

BIGA GROUP

SPECIAL WELDING, SHIP / OFF SHORE / INDUSTRY SERVICE ENGINEERING, CONSULTING AND SURVEY www.bigagroup.com

Belt back into service in 1 1/2 hours

Technical Data Sheet 5/7/2014

TESTS CONDUCTED

Devcon[®] R-Flex[™]

Description:

Self-leveling liquid urethane that in minutes turns into a non-sag putty for repairing gouges, tears, and holes and coats clips for heavy weight SBR conveyor belt.

Intended Use:

- Repair holes, gouges, and tears in SBR conveyor belt - Coats hinged or solid plate fastener systems to protect them from damage

High adhesion to SBR belts creating "surface pull" to polymer

Self-leveling liquid that develops into a non-sagging putty

- Rebuild worn rubber top ply of SBR belts protecting surface from abrasion and impact from aggregate

Product features:

Limitations:

Typical Physical Properties: Technical data should be considered representative or typical only and should not be used for specification purposes.

Cured / days @ /5 ⁻ F		TEOLOGONDOOLED		
% Solids by Volume	94%	Adhesive Tensile Shear ASTM D 1002		
Abrasion Resistance	270 mg loss per/1,000 rev	Cured Hardness Shore D ASTM D 2240		
Adhesion @ 24 hours	89 pli surface rubber pull	Maximum Elongation ASTM D 41		
Adhesion @ 7 days	137 pli surface rubber pull	Dielectric Constant ASTM D 150		
Color	Black			
Coverage/Ib.	110 sq.in./lb. @1/4"			
Cured Hardness	92 Shore A			
Dielectric Strength	350 volts/mils			
Functional Cure	1 1/2 hours			
Maximum Elongation	421%			
Maximum Operating Temperature	Dry: 180°F; Wet: 120°F			
Mix Ratio	88 resin: 12 curing agent			
Specific Volume	27.4 in(3)/lb.			
Tear Resistance	2 pli			
Tensile Strength	1,462 psi			
Uncured				
Pot Life	1-3min/liquid: 3-5min/non-sag creamy paste			
Working Time	7-9 mins: self-leveling putty			

Surface Preparation:

Surface Prep: Abrading/Cleaning

1. Pour Devcon® Cleaner Blend 300 onto belt and wipe with abrasive pad in kit and wipe dry with a rag. 2.Attach abrasive wheel to a 4+grinder [minimum 10,000 RPM]. Roughen belt releasing contaminants and grit. 3.Using grinder, roughen belt until dull bluish-grey color. Ensure top layer of belt is roughened, leaving a fine dusting of residue, brush off residue.

NOTE: Be sure not to grind down to the belt fabric this will weaken the belt. 4.Again, pour Devcon® Cleaner Blend 300 onto belt and wipe well with a rag.

5.Repeat Step 4 until no black streaks appear on rag; allow to dry before applying surface conditioner.

6.Ideal application temperature is above 50°F (12.8°C).

Surface Conditioner Mix Instructions (NOTE: Devcon® Surface Conditioner must be used prior to applying Devcon® R-Flexi)

"Open bag, remove Surface Conditioner bottles; Part A and Part B.

"Unscrew spout cap from Part B bottle and remove aluminum seal. Screw spout cap back on Part B bottle. Take Part A bottle and unscrew dauber top.

Flip up the spout cap on Part B bottle to pour liquid into Part A bottle. Screw dauber top onto Part A bottle.

"Shake bottle for 30 seconds to mix Surface Conditioner.

"Remove clear cap from dauber top. Turn upside down and press dauber firmly on repair area.

Thinly spread Surface Conditioner around entire repair area. It will evaporate guickly leaving slight change in color on surface.

Wait 3 minutes to ensure surface is dry before applying repair compound.

	 R-Flexï Mix Instructions [°]Make sure surface is roughened and surface conditioner was applied over 3 minutes before applying repair compound. [°]Remove metal resin can from box - remove can clips and open lid. [°]Unscrew cap of curing agent. Pull off aluminum seal. [°]Pour curing agent and contents of metal resin into white mix bucket, be sure to scrape resin can to release contents that may stick to sides of can. [°]Using wooden paddle, stir contents thoroughly for 2 minutes . scraping sides and bottom of bucket as you stir. [°]Pour completely mixed contents onto roughened belt, 3 minutes after applying surface conditioner. [°]Spread with spatula over entire desired repair area. Metal Surfaces [°]Thoroughly clean area to be repaired. Remove any oil, grease or dirt. Roughen metal surface by grinding with a coarse wheel. To prime the surface apply a coat of Devcon FL-10 Primer and allow to dry tack-free for 15 minutes.						
Mixing Instructions:							
Application Instructions:	 Holes: [~] For holes, use duct tape underneath belt to bridge hole. Be sure to prime repair area 6-8+back from the hole. [~] Follow surface abrading/cleaning section thoroughly. [~] After mixing Devcon® R-Flexi and applying to repair area, make sure you fill void 6-8+ around the hole to create additional strength. Gouges or Tears: [~] For tears, if the tear is over 8-10+take alligator clip and lock the tear on either end of the tear to mechanically stop the 						
	 belt from continuing to rip. " Take an abrasive wheel 4+grinder and at the tear undercut the rubber at an angle in a %/+configuration opening up the tear to expose more surface area for the repair compound to attach to. Place a strip of duct tape underneath the tear sealing off the area so no repair compound leaks through during the repair. " If using alligator metal clips, coat the clips with Devcon® FL-10 Primer and allow to dry for 3 minutes. " Follow surface abrading/cleaning section thoroughly. " After mixing Devcon® R-Flexi" [and applying to repair area, push the material into the %/+opening you created. The material will self-level in that area. Coat the clips with a thin layer of material. Coating Hinged or Solid Plate Fasteners: " When coating plated clips, abrade an 8+area from the clip to the belt on both sides of the clip. If clip was skived and below surface and go back 4". " Follow surface abrading/cleaning section thoroughly. " Coat the solid or pin clips with Devcon® FL-10 Primer and allow to dry for 3 minutes. " Spread R-Flexi" on clips at a minimum thickness of 1/8+(this helps to bridge the elongation that occurs when belt is 						
	subjected to pressure of winer an	d traveling across the b		nat occurs when beit is			
Storage:	subjected to pressure of wiper and traveling across the head pulley).						
	Store in a cool, dry place.						
Compliances:	None						
Chemical	Chemical resistance is calculated with a 7 day, room temp. cure (30 days immersion) @ 75° F)						
Resistance:	1,1,1-Trichloroethane	Poor	Phosphoric 10%	Fair			
	Aluminum Sulfate 10%	Very good	Potassium Hydroxide 40%	Very good			
	Cutting Oil	Fair	Sodium Hydroxide 50%	Very good			
	Gasoline (Unleaded)	Fair	Sodium Hypochlorite	Very good			
	Hydrochloric 10%	Very good	Xylene	Poor			
	Hydrochloric 36%	Very good					
	Isopropanol	Poor					
	Methyl Ethyl Ketone	Poor					
Precautions:	Please refer to the appropriate ma For technical assistance, please	aterial safety data sheet e call 1	(MSDS) prior to using this product.				
Warranty:	FOR INDUSTRIAL USE ONL Devcon will replace any material f	Y ound to be defective. B	ecause the storage, handling and appl Its obtained	ication of this material is			
Disclaimer:	For product information visit <u>www.</u> 880 882 or send an e-mail to biga	<u>.bigagroup.com</u> / <u>www.c</u> @biga.hr.	devconeurope.com alternatively for tec	hnical assistance please c	all +385 52:		
Order Information:	15550 4 lb. 15565 1.5 lb.						