# **TECHNICAL DATA SHEET - LINE-X® XS-252**

### PRODUCT MANUFACTURER:

LINE-X LLC 1862 Sparkman Dr. Huntsville, AL 35816 877-330-1331

#### **GENERAL PRODUCT DESCRIPTION:**

LINE-X XS-252 is an intumescent two-component, high performance elastomeric polyurea/polyurethane spray system with exceptional flame retardant properties. This product is designed to retard flame spread during an event of fire. The product contains zero VOC (Volatile Organic Compounds) and is 100% solid. XS-252 is positioned as a user-friendly product with a built-in activator for quick cure times.

XS-252 has been accepted (Acceptance Marking No. "MSHA IC-249") to meet the requirements of the Mine, Safety and Health Administration (MSHA) for use in the mining industry for protection against abrasion, corrosion and impact, as well as a nonstrength enhancing mine sealant. This revolutionary product, the only in its industry, has exceptional flame retardant properties that are ideal during the event of a fire and can be applied to any type of underground equipment, regardless of shape or size.

More recently, XS-252 has met the requirements of the MSHA Standard Application Procedures for Sealants Applied to Underground Ventilation Controls (MSHA Suitability No. S30/OO) and is the only one in its category to be used as a sealant for mining shaft seals.

Failing shaft seals have been an ongoing concern in the mining industry, but with XS-252 these concerns are minimized since the product forms a monolithic membrane to minimize the effluent gaseous migration into the working areas, therefore protecting mining company employees.

### APPLICATION:

Both Iso "A" Side and Resin "B" Side should be preconditioned between 70-90°F before application.

XS-252 must be applied using a high pressure, plural component, heated, 1:1 by volume, spray equipment with 2000 PSI fluid pressure capability. XS-252 material, both Iso "A" Side and Resin "B" Side, should be heated between 140-150°F and spray equipment should generate adequate fluid pressure for proper mixing and best polymerization results.

### **APPLICATION EQUIPMENT:**

XS-252 is designed to be sprayed through high pressure impingement mixing equipment. Plural component spray equipment must have material heat-control capability, 1:1 by volume, and can either be sprayed with a round or flat tip. Refer to equipment manufacturer for equipment specifics and accessories.

## **EQUIPMENT SETTING PARAMETERS:**

Iso "A" and Polyol "B" components must be pumped by low-pressure transfer pumps to high-pressure proportional pumping equipment.

#### Filter Screens:

Filters must be removed on the B-side before spraying XS-252.

REMOVE Y-Filter screen on the B-side. REMOVE gun's check-valve filter screen on the B-side.

# Temperature Setting:

Iso "A" Block Heater: 140-160°F Resin "B" Block Heater: 140-160°F Hoses (Iso and Polyol): 140-160°F

*Pressure Setting:* 

Equipment Pressure: 2,000-2,500 PSI

### **EOUIPMENT CLEAN-UP:**

Spray equipment should be cleaned immediately after use and users should follow the equipment manufacturer's



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recommended procedures. Please refer to the spray equipment operating and maintenance procedures for further details. XS-252 should be cleaned with environmentally safe urethane-grade cleaner. Cleaning materials must be free of reactive contaminants, such as water and alcohol. All gun cleaners and spray equipment cleaning materials must be used and disposed under permitted local rules and regulations.

### **MATERIAL STORAGE:**

Product must be re-agitated every three months. LINE-X XS-252 has a shelf life of six months from manufacture date in factory sealed containers. XS-252 has to be stored between 65-80°F. Do not expose unused materials to humid condition; always provide airtight resealed conditions to unused materials. With materials currently connected to the pump, provide as much airtight, moisture-free conditions to unused materials as possible to ensure proper chemical performance. Drums should be stored on a pallet to avoid direct contact with warehouse floor/ground.

## **SAFETY AND HANDLING:**

Please refer to MSDS for safety and handling of this material. All personnel working with this material are expected to read and understand the safety recommendations per the MSDS. All Personal Protection Equipment must be properly worn to protect worker health and safety.

#### **CHEMICAL TECHNICAL DATA:**

Mix Ratio by Volume	1A:1B
Gel Time	5-10 Sec
Tack Free Time	9-12 Sec
Viscosity (cPs) @ 77°F	
"A" Ico Cido	150125

"A" Iso Side 150±25
"B" Resin Side 600±100
Material Density (lbs/gal) @ 77°F

"A" Iso Side 10.28 lbs/gal "B" Resin Side 10.59 lbs/gal

### **BASIC PHYSICAL PROPERTIES:**

Test Name	Test Methods	Value
Hardness Shore D	ASTM D2240	69
Elongation %	ASTM D638	30-35
Tensile Strength	ASTM D638	
(psi)		1800-2050
Tear Strength	ASTM D624	
(lbs/in)		550-600
<b>Taber Abrasion</b>	ASTM D4060	
(mg loss/1000 cy	cles)	68.6
Density (lbs/ft <sub>3</sub> )		69 ± 1

*Fire Rating Certifications:* 

BS 476 (Part 7), classification of the surface spread of flame of products: Specimens tested are classified as class 1 ASTM E-162 "Surface Flammability of Materials using a Radiant Heat Energy Source"

Flame Spread Index 20.27

Mine Safety And Health Administration:

Acceptance of Flame-Resistance Solid Products Taken Into Mines – MSHA IC-249

Met the requirements of the voluntary Standard Application Procedure for Sealants Applied to Underground Ventilation Controls ASAP 5005

Non-Strength Enhancing Mine Sealant, Suitability Number-MSHA-S30/00

### **PRODUCT USER RESPONSIBILITIES:**

Users of LINE-X XS-252 product are responsible for reading the general guidelines, product data sheets, specifications and material safety data sheets (MSDS) before using these materials. Printed technical data and instructions are subject to change without notice. For additional information, or for current technical data instructions, contact a LINE-X representative or visit www.LINE-X.com.

## **PRODUCT DISCLAIMER:**

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are



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not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation. User assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazards listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and LINE-X LLC makes no claim that these tests or any other tests accurately represent all environments.

