



INNOVATIONS FOR LIVING™

# SAFETY DATA SHEET

According to EC Directive 2001/58/EC

Classification	Personal Protective Equipment	Transport Symbol
 Xi		not regulated

Preparation Date: 15-January-2007

Revision Date 18-June-2007

Revision Number 1

## 1. PRODUCT and COMPANY IDENTIFICATION

<b>Generic Product Name</b>	Low Density Fiber Glass Insulation Batts/Boards/Loosefill/Rolls – Unfaced Products
<b>Common name</b>	Acoustical Backing Board, Advanced ThermaCube Plus®, Blended Blowing Wool, Cathedral Batt Insulation, Cavity Wall, Cold Storage Wall, Curtain Wall 225, Flexible Marine, Flexible Type 75 AF-FDM, HV-24, HV-26, H <sub>2</sub> V-1000, H <sub>2</sub> V-2000, Insulation Batts, Manufactured Housing Insulation, Masonry Wall Insulation, Metal Building (all types), Metal Framing Batts, Metal Framing Insulation, Multi-purpose Insulation, Noise Stop Board, Pink® Insulation, Pink Pak, Quiet Zone Acoustic Batt, RA Series, Shaft Wall, Sill Sealer, Sonobatts, Sound Attenuation Batts, Standard Blend, Super Pink R Blowing Wool, ThermaGlas®, Marine Board, Unfaced Duct Wrap, Warm-N-Dri, YELLOW JACKET™ Fiber Glass Insulation, and YELLOW JACKET™ Loose Fill.
<b>Product Code</b>	15-MSD-13614-S – EU
<b>Recommended Use</b>	Thermal Building Insulation Products
<b>Contact manufacturer</b>	EUROPEAN OWENS-CORNING FIBERGLAS Chaussée de la Hulpe 166 1170 Bruxelles Tel. +32 2 674 82 11 Fax +32 2 674 82 48
<b>Emergency telephone number</b>	Emergencies ONLY (after 5 pm AND weekends) phone 001-419-248-5330  CHEMTREC (24h/24) phone 001-800-424-9300
<b>Health and Technical contacts</b>	Health Issues Information (8am-5pm CET): phone +32.87.692.467 or 1-419-248-8234 Technical Product Information (8am-5pm CET): 1-800-GET-PINK or 1-800-438-7465

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component	Percent by Wt.
65997-17-3	Fiber Glass Wool (Fibrous Glass)	85-96
25104-55-6	Urea, polymer with formaldehyde and phenol	4-15

In the meaning of European Directive 67/548/EEC and its amendments, fiber glass wool is classified as an irritant to skin (Xi, R38) by mechanical action (explanations see section 11)

**For the full text of the R phrases mentioned in this Section, see Section 16**

### 3. HAZARDS IDENTIFICATION

**Glass fiber wool insulation products are classified as irritant to skin according to European Directive 67/548/EEC and 99/45/EC and their latest amendments.**

<b><u>Classification:</u></b> Symbol(s)	Xi
<b><u>Most important hazards</u></b> <b><u>R-phrases(s)</u></b>	R38
<b>Physical-chemical properties</b>	No information available
<b>Properties affecting health</b>	Dust and fibers may cause mechanical irritation to the eyes, skin and mucous membranes. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhaling dust or fibers may cause short-term irritation of the mouth, nose and upper airways and of the intestines. The fibers cannot be carried into the lower lung passages when inhaled due to the physical properties of the fibers.
<b>Environmental hazard</b>	No information available
<b>Carcinogenic Status Statements</b>	This product contains traces of a component which is listed by (IARC, NTP or ACGIH). See Section 11-Toxicological Information

### 4. FIRST AID MEASURES

<b>Eye contact</b>	<ul style="list-style-type: none"> <li>• Rinse immediately with plenty of water, also under the eyelids, for at least 15 Minutes</li> <li>• Do not rub or scratch eyes</li> <li>• If eye irritation persists, consult a specialist</li> </ul>
<b>Skin contact</b>	<ul style="list-style-type: none"> <li>• Wash off immediately with soap and cold water.</li> <li>• DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of the fibers.</li> <li>• DO NOT rub or scratch affected areas.</li> <li>• Use a wash cloth to help remove fibers or apply and remove an adhesive tape so that the fibers adhere to the tape and are pulled out of the skin.</li> <li>• Remove contaminated clothing.</li> <li>• If skin irritation persists, call a physician</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>• Accidental ingestion of this material is unlikely</li> <li>• If this does occur, watch person for several days to make sure intestinal blockage does not occur</li> <li>• Rinse mouth with water and drink water to remove fibers from the throat</li> <li>• If symptoms persist, call a physician</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>• Move to fresh air</li> <li>• If symptoms persist, call a physician</li> </ul>

## 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media</b>	<ul style="list-style-type: none"> <li>• dry chemical</li> <li>• foam</li> <li>• carbon dioxide (CO<sub>2</sub>)</li> <li>• water fog</li> </ul>
<b>Unsuitable Extinguishing Media</b>	None
<b>Unusual fire</b>	No unusual fire and explosion hazards are expected from this product.
<b>Special Hazards Arising from the Chemical</b>	Release of small quantities of gases or vapors may occur due to prolonged exposure to heat or fire.
<b>Protective Equipment and Precautions for firefighters</b>	Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with the skin and the eyes.
<b>Methods for Clean-up</b>	<ul style="list-style-type: none"> <li>• Use an industrial vacuum cleaner with a high efficiency filter to clean up dust And fiber contamination</li> <li>• Avoid dry sweeping</li> <li>• After cleaning, flush away traces with water</li> <li>• Pick up and transfer to properly labeled containers</li> </ul>

## 7. HANDLING AND STORAGE

<b>Handling</b>	<ul style="list-style-type: none"> <li>• Avoid dust formation</li> <li>• Do not breathe dust</li> <li>• Wear personal protective equipment</li> </ul>
<b>Storage</b>	Keep product in its packaging until use to minimize potential dust generation.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s)	EU	United Kingdom	France	Spain	Germany
phenol	TWA(proposed value) : 2ppm	TWA: 2ppm	TWA: 2ppm	TWA: 2ppm	MAK: 2ppm
Formaldehyde	TWA: 0.2 ppm		VME: 0.5 ppm VLE: 1 ppm	VLA-EC: 0.3 ppm VLA-EC: 0.37 mg/m <sup>3</sup>	MAK: 0.3 ppm MAK: 0.37 mg/m <sup>3</sup> Peak: 0.6 ppm Peak: 0.74 mg/m <sup>3</sup>
Glass Fiber		respirable dust 5mg/m <sup>3</sup> total dust 10mg/m <sup>3</sup>	VME: 1fiber/cm <sup>3</sup> Total dust: 10mg/m <sup>3</sup>	dust: 10mg/m <sup>3</sup> VLA-ED: 1 fiber/cm <sup>3</sup>	Respirable fibers: 0.25fibre/ml Alveolar dust: 6mg/m <sup>3</sup>
	<b>Italy</b>	<b>Portugal</b>	<b>Netherlands</b>	<b>Finland</b>	<b>Austria</b>
Phenol	TWA : 5ppm	TWA : 2ppm	TWA : tbd	TWA : 2ppm	TWA : 2ppm
Formaldehyde		Ceiling: 0.3 ppm	MAC: 1.5 mg/m <sup>3</sup> MAC: 1 ppm STEL: 2 ppm STEL: 3 mg/m <sup>3</sup>	TWA: 0.3 ppm TWA: 0.37 mg/m <sup>3</sup> Ceiling: 1 ppm Ceiling: 1.2 mg/m <sup>3</sup>	MAK: 0.5 ppm MAK: 0.6 mg/m <sup>3</sup> Ceiling: 0.5 ppm Ceiling: 0.6 mg/m <sup>3</sup>
Glass Fiber	1 fiber/ml Dust: 10mg/m <sup>3</sup>	Fibrous dust: 1mg/m <sup>3</sup> Total dust: 4mg/m <sup>3</sup>	MAC(general dust): 10 mg/m <sup>3</sup> Respirable dust: 5mg/m <sup>3</sup>	1 fiber/ml Inert dust: 10mg/m <sup>3</sup>	0.5 fiber/ml Fine dust : 6mg/m <sup>3</sup> (yearly avg)
	<b>Switzerland</b>	<b>Poland</b>	<b>Norway</b>	<b>Ireland</b>	<b>Denmark</b>
phenol	TWA : 5ppm	TWA : 10ppm	TWA : 2ppm	TWA : 2ppm	TWA : 1ppm

Formaldehyde	MAK: 0.3 ppm MAK: 0.37 mg/m <sup>3</sup> STEL: 0.6 ppm STEL: 0.74mg/m <sup>3</sup>	NDS: 0.5 mg/m <sup>3</sup> NDSCh: 1 mg/m <sup>3</sup>	TWA: 0.6 mg/m <sup>3</sup> TWA: 0.5 ppm Ceiling: 1.2 mg/m <sup>3</sup> Ceiling: 1 ppm	TWA: 2.5 mg/m <sup>3</sup> TWA: 2 ppm STEL: 2.5 mg/m <sup>3</sup> STEL: 2 ppm	Ceiling: 0.3 ppm Ceiling: 0.4 mg/m <sup>3</sup>
Glass Fiber	0.5 fiber/ml Dust: 6mg/m <sup>3</sup>		1 fiber/ml Inert respirable dust: 5mg/m <sup>3</sup> Total inert dust: 10mg/m <sup>3</sup>	2 fibers/ml Inhalable dust: 5mg/m <sup>3</sup>	1 fiber/ml inert respirable dust 5mg/m <sup>3</sup> total inert dust: 10mg/m <sup>3</sup>

**Low density fiber glass for insulation (CAS glass oxide 65997-17-3)** is listed under “Synthetic Vitreous Fibers” in ACGIH. The glass formulation we use to manufacture this product is exempted from carcinogenic classification based on tests results as described in EU Directive 97/69/EC (note Q&R of Dangerous substances Directive 67/548/EEC)

**Occupational exposure controls**

**Engineering Controls**

- Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits. Dust collection system must be used in transferring operations, cutting or machining or other dust generating process. Vacuum or wet clean-up methods should be used

**Personal protective equipment**

**Respiratory protection•**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators such as 3M model 8210 (3M model 8271 in high humidity environments)

**Eye/face Protection**

- Safety glasses with side-shields

**Skin Protection**

- protective gloves
- Long sleeved shirt and long pants

**General Hygiene Considerations**

- Avoid contact with skin, eyes and clothing
- Avoid getting dust into boots and gloves through wrist bands and pant tucks
- Remove and wash contaminated clothing before re-use
- Wash hands before breaks and immediately after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Odor</b>	light binder odor.	
<b>Color and appearance</b>	Pink, yellow or tan fibrous material	
<b>Physical State</b>	Solid.	
<b>pH</b>	Does not apply	
<b>Flash point</b>	Does not apply	
<b>Autoignition temperature</b>	Not available	
<b>Melting point/range</b>	>800°C	
<b>Flammability Limits in Air</b>	<b>lower /</b>	<b>upper /</b>
<b>Explosive properties</b>	Does not apply	
<b>Oxidizing properties</b>	Does not apply	
<b>Vapor Pressure</b>	Does not apply	
<b>Water solubility</b>	insoluble	

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable.
<b>Conditions to avoid</b>	None expected.
<b>Incompatible Materials</b>	None.
<b>Hazardous decomposition products</b>	<ul style="list-style-type: none"> <li>• Formaldehyde (free formaldehyde released only with high temperature and humidity)</li> <li>• Nitrogen oxides (NO<sub>x</sub>)</li> <li>• amines</li> <li>• other undetermined compounds could be released in small quantities</li> </ul>
<b>Possibility of Hazardous Reactions</b>	Hazardous polymerization does not occur

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. High exposures may cause difficulty breathing, congestion and chest tightness

### Component Information

	LD50 Oral	LD50 Dermal	LD50 Inhalation
Urea formaldehyde polymer	8394 mg/kg Rat		167 mg/m <sup>3</sup> Rat 4 h
Formaldehyde	100 mg/kg Rat	270 mg/kg Rabbit	0.578 mg/L Rat 4 h 250 ppm Rat 4 h

### Chronic toxicity

#### **Formaldehyde – CAS 50-00-0**

Twenty-six scientists from ten countries met in June 2004 to assess the carcinogenic hazard to humans of formaldehyde. The Working Group considered it was "improbable that all of the positive findings...could be explained by bias or by unrecognized confounding effects" and concluded that there is sufficient evidence in humans that formaldehyde causes nasopharyngeal cancer. The Working Group concluded that there is "strong but not sufficient evidence for a causal association between leukemia and occupational exposure to formaldehyde". In rats, several inhalation studies have shown that formaldehyde induces squamous-cell carcinoma of the nasal cavity. Four drinking-water studies gave mixed results.

Overall, the Working Group concluded that formaldehyde is carcinogenic to humans (Group 1), on the basis of sufficient evidence in humans and sufficient evidence in experimental animals—a higher classification than previous IARC evaluations.

Under EU classification (annex 1 of dangerous substances directive 67/548/EEC), formaldehyde remains classified as carcinogenic category 3

#### **Glass fiber for insulation (fiber glass wool) – CAS glass oxide: 65997-17-3**

According to E.U. Directives (67/548/EEC and its amendments, in peculiar 97/69/EC) the fiber glass wool used in these products are not classified as carcinogenic. ***Insulation wools contain a proportion of thicker fibers, which may itch the skin and cause reversible temporary symptoms due to the mechanical action of coarse fibers as may occur with any non-fibrous dust. To cover this effect, the EU Commission chose to classify all insulation wools as "irritant to the skin".***

In October 2001, the International Agency for Research on Cancer (IARC) classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans." The 2001 decision was based on human studies and animal research that have not shown an association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease. This classification replaces the IARC finding in 1987 of a Group B designation "possibly carcinogenic to humans."

<b>Allergy</b>	No information available
<b>Neurological Effects</b>	No information available
<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available
<b>Developmental Effects</b>	No information available
<b>Target Organ Effects</b>	No information available

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No data available for finished product.

Formaldehyde - 50-00-0

**Microtox Data**

*Photobacterium phosphoreum* EC50=6.81 mg/L (25 min)

*Photobacterium phosphoreum* EC50=7.26 mg/L (15 min)

*Photobacterium phosphoreum* EC50=9.0 mg/L (5 min)

**Water Flea Data**

*water flea* EC50=20 mg/L (96 h)

<b>Persistence/Degradability</b>	Not available
<b>Bioaccumulation/Accumulation</b>	Not available

Formaldehyde - 50-00-0

log Pow = 0.35

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of in accordance with Local, State, Federal and Provincial regulations.
<b>Contaminated packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal.
<b>EWC waste disposal No</b>	no data available

## 14. TRANSPORT INFORMATION

<b>IMDG/IMO</b>	not regulated
<b>RID</b>	not regulated
<b>ADR</b>	not regulated
<b>ICAO</b>	not regulated
<b>IATA</b>	not regulated
<b>DOT</b>	not regulated
<b>TDG</b>	not regulated
<b>MEX</b>	not regulated

## 15. REGULATORY INFORMATION

**Labeling**

This product is an irritant to skin according to European Directive 99/45/EC, 67/548/EEC and their latest Amendments



**Symbol(s)** Xi, irritant to skin

**R -phrase(s):** R 38

**S -phrase(s):** Recommended: S 37

**International Inventories**

	<b>EINECS</b>	<b>TSCA</b>	<b>DSL</b>	<b>ENCS</b>	<b>AICS</b>	<b>KECL</b>
Urea formaldehyde polymer	no	yes	yes	yes	yes	yes
Glass Fiber wool	266-046-0	yes	yes	yes	yes	yes

## 16. OTHER INFORMATION

**Text of R phrases mentioned in Section 2**

R38: irritant to skin

S37: wear appropriate gloves

**Preparation Date:** 15-Jan-2007

**Revision Date** 18-June-2007

**Revision Summary** Added Common Names

## Disclaimer

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use

**End of Safety Data Sheet**