

# DUROPUR FLEX HYDROPHOBIC

## POLYURETHANE SYSTEM



### DESCRIPTION

Duropur Flex Hydrophobic is a low viscosity hydrophobic polyurethane formulation. The system is comprised of a base resin along with an accelerator component. Flexible is typically used to repair cracks or failed joints in concrete structures. Duropur Accelerator is used by the experienced installer to manipulate the reaction profile as warranted by job site conditions. Being a hydrophobic formulation, when reacted with minimal amounts of water, the resulting foam will maintain its physical form and not be subject to shrinkage due to wet/dry cycles. Flexible produces a closed cell polyurethane grout.

### FEATURES

- 100 % solids
- Outstanding adhesion, high elongation
- Expands up to 30 times initial volume
- Non-hazardous shipping
- Pumps as a single component
- Non-flammable
- Controllable reaction times
- Cures inert, non-toxic permanent seal
- Excellent resistance and durability

### USE AREAS

- Water Related Facilities
- Concrete Dams
- Waste Treatment Plants
- Tunnels
- Storm Water Systems
- Earthen Dams
- Underground Vaults
- Elevator Pits
- Manhole Facilities
- Parking Garages

### Physical Properties - Liquid

	Flex	Accelerator	Test Method
Viscosity	500 cps	35 cps	ASTM D-4016
Specific gravity	1.15	0.95	ASTM D-1475
Colour	Pale yellow	Pale yellow	
Flash Point °C	>250°F	216°F	ASTM D-93

### Physical Properties - Cured

	Gel Foam	Test Method
Elongation	62%	ASTM D-3574
Tensile	24 psi	ASTM D-3574
Shear	17 psi	ASTM C-273
Water Absorption	<1%	ASTM D-2842
Toxicity	Non-toxic	

### PACKAGING

- 20 kg Drum



## USE OF ACCELERATOR COMPONENT

The reaction profile may be adjusted prior to pumping by the addition of Accelerator into the base resin and is affected by temperature and the amount of moisture encountered. At 1.25% (1/2 pint per five gallons) the expansion will start in about 50 seconds and be complete in about 4 minutes after encountering water. At 2.5% (1 pint per five gallons) the expansion will start at 15 seconds and be complete at about 65 seconds. These reaction times were determined at 77°F with the addition of 2.5% water.

## APPLICATION EQUIPMENT

Contact Durotech Industries for equipment recommendations for the particular application and conditions.

## PERSONAL PROTECTION

Read MSDS for complete details. For professional use only. Avoid breathing vapors – use in well-ventilated area only or use self-contained respiratory protection in confined spaces. Avoid skin contact – wear protective gloves. Avoid eye contact – wear eye protection. Do not ingest.

## FIRST AID

In case of eye contact, flush with large amounts of water and get medical attention. For skin contact, wipe excess liquid from skin and wash with soap and water. If breathing is difficult, give oxygen and get medical attention.

## SAFETY PRECAUTION

During the chemical reaction, polyurethane products release heat via an exothermic reaction. When polyurethane products are applied in substantial quantities, exothermic reactions may generate enough heat to become a fire hazard. All necessary precautions should be taken to avoid the creation of a situation in which a fire could occur. Contact Durotech Industries for further information.

## STORAGE AND SHELF LIFE

Product is moisture sensitive. Store in original sealed containers at temperatures between 60°F and 90°F (15°C- 32°C). Opened containers must be handled properly to prevent moisture contamination. Shelf life is 12 months when properly stored.

## CLEAN-UP OF SPILLS OR LEAKAGE

With adequate ventilation and appropriate personal protective equipment, cover the spill area with absorbent material such as clay, or vermiculite and transfer to metal waste containers. **DO NOT RESEAL CONTAINER AS REACTION OF CONTAMINATED MATERIAL CAN CREATE PRESSURE.** Wash area with decontamination solution (5-10 % solution of sodium carbonate). Dispose of waste in accordance with Federal, State and local regulations.

## SHIPPING INFORMATION

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

## WARRANTY INFORMATION

This limited warranty is limited to the replacement of the materials which are defective. Durotech Industries makes no other warranty, expressed or implied, and makes no warranty of merchantability or fitness for a particular purpose. This limited warranty does not include any transportation charges or costs of installation or any liability for direct, indirect, consequential, or punitive damages or delay, whether or not the undersigned has been advised of such claims. **THE FOREGOING LIMITED WARRANTY IS THE SOLE WARRANTY FOR THE PRODUCT. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

## PHYSICAL PROPERTY VALUES

PLEASE NOTE, this Technical Data Sheet is intended as a general guide to provide assistance regarding typical physical characteristics of the product. However, the specific values are affected by various factors, including, but not limited to, ambient temperature, water temperature, humidity, water pH, reaction under confinement, and the presence of chemicals or debris in the reaction area. Applicators are encouraged to perform sample tests with the variables found on site to get the best possible indication of the product's physical properties for the specific job.

## DUROTECH INDUSTRIES



*"This document, including any attached files, is strictly confidential and intended solely for the use of the individual or entity to which it is addressed. Durotech Industries prohibits the right to publish, copy, distribute or disclose any information contained in this document, or its attachments, by any party other than the intended recipient. If you have received this document in error please notify the sender and delete it from your system immediately, no employee or agent is authorised to conclude any binding agreement or make any representation on behalf of Durotech Industries. The views or opinions presented in this document are solely those of the author and do not necessarily represent those of Durotech Industries, except where the sender expressly, and with clear authority, states them to be the views of Durotech Industries. Durotech Industries accepts no liability for any loss or damage (direct or indirect or consequential) arising from the use of or in connection with this document and any attachments and suggests that the recipient check this document and any attached files for the presence of viruses."*

