

#### What are VOCs?

Volatile organic compounds (VOCs) are organic chemicals that have a high vapour pressure at ordinary room temperature. Their high vapour pressure results from a low boiling point, which causes large numbers of molecules to evaporate or sublime from the liquid or solid form of the compound and enter the surrounding air, a trait known as volatility. For example, at 20°C water has a vapour pressure (mbar) of 23.4 whilst the MDI used to manufacture Star Uretech's products has a vapour pressure of just 0.00001 which is two and a half million times less volatile than water and 2000 times less volatile than the other pure TDI and HDI isocyanates.

VOCs are numerous, varied, and ubiquitous. They include both human-made and naturally occurring chemical compounds. Most scents or odours are of VOCs. Some VOCs are dangerous to human health or cause harm to the environment. Anthropogenic VOCs are regulated by law, especially indoors, where concentrations are the highest.

#### What is LEED?

LEED (Leadership in Energy and Environmental Design) is a green building certification program administered by the Green Building Certification Institute (GBCI). It provides third-party certification that a building is designed and built using materials and methods which reduce environmental impact.



The LEED program is designed to apply at all types of buildings, at any stage of a building's life cycle and provides construction industry professionals and building owners with a framework to produce green buildings that provide a healthy environment for their occupants.

#### ● Evaluation Criteria:

LEED bases its evaluation on a building's performance in the following five key areas: energy efficiency, water efficiency, materials and resources, indoor environmental quality and overall sustainability of the site. The use of the StarFix range of adhesives, coatings and binders falls into the EQ Credit 4.1: Low-Emitting Materials: Adhesives & Sealants subsection of the 'materials and resources' category.

#### What is BREEAM?

BREEAM is the world's foremost environmental assessment method and rating system for buildings. It sets the standard for best practice in sustainable building design, construction and operation. A BREEAM assessment uses recognized measures of performance, which are set against established benchmarks, to evaluate a building's specification, design, construction and use.



#### ● Evaluation Criteria:

BREEAM bases its evaluation on a building's performance in the following eight key areas: energy and water use, the internal environment (health and well-being), pollution, transport, materials, waste, ecology and management processes.


## Declaration

Star Uretech declares that the following data is accurate and should be used in your LEED/BREEAM assessment:

The StarFix range of single component adhesives and coatings are supplied in metal containers that when empty or contain only fully cured material, can be recycled or disposed of as general building waste.

**BREEAM Credit 'Volatile Organic Compounds' & LEED EQ Credit 4.1: Low-Emitting Materials** submittal:

The StarFix range of single component pedestal adhesives, tanking membranes and sealers fall into the BREEAM classification of 'Flooring Adhesives', are tested according to the EU/BS standard EN 13999:2013 and are compliant to the following standards:

Regulation/Protocol	Result	Version of regulation or protocol
French VOC Regulation		Regulation of March and April 2011 (DEVL1101903D and DEVL1104875A)
French CMR components	PASS	Regulation of March and April 2011 (DEVL1101903D and DEVL1104875A)
AgBB/ABG	PASS	Anforderungen an bauliche Anlagen bezüglich des Gesundheitsschutzes (ABG), Entwurf 31.08.2017
Belgian Regulation	PASS	Royal decree of May 2015 (C-2014/24239)
EMICODE	EC 1 PLUS	November 2015
Indoor Air Comfort®	PASS	Indoor Air Comfort 6.0 of February 2017
Indoor Air Comfort GOLD®	PASS	Indoor Air Comfort GOLD 6.0 of February 2017
Blue Angel (RAL UZ 113)	PASS	RAL UZ 113 for "Low-Emission Floor Covering Adhesives and other Installation Materials" (Version June 2011)
BREEAM International	Compliant	GN22: BREEAM Recognised Schemes for VOC Emissions from Building Products
LEED v4 (outside US)	Compliant	LEED v4 for Building Design and Construction (April 2015)
BREEAM® NOR	PASS	BREEAM-NOR New Construction 2016

SCAQMD allowable VOC content (g/L): 70.00 - Product VOC content (g/L): <10.00

## Our Credentials

Star Uretech was formed in 2001 with an ambition to develop unique high performance, specialist urethane products which improved upon outdated, conventional technologies that often suffered shortcomings. Our innovative products, technical development and commitment to customer service have secured our place as a market leader in several construction adhesives market sectors. A pioneer in ultra-low VOC, phthalate & solvent free, low carbon footprint adhesives, we continue to lead the way and develop our patented range of products to meet the most challenging requirements. Our young, dynamic and forward-looking management team believe passionately that the industry needs a company which leads the way in product development and more importantly, strives to do the right thing.

Star Uretech have been formulating and manufacturing adhesives for over 15 years and our team includes several polyurethane chemists. We formulate all of our own products in our purpose-built laboratory which are then manufactured and distributed from our production and warehousing facility in Lancashire. Our inhouse testing facility enables us to provide unmatched product testing, performance data and a guarantee that our products are of the very highest quality.

