



PGF Insulation Glass Mineral Wool Insulation is Safe to Manufacture and Use

Glass mineral wool falls within a group of materials historically referred to as man-made vitreous (of or like glass) fibres and more recently synthetic vitreous fibres or SVF. PGF Insulation glass mineral wool insulation products have been manufactured and marketed for over 25 years. During that time, extensive medical and scientific research has been conducted throughout the insulation industry to determine the safety of working with glass mineral wool in the process of manufacturing, installation, and commercial and residential use. The research has consistently verified the safety of glass mineral wool.

Glass mineral wool insulation is found to be safe for workers to manufacture, install, and use when appropriate work practices are followed, preventing temporary mechanical irritation. The insulation material is also safe for the building occupants who enjoy the lasting thermal and acoustical comfort benefits of glass mineral wool insulation.

In October 2001, the International Agency for Research on Cancer (IARC), acting through an independent panel of internationally distinguished scientists, toxicologists, and health experts, reviewed the most recent scientific literature and removed glass, rock, and slag wool fibres from its list of possible carcinogens. IARC is part of the World Health Organization, and its mission is to coordinate and conduct research on the causes of human cancer, the mechanisms of carcinogenesis, and to develop scientific strategies for cancer control.

"Epidemiologic studies...provide no evidence of increased risks of lung cancer or mesothelioma...and inadequate evidence overall of any cancer risk"

GLASS MINERAL WOOL IS NOT CARCINOGENICITY IN HUMANS...

In 2001, the World Health Organization's International Agency for Research on Cancer ("IARC") removed glass wool insulation from its list of possible carcinogens. Based on the review by an international panel of experts, the IARC reported that "...studies published during the 15 years since the previous IARC Monographs review of these glass wool in 1988 provide no evidence of increased risks of lung cancer or of mesothelioma (cancer of the lining of the body cavities) from occupational exposures during manufacture of these materials, and inadequate evidence overall of any cancer risk."¹

Specifically, IARC downgraded the classification of these insulation glass fibre from Group 2B (possible carcinogen) to Group 3 (not classifiable as to carcinogenicity in humans). All glass mineral wool fibres that are commonly used for thermal and acoustical insulation are included in the Group 3 classification.²

In 2000, the U.S. National Academy of Sciences also found "no significant association between glass fibre exposure and lung cancer or non-malignant respiratory disease in the MVF [Man-made Vitreous fibres] manufacturing environment."³

In 2004, the U.S. Department of Health and Human Services Agency for Toxic Substance and Disease Registry ("ATSDR") released the "Toxicological Profile for Synthetic Vitreous fibres." The profile is consistent with IARC's findings, reporting that "exposure to SVFs [Synthetic Vitreous fibres] are low [and] that epidemiological studies showed no consistent evidence of disease among groups of workers involved in the manufacture of SVFs."⁴

PGF Insulation is determined to protect your health and safety.

¹ <http://www.iarc.fr/en/media-centre/pr/2001/pr137.html>

² International Agency for Research on Cancer, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Man-Made Vitreous Fibres, Vol.81(Lyon, France: WHO/IARC, 2002). This monograph is available at <http://monographs.iarc.fr/ENG/Monographs/vol81/index.php>

³ Quoted in "Health and Safety Facts for fibre Glass," 62, Publication Number 40, September 2003, www.naima.org.

⁴ Ibid. at p. 18.



PGF Insulation Glass Mineral Wool Insulation is Safe to Manufacture and Use

"The glass mineral wool is safer than coffee."



In general, glass mineral wool does not cause any effect to human health and it is not carcinogenic. Therefore, insulating your building with Glass Mineral Wool will not be harmful to your health.

GROUP	CLASSIFICATION	AGENT
Group 1	Carcinogenic to humans	Asbestos and tobacco smoke (second-hand), salted fish (chinese-style), etc
Group 2A	Probably carcinogenic to humans	Engine exhaust, diesel and ultraviolet ray etc
Group 2B	Possibly carcinogenic to humans	Gasoline, pickled vegetables (traditional in Asia), talc-based body powder (perineal use of) and <i>coffee</i> , etc
Group 3	Not classifiable as to its carcinogenicity to humans	<i>Glass wool</i> , nylon and black tea, etc
Group 4	Probably not carcinogenic to humans	Caprolactam

Source: Agents Classified by the IARC Monographs, Volumes 1-100

The physical and chemical properties of PGF Insulation products represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Head Office to assure current information. All PGF Insulation products are sold subject to PGF Insulation's Limited Warranty. For a copy of the PGF Insulation Limited Warranty and information on other thermal and acoustic insulations products, call +6 04 390 8460.



PGF Insulation Sdn. Bhd. (228905-M)

Penang Office : No. 2449, Lorong Perusahaan Sepuluh, Kawasan Perusahaan Perai, 13600 Perai, Penang, Malaysia

T: +604 390 8460 F: +604 399 6197

KL Office : 46-2, Block D, Zenith Corporate Park, Jalan SS7/26, 47301 Petaling Jaya, Selangor Darul Ehsan

T: +603 7886 0074 F: +603 7886 077

E: sales@polyglass.com.my

W: www.polyglass.com.my



Sustainable Insulation • Save Energy 