

SAFETY DATA SHEET

with reference to OSHA Hazard Communication Standard (HCS)
published in Federal Register 77 FR 17574 - March 2012

Armacell Products

revised 12/17/2014, replaces version 12/19/2013

STATUS: 12/17/2014

PAGE: 1 (of 5)

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

PRODUCT NAME Tubolit Products: Including Tubolit SS, Tubolit, Tubolit WLS, and Tubolit W SS

USE OF THE PRODUCT This product is classified as an "article" according to Title 29 of the Code of Federal Regulations, OSHA Part 1910.1200©, page 463.

"Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g. minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees."

MANUFACTURER /DISTRIBUTOR Armacell LLC
7600 Oakwood Street Extension
Mebane, NC 27302
Tel: +1-919-304-3846
www.armacell.com

Technical contact point:
Michael Resetar
Technical Manager Insulation Products Division
Tel: +1-919-304-8908 Fax: +1-919-304-8964
michael.j.resetar@armacell.com

EMERGENCY INFORMATION Armacell LLC
7600 Oakwood Street Extension
Mebane, NC 27302
Tel: +1-919-304-3846
www.armacell.com

2. HAZARDS IDENTIFICATION

<u>(Chemical Identity; Common Name)</u>	<u>C.A.S. No</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TVL</u>
Isobutane	75-20-5	0 – 10%		800 ppm TWA

3. COMPOSITION / INFORMATION ON INGREDIENTS

DESCRIPTION Expanded, closed-cell polyethylene compound. Available in tubes of various ID's and wall thickness, with or without self adhering strips

- Polyethylene

SAFETY DATA SHEET

with reference to OSHA Hazard Communication Standard (HCS)
published in Federal Register 77 FR 17574 - March 2012

Armacell Products

revised 12/17/2014, replaces version 12/19/2013

STATUS: 12/17/2014

PAGE: 2 (of 5)

4. FIRST-AID MEASURES

IN CASE OF INHALATION	Not applicable
IN CASE OF SKIN CONTACT	Not applicable
IN CASE OF EYE CONTACT	Not applicable
IN CASE OF INGESTION	Not applicable

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Unrestricted, Flashpoint: Isobutene is 117°F. Range: LEL =1.6% by volume UEL 8.4% by volume.
SPECIAL EXPOSURE HAZARDS ARISING FROM THE PREPARATION	Fire gases, do not breathe. Emits toxic fumes under fire conditions because of incomplete incineration. In the case of fire wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURE

PERSONAL PRECAUTIONS	Not applicable
ENVIRONMENTAL PRECAUTIONS	Not applicable
METHODS FOR CLEANING UP / TAKING UP	Take up mechanically.

7. HANDLING AND STORAGE

HINTS FOR SAFE HANDLING	None
HINTS FOR PROTECTION AGAINST FIRE AND EXPLOSION	PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE, FLAMMABLE VAPORS OF ISOBUTANE MAY BE GENERATED DURING UNVENTILATED STORAGE OF LARGE AMOUNTS OF THIS PRODUCT (FOR EXAMPLE IN STORAGE TRAILERS) WARNING: TO PREVENT THE BUILD-UP OF FLAMMABLE VAPORS, DO NOT STORE LARGE QUANTITIES OF THIS PRODUCT IN UNVENTILATED SPACES
HINTS FOR SEPARATION OF INCOMPATIBLE PRODUCTS	None
FURTHER INFORMATION ON STORAGE CONDITIONS	Can be stored in clean, dry rooms under normal conditions with respect to humidity (50 - 70 %) and surrounding temperature of 32 °F – 95 °F (0 °C - 35 °C).

SAFETY DATA SHEET

with reference to OSHA Hazard Communication Standard (HCS)
published in Federal Register 77 FR 17574 - March 2012

Armacell Products

revised 12/17/2014, replaces version 12/19/2013

STATUS: 12/17/2014

PAGE: 3 (of 5)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

GENERAL HEALTH MEASURES	Not applicable
RESPIRATORY PROTECTION	Not applicable
HAND PROTECTION	Not applicable
EYE PROTECTION	Not applicable

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Tubes in various ID's and Wall thickness with and without self adhesive closure strips
COLOR	Dark grey, White
ODOR	Characteristic
MELTING POINT	Not applicable
BOILING POINT	Not applicable
LOWER EXPLOSION LIMIT	1.6% by volume
UPPER EXPLOSION LIMIT	8.4% by volume
DENSITY AT 73 °F (23 °C)	1.5 – 6 lb./ ft ³ (24 – 96 kg./ m ³)
WATER SOLUBILITY 73 °F (23 °C)	Insoluble

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID	Avoid open flames.
HAZARDOUS REACTION	No dangerous reactions known.
HAZARDOUS DECOMPOSITION PRODUCTS	No decomposition if used as prescribed.

SAFETY DATA SHEET

with reference to OSHA Hazard Communication Standard (HCS)
published in Federal Register 77 FR 17574 - March 2012

Armacell Products

revised 12/17/2014, replaces version 12/19/2013

STATUS: 12/17/2014

PAGE: 4 (of 5)

11. TOXICOLOGICAL INFORMATION

EXPERIENCE MADE IN PRACTICE When used and handled according to specification, the product does not have any harmful effect according to our experience and knowledge.

12. ECOLOGICAL INFORMATION

ADDITIONAL ECOLOGICAL INFORMATION The product is classified non-hazardous to waters.

13. DISPOSAL CONSIDERATIONS

DISPOSAL PRODUCT Dispose waste according to applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

TRANSPORT BULK SHIPMENTS OF THIS PRODUCT IN VENTILATED TRAILERS ONLY.
WARNING: TO PREVENT POTENTIAL FIRE OR EXPLOSION, DO NOT WELD OR APPLY INTENSE HEAT TO CLOSED CONTAINERS WHICH CONTAIN THIS PRODUCT. OPEN CLOSED CONTAINERS IN A WELL-VENTILATED AREA AWAY FROM SPARKS OR OPEN FLAMES.
WARNING: THIS PRODUCT IS COMBUSTIBLE AND SHOULD NOT BE EXPOSED TO SPARKS OR OPEN FLAMES. LARGE QUANTITIES OF THIS PRODUCT CAN BURN RAPIDLY AND RELEASE TOXIC GASES, INCLUDING CARBON MONOXIDE.
WARNING: FABRICATION METHODS INVOLVING CUTTING OF THIS PRODUCT MAY RELEASE ISOBUTANE REMAINING IN THE FOAM CELL STRUCTURE. PROVIDE ADEQUATE VENTILATION TO INSURE THAT THE ISOBUTANE CONCENTRATIONS REMAIN BELOW THE ACGIH THRESHOLD LIMIT VALUE. (TLV) OF 800 PPM AND LOWER FLAMMABLE LIMIT OF 1.8% IN AIR BY VOLUME TO PROTECT WORKERS AND ELIMINATE THE POSSIBILITY OF DEVELOPING FLAMMABLE OR HAZARDOUS CONCENTRATIONS.
OTHER PRECAUTIONS: N/A. WORK SITE ENVIRONMENT: N/A.

15. REGULATORY INFORMATION

This product does not require labelling in terms of REACH regulation (EC) 1907/2006

16. OTHER INFORMATION

The data in this safety data sheet describe the safety requirements of our product based on our current level of knowledge and may not be considered to guarantee any product properties and it is sufficient for **United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS) standard**. However, we have no knowledge of or control over the working conditions. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.



SAFETY DATA SHEET

with reference to OSHA Hazard Communication Standard (HCS)
published in Federal Register 77 FR 17574 - March 2012

Armacell Products

revised 12/17/2014, replaces version 12/19/2013

STATUS: 12/17/2014

PAGE: 5 (of 5)