

IRO & IRO HD (THE TOUGHEST FIELD-APPLIED IMPACT RESISTANT OUTERWRAP) PRODUCT DATA SHEET



DESCRIPTION

POLYGUARD IRO™ (Impact Resistant Outerwrap) & IRO™ HD (Heavy Duty) products are designed to protect field joint coatings from abrasion damage during directional drilling, HDD and boring. IRO & IRO HD creates an abrasion resistant, sacrificial outer layer which protects pre-approved field joint coatings and mainline coating such as RD-6, Fusion Bond Epoxy (FBE), liquid epoxies, or any other coatings. Controlled set times, packaging and conformability provide for efficient installations in any project environment. The IRO & IRO HD line of products eliminates the potential for costly spot repairs or re-pulling pipe while providing the best mechanical protection of the underlying field-joint and mainline coatings.

APPLICATIONS

- Field-applied ARO (Abrasion Resistant Overlay)
- Mainline coating protection
- HDD (Horizontal Directional Drilling), thrust boring, and micro-tunneling
- Aggressive soil conditions

PRODUCT BENEFITS

- Eliminate coating damage
- Controlled set time
- Non-shielding
- Non-hazardous
- 100% solids content
- Smooth profile
- Outstanding abrasion, gouge, & impact resistance

TYPICAL PROPERTIES

IRO™ & IRO™ HD PROPERTIES					
Product	Laminate Properties			Cure Schedule 75°F (24°C)	
	Thickness (per Layer)	Resin Type	Application Temperature	Working Time	Set Time
IRO™ HD	0.034"	MCU	32° to 150°F (0° to 75°C)	12 min	30 min
IRO™	0.013"	MCU	32° to 150°F (0° to 75°C)	8 min	28 min
Product	Mechanical Properties		Gouge Resistance Partech (50 kg load)		
	Impact Resistance ASTM-G14 (100 mils)		Abrasion Resistance ASTM-D4060 (cycles/mil)		
IRO™ HD	47.6 J (421 in-lb)		1,667		Pass
IRO™	48.7 J (431 in-lb)		1,467		Pass

SURFACE PREPARATION

Roughen existing FBE or LE coating surfaces to de-gloss before application of IRO, if used with RD-6 there's no need to roughen the surface.

SHELF LIFE

12 months with proper storage.

STORAGE CONDITIONS

Store in original, unopened packaging in a cool area at ambient temperatures of 72°F (23°C). DO NOT FREEZE.

PRECAUTIONS

This material is sold by **Polyguard Products, Inc.** only for the purposes described in this literature. Any other use of the products is the responsibility of the purchaser and **Polyguard Products** does not warrant nor will be responsible for any misuse of these products. **Polyguard Products** will replace material not meeting our published specifications within one year from date of sale.

HEALTH AND SAFETY

Refer to the most recent SDS, latest revision, containing physical, ecological, toxicological, and other safety-related data.

All **Polyguard Products** Safety Data Sheets (SDS) and precautionary labels should be read and understood by all user supervisory personnel and employees before using. Purchaser is responsible for complying with all applicable federal, state or local laws and regulations covering use, health, safety, and disposal of the product.

MAINTENANCE

None required.

Technical Service

Polyguard Products, Inc.

Houston, Texas 77066

PH: 281-580-5700

EMAIL: pipeline@polyguard.com

WEB: www.polyguard.com