



Premium Protection

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Rhino Linings premium protective linings include products with superior chemical resistance.

The RhinoChem 2170 (formerly Hi-Chem) system has been specially formulated for exceptional resistance to a wide variety of chemicals and is our premium chemical resistant product. In addition to RhinoChem 2170, Rhino Duraspray offers excellent resistance to many common chemicals often found in industrial applications whilst offering good flexibility, abrasion and impact resistance.

Rhino Linings conducts its in-house product testing using state of the art testing equipment as used by independent testing authorities. Where applicable testing is conducted to ASTM Standards. Our testing facilities are operated under our ISO9001 Quality Assurance Standards.

The following chart summarises the chemical resistance of RhinoChem 2170 (formerly Hi-Chem) and Rhino Duraspray products based on total immersion testing of sample swatches. Rhino Linings is aware that some manufacturers provide chemical resistance testing based on surface contact only and although this is a much easier and more favourable test at Rhino Linings, we take the view that by submitting our products to a full sample immersion test we are providing our customers with a superior level of information from which they can draw conclusions about the suitability of our products in their own particular circumstances.

For applications involving chemicals not listed below, please contact your Rhino Linings representative. We are continually adding to our database for chemical resistance. If necessary, we can assist in conducting chemical exposure testing with the Rhino Linings systems **It is important to note that higher service temperatures, length of exposure time, and other factors can significantly influence the performance of these linings.**

Ratings Interpretation

- A:** Suitable for continuous immersion or exposure. Do not see any significant weight gain or swelling and virtually no loss of hardness after full immersion for 6 months at 23.9degC (75degF).
- B:** Suitable for temporary storage or immersion for up to 3 months. Less than 10% weight gain or loss of hardness after full immersion for 30 days at 23.9 degC (75degF).
- C:** Suitable for temporary exposure to chemical splash or spills, such as secondary containment. Less than 20% weight gain or loss of hardness after full immersion for 3 days at 23.9 degC (75degF).
- NR:** Not recommended for service. Noticeable chemical degradation with more than 20% weight gain and substantial loss of strength and hardness after full immersion for 3 days at 23.9 degC (75degF).

| Chemical Media | RhinoChem 2170 (formerly Hi Chem) | Duraspray |
|-----------------------|--------------------------------------|-----------|
| Acids: | | |
| Hydrochloric, 15% | B | C |
| Hydrochloric, 30% | C | NR |
| Sulfuric, 20% | A | C |
| Sulfuric, 60% | B | NR |
| Phosphoric, 24% | A | C |
| | | |
| Alkalis: | | |
| Detergents | A | B |
| Soaps | A | B |
| Sodium Hydroxide, 25% | A | |
| Sodium Hydroxide, 50% | A | |

| Chemical Media | RhinoChem 2170 (formerly Hi Chem) | Duraspray |
|---------------------------------|--------------------------------------|-----------|
| Oxidizers: | | |
| Bleach (5% Sodium hypochlorite) | A | C |
| Sodium hypochlorite, 13% | A | C |
| Salts: | | |
| Sea salt, 25% | A | B |
| Ferric sulfate, 50% | A | B |
| Ferric chloride, 35% | A | B |
| Sodium chloride | A | B |
| Petroleum products: | | |
| Diesel | A | B |
| Gasoline | C | NR |
| Hydraulic Fluid | A | B |
| JP8 | A | B |
| Machine Oils | A | B |
| Motor Oil | A | B |
| Solvents: | | |
| Chlorinated Solvents | NR | NR |
| Denatured alcohol | C | NR |
| D-Limonene | C | NR |
| Ketones (Acetone,MEK) | NR | NR |
| Xylene | NR | NR |
| Water and Wastewater | | |
| Raw Water | A | B |
| Distilled Water | A | B |
| Sea Water | A | B |
| Hydrogen Sulfide Gas | A | B |
| Methane Gas | A | B |
| Raw Sewage | A | B |
| Others | | |
| Animal Grease/Fats | A | B |
| Antifreeze Solution | A | B |
| Castor oil | A | B |
| Corn Oil | A | B |
| Diethylene Glycol | A | B |
| Diethyl Toluene Diamine | B | C |
| Diocetyl Phthalate | A | B |

LIMITATIONS

The data on this chart contains information to the best of our knowledge and testing. However, such immersion data is subject to varying interpretations. Application methods and conditions can also greatly affect the performance of the products. Rhino Linings recommends that client specific testing is carried out assimilating the clients conditions as closely as possible to ascertain the suitability or otherwise of the Rhino Linings products. Rhino Linings recommends that both total immersion and surface exposure testing be carried out in consultation with the client.

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