

Oil and Gas *Dow Corning*®

Proppant and Sand Treatment Aids

FEATURES

- Alkoxy functionality
- Epoxy or Amine reactive group

BENEFITS

- Improved Adhesion
- Improved Compression Strength
- Decreased fines swelling
- Decreased fines migration
- Compatible in multiple resin systems

APPLICATIONS

- Proppant treatment to improve adhesion of resin, improved compression strength of cured resin and increase conductivity
- Treatment of poorly consolidated sand formations to decrease fines migration, increase compressive strength of formation and improve permeability

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Material	Functionality	Specific Gravity at 25°C	Viscosity (cSt)	Resin system*
Dow Corning® PP-11 Treatment Aid	Amino/ethoxy	1.03	5	Novolac and Resol Phenolic
Dow Corning® PP-20 Treatment Aid	Amino/methoxy	.946	1.06	Novolac and Resol Phenolic
Dow Corning® PP-40 Treatment Aid	Glycidoxy/methoxy	1.08	3	Epoxy modified phenolic and Epoxy

*these are the preferred resin systems

DESCRIPTION

The Dow Corning® PP-X line of Treatment Aids represents a range of different functionalities that have been proven to be applicable as proppant and sand consolidation aids.

Possessing both organic and inorganic reactivity, Dow Corning® PP-X Treatment Aids can react with organic resins as well as the surfaces of inorganic material such as sand, silica, ceramic and other minerals. Tailoring the functionality of the reactive species for the specific organic resin can yield improvements in performance.

Dow Corning® PP-X Treatment Aids can be used on their own or in combination with multiple organic resins, such as novolac and resol phenolics, epoxy modified phenolics, epoxies and urea formaldehydes.

HOW TO USE

The Dow Corning PP-X Treatment Aids can be delivered from aqueous or organic solvent.

Proppants or sand formation can be pretreated with the treatment aids or they can be incorporated into a organic resin matrix and delivered to the system that way.

HANDLING PRECAUTIONS

Dow Corning® PP-20 Treatment Aid and PP-40 Treatment Aid generate methanol upon exposure to moisture. Dow Corning® PP-11 Treatment Aid generates ethanol upon exposure to moisture. Appropriate ventilation should be provided to prevent the accumulation of hazardous concentration of fumes in the working environment.

USABLE LIFE AND STORAGE

When stored at or below 25°C (77°F) in the original unopened containers, Dow Corning® PP-20 Treatment Aid and PP-40 Treatment Aid products have a usable life of 36 months from the date of production;

Dow Corning® PP-11 Treatment Aid has a usable life of 24 months from the date of production.

After the containers have been opened, Dow Corning® PP-11 Treatment Aid, PP-20 Treatment Aid and PP-40 Treatment Aid should be protected from the atmospheric moisture to prevent gellation.

PACKAGING

Dow Corning PP-X Treatment Aids re available in 190-205 Kg drums.

Samples are available in 500mL bottles.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance

(PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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