

**MATERIAL SAFETY DATA SHEET**  
**ISOLMOS 450 - 550**  
**AB-45 AB-50 AB-55 AB-60 AB70**  
**AW-500**

October 2012

1) PRODUCT IDENTIFICATION AND COMPANY	
TRADE NAME:	ISOLMOS 450-550, AB-45 AB-50 AB-55 AB-60 AB-70, AW-500
PRODUCT :	Refractory insulating bricks for max. temperature of 900° - 1050° C
MANUFACTURER :	MOSCONI S.r.l. – Villa Fornace, 4 – 26021 Annicco (CR) ITALY Phone: +39 0374 79020 – Fax +39 037479101 <a href="http://www.mosconi.com">www.mosconi.com</a> Mr. Paolo Mosconi
PERSON TO REFER :	Tel. +39037479020 Fax +39037479101 <a href="mailto:paolo.mosconi@mosconi.com">paolo.mosconi@mosconi.com</a> Dr. Raffaella Bufera
RESPONSABILE OF MSDS:	Centro Antiveleni Pavia – Italy Phone +39 0382 26261 <a href="mailto:raffaella.butera@fsm.it">raffaella.butera@fsm.it</a>
DIVISION ANTIPOISON:	For emergency phone no. +39 0382 24444 operative h. 24/24
2) HEALTH HAZARD	
CLASSIFICATION: LIMITS HAZARD	<p>The product is not classified as dangerous according to Regulation CE 1272/2008 (CLP).</p> <p>This item, as a product, is not subjected to classification and marking according to the above mentioned Regulation. Nevertheless it must be noted that the use of the products may release dusts containing crystalline silica. The inhalation of high concentration of dust may cause irritation to the higher respiratory system, to skin and eyes. A priori we cannot define if and the quantity of crystalline silica can be found in free breathable shape under real condition of use.</p> <p>The free crystalline silica is not in the Enclosure Vi of Regulation Ce 1272/2008 (CLP), but long work exposure to dust of crystalline silica may cause lung fibrosis, silicosis and according to IARC - International Agency for Cancer Research - the exposure to dust containing crystalline silica can increase the risk to develop pulmonary neoplasia.</p>
3) INFORMATION OF THE COMPONENTS	
MATERIAL OR COMPONENTS:	<p>Product composed of silica, aluminium oxide, iron oxide, oxide alkaline and alkaline earths. According to Regulation 67/1272/2008 (CLP), the product does not contain components classified as dangerous. Warning: ISOLMOS 450-550, AB-45 AB-50 AB-55 AB-60 AB-70 and AW-500 contain crystalline silica as here below indicated:</p> <p>Quartz 5,3-8,0% (n. CAS 14808-60-7)</p> <p>Cristobalite : not detectable (n. CAS 14464-46-1)</p> <p>Tridimite : not detectable (n. CAS 15468-32-3)</p>
4) FIRST AID	
MEDICAL ATTENTION	In case of serious symptoms seek medical advice.
INHALATION	In case of cough, dyspnea, go to open air, drink water and blow the nose.
SKIN CONTACT	Rinse with water for 15 minutes, in case of serious irritation, seek medical advice.
EYE CONTACT	Flush with water for 15 minutes holding the eyelids wide open, remove contact lenses. In case of serious irritation, seek medical advice.
INGESTION	Rinse mouth with water.
FIRST AID EQUIPMENT	Water for flushing skin and eyes.
5) FIRE FIGHTING MEASURES	
	The product is non-flammable, no special measures are required, follow the extinguishing procedure requested for other materials in the area.

6) ACCIDENTAL RELEASE MEASURES																					
INDIVIDUAL MEASURES	Only in case of dust use protective respiratory equipment, like indicated in section 8.																				
ENVIRONMENTAL MEASURES	Do not release the product in the environment.																				
DECONTAMINATION	Before seeping the product wet the floor. Should be collected in bins for disposal.																				
7) HANDLING AND STORAGE																					
HANDLING	In case of dust use protective respiratory equipment and wear protective gloves and glasses. Remove contact lenses.																				
STORAGE	Store in a dry place.																				
8) EXPOSURE CONTROL - INDIVIDUAL PROTECTION																					
EXPOSURE WORK LIMITS	The below indicated work limits refer to the components aero dispelled during the use (ACGIH, 2007)																				
BIOLOGICAL EXPOSURE	Not relevant.																				
PERCEPTION OLFACTORY LIMITS	Not relevant.																				
ENVIRONMENTAL MEASURES	Avoid generation of dust and follow the measures indicated in section 7.																				
BREATHING PROTECTION	Use local exhaust ventilation and respiratory protection.																				
EYE PROTECTION	Use protective glasses especially when the product is cut or perforated, remove contact lenses.																				
HAND PROTECTION	Wear gloves for protection against scraping.																				
SKIN PROTECTION	None.																				
WORK LIMIT EXPOSURE	<table border="1"> <thead> <tr> <th>MATERIAL</th> <th>TLV ppm</th> <th>TWA mg/m<sup>3</sup></th> <th>Valore guida mg/m<sup>3</sup></th> <th>Note</th> </tr> </thead> <tbody> <tr> <td>Inhalating irritating dust</td> <td></td> <td></td> <td>10</td> <td>*</td> </tr> <tr> <td>Breathable irritating dust</td> <td></td> <td></td> <td>3</td> <td>*</td> </tr> <tr> <td>Quartz</td> <td>0,01</td> <td>0,025</td> <td></td> <td>A2</td> </tr> </tbody> </table> <p>* advice as guideline rather than TLV A2 suspected carcinogenic to human</p>	MATERIAL	TLV ppm	TWA mg/m <sup>3</sup>	Valore guida mg/m <sup>3</sup>	Note	Inhalating irritating dust			10	*	Breathable irritating dust			3	*	Quartz	0,01	0,025		A2
MATERIAL	TLV ppm	TWA mg/m <sup>3</sup>	Valore guida mg/m <sup>3</sup>	Note																	
Inhalating irritating dust			10	*																	
Breathable irritating dust			3	*																	
Quartz	0,01	0,025		A2																	
9) PHYSICO-CHEMICAL PROPERTIES																					
STATE	Solid	COMBUSTIVE PROPERTY	None																		
COLOUR	Cream (AW-500) Reddish (others)	DENSITY	400 - 700 kg/m <sup>3</sup>																		
SMELL	None	WATER-SOLUBLE	N.a.																		
PH	None	VISCOSITY	N.a.																		
BOILING POINT	None	EVAPORATION	N.a.																		
FLAMABILITY	Non flammable	MIXABILITY	N.a.																		
COMBUSTIBILITY	None	LIPOSOLUBILITY	N.a.																		
EXPLOSIVE PROPERTY	None	CONDUCTIVITY	N.a.																		
PRESSURE STREAM	None	SOLUBILITY IN ORGANIC SOLVENT	N.a.																		
MELTING POINT	Steady up to 1100° C																				
10) STABILITY AND REACTIVITY																					
CONDITIONS TO AVOID	The product is stable under normal circumstances.																				
MATERIALS TO AVOID	The product is stable under normal circumstances.																				
DECOMPOSITION RISKS	At the service temperature no dangerous substances are released.																				
11) TOXICOLOGICAL MEASURES																					
TOXICITY INFORMATION	No specific tests have been carried on the product. The information come from same cases of exposition to products with same physical-chemical properties, on the epidemiologic data and on observation of toxicity on the single component of the product.																				
ACUTE TOXICITY	A massive inhalation of dust may cause cough and dyspnea. The prolonged contact with skin may cause light irritation. Eye contact may cause sting and corneal wounds of variable entity.																				
CHRONIC TOXICITY	The working and handling of the product may release dusts containing crystalline silica. Inhalation: the work exposure may cause pulmonary fibrosis and increase the risk for pulmonary neoplasia. Skin contact: the prolonged contact may cause light irritation. Eye contact: It is not a ordinary way of exposure. Ingestion: It is not a ordinary way of exposure.																				

DEFERRED EFFECT	Not applicable for the product as is when enter the market. The silicogenic and carcinogenic effects due to inhalation of dust of crystalline silica appear after years of exposure.
IRRITANT EFFECT	Skin, Nose, Eyes: possible mechanical effects due to dusts.
ALLERGENIC EFFECT	Not known.
NARCOTIC EFFECT	None.
CANCEROGENIC EFFECT	IARC has classified the crystalline silica as carcinogenic to humans (Class 1). The amorphous silica is not carcinogenic (Class 3). ACGIH has classified the crystalline silica-quartz probably carcinogenic to humans (Class A2).
MUTAGENICITY	Not known.
TERATOGEN EFFECT	Not known.
<b>12) ECOLOGICAL INFORMATION</b>	
ECO-TOSSICITY	Data not available.
MOBILITY	Data not available.
PERSISTANCE	Data not available.
DEGRADABILITY	Data not available.
BIO-ACCUMULATION	Data not available.
RESULTS PBT	Data not available.
<b>13) DISPOSAL INFORMATION</b>	
The waste is classified as NOT DANGEROUS. The waste must be disposed of authorized dumping ground for inert materials. In case the product is contaminated by other dangerous material, contact an expert consultant.	
<b>14) TRANSPORTATION</b>	
The product is not subject to national and or international regulation concerning transportation for hazard products (ADR, RID, IMDG, ICAO/IATA).	
<b>15) CLASSIFICATION AND LABELLING</b>	
GENERAL INFORMATION	The product as it is, it is not dangerous according to the Regulation CE 1278/2008 (CLP)
RULES ON HEALTH AND SECURITY	Regulation REACH CE 1907/2006 and further modifications <ul style="list-style-type: none"> <li>• The product does not contain substances which are in the list of high worrying substances (SVHC) candidates to authorisation.</li> <li>• The product does not contain substances subjected to restrictions</li> </ul>
VALUATION OF CHEMICAL SECURITY	At date of issuing of Safety Data Sheet, there is any available valuation of chemical security according to Regulation REACH (Regulation (CE) no. 1907/2006) for substances composing the product
<b>16) OTHER INFORMATION</b>	
The information on this MSDS is based on the current knowledge and comply with the Italian and European regulations about classification and labelling of Dangerous Substances. The product must not be used for other purposes other than the ones specified in Section 1. It is responsibility of the user to take all the necessary steps to comply with the Italian and European regulations.	
Revisions : Rev. 1 dtd. 03/05/1999 first issue of the MSDS.	
Rev. 2 dtd. 19/11/2002 updating of the work exposure limits and evaluation of potential carcinogenicity of the crystalline silica.	
Rev. 3 dtd. 11/01/2008 updating of the work exposure limits and to the Regulation (CE 1907/2006).	
Rev. 4 dtd. 06/06/2011 check of security information and adjustment to Regulation CE 453/2010.	