



H.B. Fuller Company
P.O. Box 64683
St. Paul, MN 55164-0683

FH3503
PRODUCT NUMBER

Page 1 of 4

TECHNICAL DATA SHEET

URALITE FH-3503

URETHANE CASTING ELASTOMER

95 Shore A

DESCRIPTION

URALITE FH-3503 is a two-component, liquid, castable, polyurethane elastomer that contains no MDA, TDI, or MOCA. The material has a low mixed viscosity and cures to a brown, semi-transparent, high modulus, high hardness elastomer at room temperature.

FEATURES

No MDA
High Abrasion Resistance
Insensitive to Typical Environmental Moisture
Longer Pot Life
Low Viscosity
No TDI or MOCA

TYPICAL PHYSICAL PROPERTIES and GENERAL INFORMATION

| Property | Part A | Part B | Blend |
|---|-----------|-----------|---------|
| BLENDING RATIO BY VOLUME | 100 | 28.3 | |
| BLENDING RATIO BY WEIGHT | 100 | 28 | |
| COLOR | COLORLESS | AMBER | |
| DENSITY (ASTM D0792) (lb-mass/gal) | 8.91 | | |
| FUNCTIONALITY MEASURE, ISOCYANATE (TMS049, (TOTAL NCO)) (percent) | 6.3 - 6.5 | | |
| GEL TIME, ASTM GEL FOR URETHANE(TIME IN MIN.) (minute) | | | 30 - 40 |
| GEL TIME, BALL GEL FOR URETHANE(TIME IN MIN.) (minute) | | | 25 - 35 |
| HARDNESS, SHORE A, HARDNESS - SHORE A | | | 90 - 95 |
| ODOR | SWEET | | |
| ODOR INTENSITY | FAINT | FAINT | |
| SHELF LIFE (day) | 365 | | |
| SPECIFIC GRAVITY (D792/D1475) | 1.07 | 1.05 | |
| TEAR RESISTANCE, ASTM D-1938, TEAR RESISTANCE (lb-f/in) | | | 150 |
| TEAR RESISTANCE, ASTM D-470, TEAR RESISTANCE 6.1.6 (lb-f/in) | | | 90 |
| TEAR RESISTANCE, ASTM D-624, TEAR RESISTANCE USING DIE C (lb-f/in) | | | 270 |
| TENSILE ELONGATION, ASTMD41283, ULTIMATE ELONGATION (ASTM D412-83) (percent) | | | 500 |
| TENSILE STRENGTH, ASTMD41283, MODULUS AT 100%ELONG (ASTM D412-83) (lb-f/in ²) | | | 1,200 |
| TENSILE STRENGTH, ASTMD41283, TENSILE STRENGTH (ASTM D412-83) (lb-f/in ²) | | | 4,100 |
| VISCOSITY (2/20/75 F) (cP) | | 160 - 220 | |
| VISCOSITY (TMS001) (cP) | 5,500 | 190 | |

Last Update: 12/30/2008



H.B. Fuller

H.B. Fuller Company
P.O. Box 64683
St. Paul, MN 55164-0683

FH3503
PRODUCT NUMBER

Page 2 of 4

| | | | |
|--|--|--|---------------|
| VISCOSITY, TMWB070, VISCOSITY - INITIAL-1162 (2/20/75 F) (cP) | | | 4,200 - 4,500 |
|--|--|--|---------------|



ADDITIONAL PHYSICAL PROPERTIES

| <u>Cure Time</u> | <u>Value</u> |
|------------------------------|--------------|
| Demolding Time at 77F, hrs. | 16-24 |
| Demolding Time at 150F, hrs. | 2-4 |
| Complete Cure at 77F, days | 7 |

HANDLING PRECAUTIONS

URALITE FH-3503 Part B contains amines. It can cause temporary liver damage, methemoglobinemia (Cyanosis), mild eye irritation. It may produce delayed chemical burns and ingestion may cause poisoning

EMERGENCY AND FIRST AID PROCEDURES

Skin Contact: Prompt washing with 99% isopropyl alcohol followed by washing with soap and water.

Eye Contact: Irrigate promptly with clean water for 15 minutes and call a physician.

Inhalation: Treat symptomatically; vasodilators, fresh air, oxygen. Call a physician.

Ingestion: Call a physician at once. Give milk or white of beaten with water. Then give a tablespoon of salt in a glass of warm water and repeat until vomit fluid is clear.

STORAGE

FH-3503 A/B should be stored in a cool dry area. Shelf life is a minimum of one year in unopened containers when stored at 65-80F (one year from date of shipment).

PROTECTION PROCEDURES

If used in a confined or an enclosed area, use an air-supplied mask or respirator with canister for organic vapors and provide mechanical exhaust ventilators. Vapors are generally heavier than air, therefore any ventilation equipment should be designed to pick up between bench level and floor level. Use protective gloves, safety glasses and rubber or plastic aprons. Avoid contact with skin or clothing. Contaminated clothing should be laundered before wearing again. Contaminated shoes should be thoroughly cleaned before wearing again.



LIMITED WARRANTY AND TERMS

H.B. Fuller Company ("Fuller") warrants that, for a Warranty Period of one year (or the period specified on the applicable Technical Data Sheet, whichever is less) from the date of shipment from Fuller to the Initial Purchaser, that this Fuller product was manufactured in accordance with Fuller's specifications in effect on the date of manufacture. These specifications are available upon request. This Warranty does not cover test data, or any defects, damages or other harms caused to any extent or in any way by failure to follow applicable Fuller instructions, if any, or abuse or misuse of the product.

WARRANTIES DISCLAIMED -- THE WARRANTY STATED IN THE PARAGRAPH ABOVE IS IN PLACE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. Fuller EXPRESSLY DISCLAIMS ANY OTHER WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ALTHOUGH Fuller MAY HAVE SUGGESTED THE PRODUCT OR DEVELOPED THE PRODUCT AT THE PURCHASER'S REQUEST, IT IS THE PURCHASER'S RESPONSIBILITY TO TEST AND DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE PURCHASER'S INTENDED USE AND PURPOSE, AND PURCHASER ASSUMES ALL RISK AND LIABILITY WHATSOEVER REGARDING SUCH SUITABILITY.

LIMITATIONS OF REMEDIES AND DAMAGES -- FOR ANY VALID CLAIM PRESENTED UNDER THE LIMITED WARRANTY, Fuller WILL REPLACE THE PRODUCT, OR AT ITS OPTION, REFUND THE PURCHASE PRICE. THIS REPLACEMENT/REFUND REMEDY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST Fuller. THE PURCHASER AGREES THAT NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO PURCHASER FOR CLAIMS ARISING OUT OF ANY USE OF THE PRODUCT REGARDLESS OF THE LEGAL THEORY (CONTRACT, TORT OR OTHER). IN NO EVENT WILL Fuller BE OBLIGATED TO PAY DAMAGES TO PURCHASER IN ANY AMOUNT EXCEEDING THE PRICE THAT THE PURCHASER PAID FOR THE PRODUCT.

LIMITATION OF ACTIONS AND VENUE -- Any claim made or action commenced by Purchaser under Fuller's limited warranty as set forth herein must be brought within one year from the date of shipment from Fuller to the Purchaser. Purchaser agrees that all disputes arising from Fuller's sale of product to Purchaser shall be brought, if at all, in and before a court located in the State of Minnesota, to the exclusion of the courts of any other state.

CONDITIONAL ACCEPTANCE -- Fuller's acceptance of Purchaser's order for this product is expressly conditional on Purchaser's assent to terms and conditions set forth herein.

ADEQUATE TESTS: The information contained in this bulletin we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be made in your laboratory or plant to determine if this product meets all of your requirements.