Hydrowrap™ Composite Repair System

Argosy's Hydrowrap™ is a versatile, water-activated composite system designed for rapid and durable repair of pipes, structures, and mechanical systems across multiple industries, including **marine, construction, oil and gas, and mining.**

Unlike conventional repair solutions, **Hydrowrap™ is water-cured**, enabling application in wet, humid, or even fully **underwater environments**. This makes it ideal for critical infrastructure and emergency repair scenarios where downtime must be minimized.

To support a wide range of repair conditions, Argosy also offers a full line of **primers, fillers, and surface preparation materials** that enhance bond strength and performance, depending on the scale and complexity of the application.

Key Features & Benefits

- **Water-cured system** – reliable in wet and underwater conditions.
- **High strength and durability** – reinforces and extends the service life of existing structures.
- **Chemical and fuel resistance** – cured material is impervious to fuels, most solvents, and harsh chemicals.
- **Safe handling** – odorless and non-flammable formulation.
- **Cost-effective** – provides a rapid, economical solution compared to replacement.

Applications

- Structural reinforcement of piping and mechanical systems.
- Emergency or planned maintenance repairs.
- Infrastructure rehabilitation in challenging environments.

Chemical Resistance Chart

Chemical	Hydrowrap™
Acetic acid, 20%	P
Acetic acid, glacial	P
Acetone	P
Acetylene	P
Air, atmosphere	E
Alcohols (general category)	G to F
Amines (general category)	F to P
Ammonia, anhydrous	P
Ammonium hydroxide	P
Asphalt	F
Benzene	F to P
Black liquor	G (to 70°F)
Butane	P
Carbolic acid	P
Carbon dioxide	E (to 140°F)
Carbonic acid	E (to 70°F)
Caustic (Sodium hydroxide, 100%)	G to F
Chlorine Dioxide, dry	P
Chlorinated water	P
Crude oil	G
Detergents (general)	F
Diesel fuel	G to F
Diethylene glycol	P
Ethane	P
Ethanolamine	P
Ethers (general)	F

Key: E = excellent (no effect), G = good (minimal effect), F = fair (moderate to serious effect), P = poor (destructive effect), n/d = no data

Chemical Resistance Chart (Cont.)

Chemical	Hydrowrap™
Ethylbenzene	F
Ethylene glycol	G
Ethylene oxide	P
Fluorine gas, dry	P
Formaldehyde	G (to 40% concentration)
Freon	G to P
Fuel oil	G (to 150°F)
Gas, natural	F
Gasoline	G
Glycerine	G (to 70°F)
Heptane	G (to 70°F)
Hexane	G
Hydraulic fluid	P
Hydrochloric acid, <10%	G
Hydrochloric acid, concentrated	P
Hydrofluoric acid, <40%	P
Hydrofluoric acid, >40%	P
Hydrogen	E
Hydrogen chloride gas, dry	G (to 35% conc. at 70°F)
Jet fuel (JP-1, JP-2, JP-3)	G
Jet fuel (JP-4)	F
Kerosene	E (to 70°F) G (to 120°F)
Ketones (general)	P
Lacquer thinner solvent	P
LPG (propane)	F
Methane	F

Key: E = excellent (no effect), G = good (minimal effect),
F = fair (moderate to serious effect), P = poor (destructive effect), n/d = no data

Chemical Resistance Chart (Cont.)

Chemical	Hydrowrap™
Methyl alcohol (methanol)	F
Methyl ethyl ketone	G (to 70°F)
Methylene chloride	P
Mineral oil	G
Motor oil	G
Naphtha	F
Natural gas	F
Nitric acid	P
Nitrogen	E
Oils, animal	E
Oils, crude	G
Oils, mineral	G
Oils, vegetable	G
Oxygen	E (to 70°F)
Perchloroethylene	P
Phosphoric acid	P
Potassium hydroxide	G (to 70% conc. at 70°F)
Propane	G
Salt brine solution	G
Sea water (saltwater)	G (protect)
Sewage	P
Sodium chloride	E
Sodium hydroxide	G
Sodium nitrate	G
Steam	P
Styrene	F

Key: E = excellent (no effect), G = good (minimal effect),
F = fair (moderate to serious effect), P = poor (destructive effect), n/d = no data

Chemical Resistance Chart (Cont.)

Chemical	Hydrowrap™
Sulfur dioxide gas	G (to 70°F)
Sulfuric acid <60%	F
Sulfuric acid 70-90%	P
Sulfuric acid, concentrated	P
Sunlight	E (protect)
Toluene	F
Transformer oil	F (to 70°F)
Trichloroethylene	P
Triethanolamine	F (to 70°F)
UV light	E (protect)
Water	E (coat if submerged)
Xylene	F to P

Key: E = excellent (no effect), G = good (minimal effect),
F = fair (moderate to serious effect), P = poor (destructive effect), n/d = no data

Chemical Resistance Chart Disclaimer:

No claims for the field (installed) performance or fitness for purpose of any of our products are made or should be assumed from information in this document. All of the following information is provided, based on laboratory testing and/or best information available to the manufacturer, at the time of publication. All data is based on room temperature, or as stated. **Your chemical(s), temperature, concentration and/or type of exposure may differ from the one used in the preparation of this chart and that difference may radically change the performance of our products.** The user is cautioned to take the most conservative position when evaluating our products and to conduct testing on their own, under the actual conditions of intended usage.

Note: There are over 100,000 chemicals in use, world-wide. It would be impossible to test each of them against each Argosy product. What we provide here is an overview of classes of chemicals. Please contact us if you have additional needs. We may have a case history that corresponds to your application. There may also be other installation methods that can be used, such as a combination of products, or the use of a chemical barrier film, which allows our products to be used with harsher concentrations than are listed below.

Revision Date: 09-30-2025

Revision: B

Disclaimer:

Argosy Advanced Materials LLC dba Argosy International furnished this information without warranty, expressed or implied regarding the accuracy of this data, except that it is accurate to the best of our knowledge. The data on this sheet only relates specifically to the material designated herein. Argosy Advanced Materials LLC dba Argosy International assumes no obligation or liability for the information given, or results obtained, all such being given and accepted at users' risk. Any alterations of this document are prohibited.

Argosy Advanced Materials LLC
dba Argosy International

225 West 34th Street, Suite 800

New York, NY, USA 10122

T: (1) 212 268 0003 F: (1) 212 268 4228

E: sales@argosyinternational.com