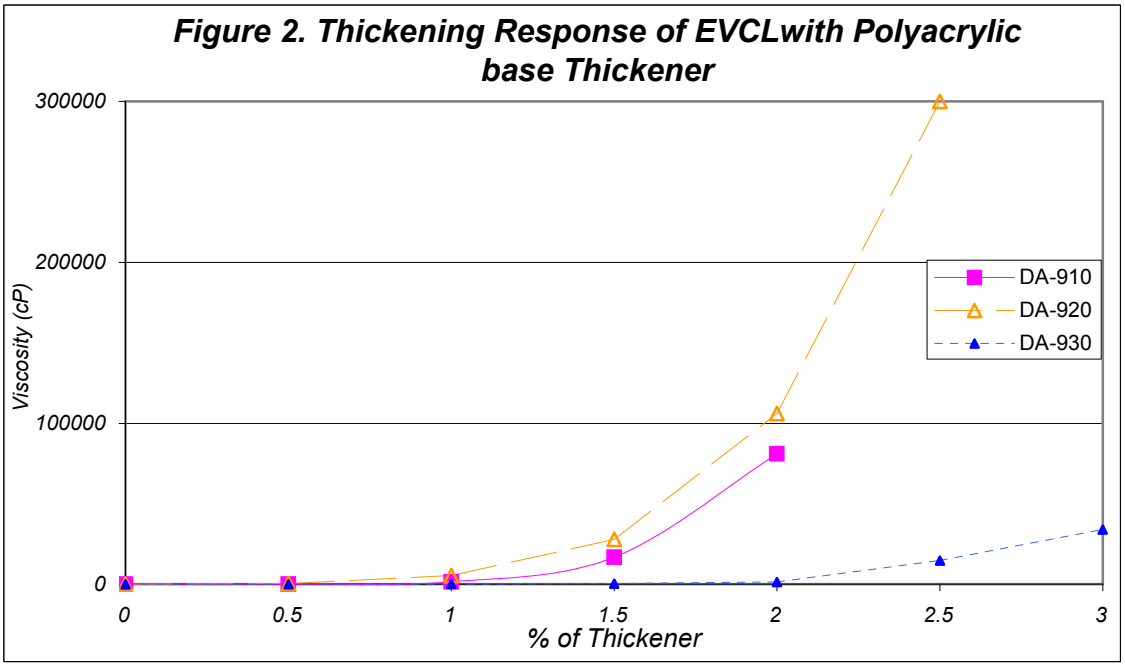
Taipei Head Office : 9 th Floor, 301 Songkiang Rd. Taipei, Taiwan, R.O.C TEL: 886-2-25020238 FAX : 886-2-25099619
Malaysia Plant : Plo 18, Tanjung Langsat Industrial Estate, Mukim Sungai Tiram 81700 Pasir Gudang, Johor , Malaysia
TEL : 607-2565800 FAX : 607-2565799

DA-910/920/930

EVCL Emulsion

Thickening Response





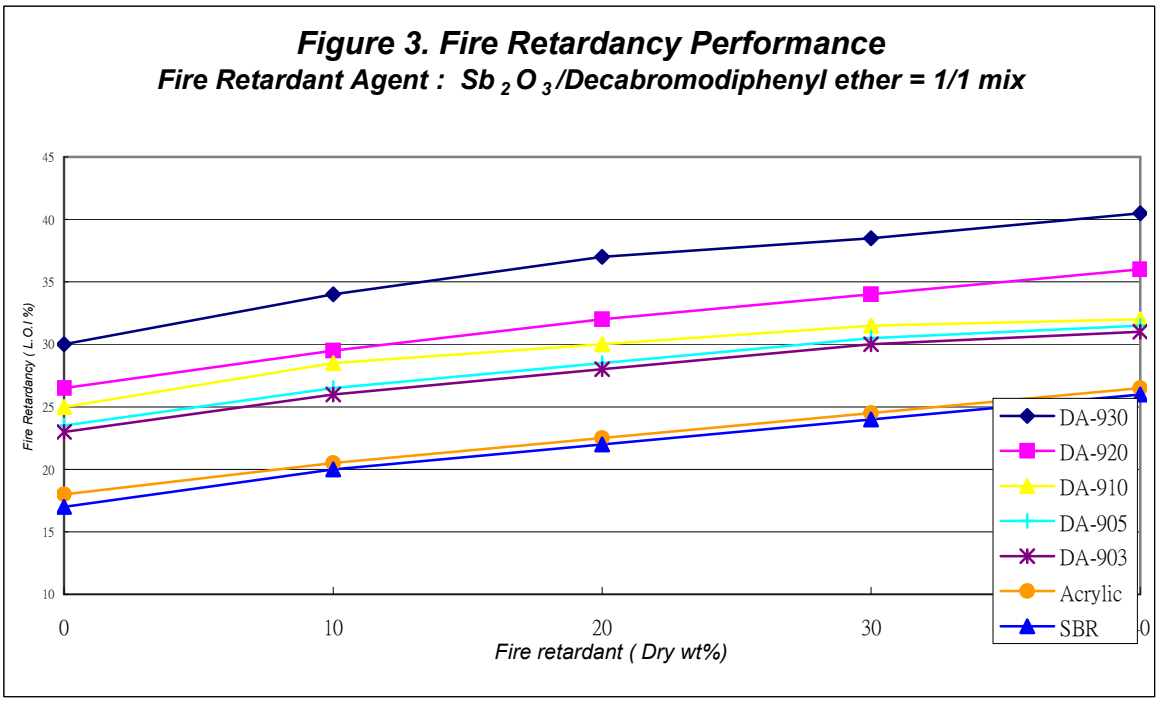
*Brookfield Viscometer, Model RVDV 10 RPM (#4,#5 or #6, 25°C)

Taipei Head Office : 9 th Floor, 301 Songkiang Rd. Taipei, Taiwan, R.O.C TEL: 886-2-25020238 FAX : 886-2-25099619
Malaysia Plant : Plo 18, Tanjung Langsat Industrial Estate, Mukim Sungai Tiram 81700 Pasir Gudang, Johor , Malaysia
TEL : 607-2565800 FAX : 607-2565799

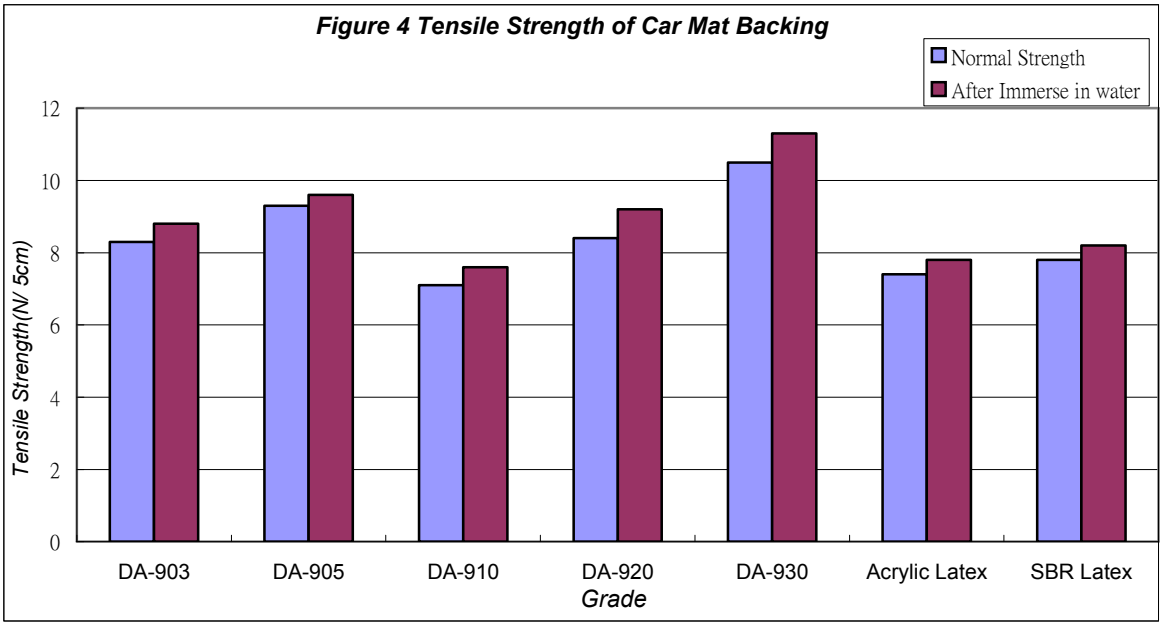
DA-910/920/930

EVCL Emulsion

Fire Retardance



Car Mat Backing



Wet Strength: Measure after immerse in water at 20°C for 30 min.

Taipei Head Office : 9 th Floor, 301 Songkiang Rd. Taipei, Taiwan, R.O.C TEL: 886-2-25020238 FAX : 886-2-25099619
Malaysia Plant : Plo 18, Tanjung Langsat Industrial Estate, Mukim Sungai Tiram 81700 Pasir Gudang, Johor , Malaysia
TEL : 607-2565800 FAX : 607-2565799