



## HEX<sup>TM</sup> SEALANT REACH STATEMENT

### **What is REACH?**

Registration, Evaluation, Authorisation and Restriction of Chemicals (“REACH”) is a European Union regulation dating from December 18, 2006. REACH addresses the production and use of chemical substances, and their potential impacts on both human health and the environment.

### **Who is Responsible for REACH Compliance?**

Companies established outside the EU are not bound by the obligations of REACH, even if they export products into the customs territory of the European Union. The responsibility for fulfilling the requirements of REACH, such as pre-registration or registration lies with the importers established in the European Union, or with the only representative of a non-EU manufacturer established in the European Union. This statement is designed to assist you, as an EU importer, with an understanding of your REACH compliance when importing HEX<sup>TM</sup> Sealant into the EU.

### **What is HEX<sup>TM</sup> Sealant?**

HEX<sup>TM</sup> Sealant and its packaging is composed of several ingredients, specifically, ammonia-free latex, glycerol, naturally occurring minerals, water, and PET plastic.

### **Does HEX<sup>TM</sup> Sealant Require REACH Certification?**

**No. HEX<sup>TM</sup> Sealant does not require REACH registration.** An in-depth discussion of why each ingredient of HEX<sup>TM</sup> Sealant does not trigger any REACH obligations is as follows:

#### **1. Latex<sup>1</sup>**

Product Name	CAS No.	EC / List No.	REACH No.	Classification According to Reg. (EC) 1272/2008 (CLP)
Rubber Latex	9006-04-6	N/A	N/A	Not classified as hazardous.

#### **1.1. Natural Rubber Is A Naturally Occuring Polymer**

Natural rubber fulfils the definition from article 3(39) as it is not chemically modified. Natural rubber is generated by a polymerization reaction which occurs in nature, more specifically in the e.g. Hevea Brasiliensis, and is obtained as a watery solution by extraction from the bark. The extracted liquid contains particles of natural rubber. This liquid may then be coagulated. The coagulation is a physical process that could involve the use of chemicals, such as acetic and formic acid, to create a specific environment helping the polymers coagulation. The chemicals used for coagulating natural rubber do not chemically modify the natural polymers and they are

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<sup>1</sup> The position herein is supported by the European Tyre & Rubber Manufacturers Association (“ETRMA”). See ETRMA Position Paper Natural Rubber, REACH, 1907/2006/EC, Nov. 2, 2008; see also, ETRMA Position Paper Reach Registration Requirements Dry Natural Rubber (DNR) and Natural Rubber Latex (NRL), REACH, 1907/2006/EC, Aug. 2010.

washed out at the end of the process. Some impurities produced by the tree could remain at trace level in the natural rubber at the end of the process.

From a chemical standpoint natural rubber is a naturally occurring polymer since it complies with all the conditions listed in Art. 3(5) of the REACH Regulation.<sup>2</sup> In particular:

- Natural rubber is a substance consisting of molecules characterised by the sequence of one or more types of monomer units (called isoprene).
- The molecules of natural rubber are distributed over a range of molecular weights wherein differences in the molecular weight are primarily attributable to differences in the number of monomer units.
- The simple weight majority of molecules contains at least three monomer units which are covalently bound to at least one other monomer unit or other reactant;
- Natural rubber contains less than a simple weight majority of molecules of the same molecular weight.

Further, natural rubber does not meet the criteria for classification as dangerous in accordance with Directive 67/548/EEC.

### **1.2. Natural Rubber Latex (NRL)**

The watery phase of natural rubber contains proteins that originate from the process of natural rubber biosynthesis and are considered as part of the composition of natural rubber. Once extracted, natural rubber can be worked up towards Natural Rubber Latex (NRL).

### **1.3. Non-isolated Intermediates**

Regarding the monomers of natural rubber, according to the European Chemical Agency (ECHA, Frequently Asked Questions about REACH, Version 3.0.1), “monomer substance(s) or other substance(s) in the form of monomeric units and chemically bound substance(s) originating from the natural polymer can for practical reasons be treated as “non-isolated intermediates” and do not have to be registered”.

## **2. PET Plastic**

Product Name	CAS No.	EC / List No.	REACH No.	Classification According to Reg. (EC) 1272/2008 (CLP)
Polyethylene terephthalate (PET)	25038-59-9	924-655-5	N/A	Not classified as hazardous.

Polyethylene terephthalate (PET) is an intermediate plastic used for food and non-food contact packaging, bottles and other relevant applications, by (not exhaustive methods): molding and extrusion processes. PET is a polyester polymer made by reacting ethylene glycol and terephthalic acid. Pellets of the PET polymer are heated to a molten mass, which can easily be moulded into almost any shape. PET was invented by DuPont chemists in the mid-1940s, during a search for polymers that could be used to make new textile fibres. The first PET bottle was patented by Nathaniel Wyeth in 1973 and the first PET bottle was recycled in 1977.

Polyethylene terephthalate (PET) is a polymer not classified as a hazardous substance according to Regulation (EC) No 1272/2008 (CLP). PET is not categorized as persistent, bio-accumulative or toxic (PBT). PET is not very persistent or very bio-accumulative (vPvB), as defined in REACH (Annex XIII) and is not included in the candidate list of substances of very high concern (SVHC). In accordance with Regulation (EC) No 1907/2006 (REACH), there is no obligation to provide a material safety data sheet (MSDS) for PET products.

<sup>2</sup> See Regulation 1907/2006/EC and the interpretation provided in the guidance on monomers and polymers published by the European Chemicals Agency (ECHA) in March 2008.

### 3. Glycerol

Product Name	CAS No.	EC / List No.	REACH No.	Classification According to Reg. (EC) 1272/2008 (CLP)
Glycerol	56-81-5	200-289-5	N/A	Not classified as hazardous.

Glycerol, which is also commonly called glycerine or propane-1,2,3-triol, forms the backbone of triglycerides bound to a number of fatty acids. Glycerol is sold under the trade name glycerine. Article 2(7)(b) of the Regulation (EC) No 1907/2006 (REACH) and its amendment by Regulation (EC) No 987/2008 of 8 October 2008 sets out criteria for exempting substances covered by Annex V from the registration, downstream user and evaluation requirements. Annex V (9) exempts glycerol obtained from natural sources that are not chemically modified. In accordance with Regulation (EC) No 1907/2006 (REACH), there is no obligation for REACH registration and no obligation to provide a material safety data sheet (MSDS) for glycerol.

### 4. Minerals

Article 2(7)(b) of the Regulation (EC) No 1907/2006 (REACH) and its amendment by Regulation (EC) No 987/2008 of 8 October 2008 sets out criteria for exempting substances covered by Annex V from the registration, downstream user and evaluation requirements. Annex V (7) exempts minerals obtained from natural sources that are not chemically modified. In accordance with Regulation (EC) No 1907/2006 (REACH), there is no obligation for REACH registration and no obligation to provide a material safety data sheet (MSDS) for the minerals contained in HEX™ Sealant.

## **CONCLUSION**

In conclusion, **no REACH registration** is required for HEX™ Sealant. Therefore, importers of HEX™ Sealant are exempted from any registration provisions under Title II of the Regulation. Further, additives necessary to preserve the stability of the polymer are considered to be part of the substance and do not have to be registered.

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