

# Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

## SECTION 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product name **GLAXS ORIGINAL CARTUCCIA PARTE B**

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use **BICOMPONENT GLUE IN CARTRIDGE - PART B**

Identified Uses	Industrial	Professional	Consumer
ADHESIVE SYSTEM/TREATMENT FOR STONE SECTOR	-	✓	-

### 1.3. Details of the supplier of the safety data sheet

Name **Tenax Spa**  
Full address **Via I Maggio, 226**  
District and Country **37020 Volargne (VR)**  
**Italy**  
Tel. **+39 045 6887593**  
Fax **+39 045 6862456**

e-mail address of the competent person responsible for the Safety Data Sheet **msds@tenax.it**

### 1.4. Emergency telephone number

For urgent inquiries refer to **800.883300 (24h) Centro Antiveleni (Bergamo)**  
**0 800 314 7900 (Turkey) only, or +90 0312 433 70 01 Toxicology Department and Poisons Centre**  
**+98 21 6419306 / +98 21 6405569 Poisons Information Centre (Tehran)**  
**+91 484 4008056 Poison Control Centre (South India)**  
**(011) 642 2417 / (011) 488 3108 Anti-Poison Centre (Johannesburg)**

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Acute toxicity, category 4	H332	Harmful if inhaled.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.

### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: **Warning**



# Tenax Spa

## GLAXS ORIGINAL CARTUCCIA PARTE B

Revision nr.2  
Dated 28/05/2019  
First compilation  
Printed on 28/05/2019  
Page n. 2 / 10

### SECTION 2. Hazards identification ... / >>

#### Hazard statements:

<b>H332</b>	Harmful if inhaled.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>EUH204</b>	Contains isocyanates. May produce an allergic reaction.
<b>EUH208</b>	Contains: HEXAMETHYLENE-DI-ISOCYANATE May produce an allergic reaction.

#### Precautionary statements:

<b>P280</b>	Wear protective gloves.
<b>P261</b>	Avoid breathing dust / fume / gas / mist / vapours / spray.
<b>P312</b>	Call a POISON CENTER / doctor / . . . / if you feel unwell.
<b>P403+P233</b>	Store in a well-ventilated place. Keep container tightly closed.

**Contains:** ALIPHATIC POLYISOCYANATE  
HEXAMETHYLENE-DI-ISOCYANATE

#### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### SECTION 3. Composition/information on ingredients

#### 3.2. Mixtures

##### Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>ALIPHATIC POLYISOCYANATE</b>		
CAS	28182-81-2 55 ≤ x < 100	<b>Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1 H317, EUH204</b>
EC	500-060-2	
INDEX		
Reg. no.	01-2119485796-17-XXXX	
<b>HEXAMETHYLENE-DI-ISOCYANATE</b>		
CAS	822-06-0 0,4 ≤ x < 0,45	<b>Acute Tox. 3 H331, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: 2</b>
EC	212-485-8	
INDEX	615-011-00-1	

The full wording of hazard (H) phrases is given in section 16 of the sheet.

### SECTION 4. First aid measures

#### 4.1. Description of first aid measures

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

#### 4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Information not available



### SECTION 5. Firefighting measures

#### 5.1. Extinguishing media

##### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

##### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

#### 5.2. Special hazards arising from the substance or mixture

##### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

#### 5.3. Advice for firefighters

##### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

##### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

### SECTION 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

#### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

### SECTION 7. Handling and storage

#### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

#### 7.3. Specific end use(s)

Information not available



# Tenax Spa

## GLAXS ORIGINAL CARTUCCIA PARTE B

Revision nr.2  
 Dated 28/05/2019  
 First compilation  
 Printed on 28/05/2019  
 Page n. 4 / 10

### SECTION 8. Exposure controls/personal protection

#### 8.1. Control parameters

##### ALIPHATIC POLYISOCYANATE

###### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,127	mg/l
Normal value in marine water	0,0127	mg/l
Normal value for fresh water sediment	266700	mg/kg
Normal value for marine water sediment	26670	mg/kg
Normal value for water, intermittent release	1,27	mg/l
Normal value of STP microorganisms	38,3	mg/l
Normal value for the terrestrial compartment	53182	mg/kg

###### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers			
	Acute local	Acute systemic			Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					1 mg/m3		0,5 mg/m3	

##### HEXAMETHYLENE-DI-ISOCYANATE

###### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,077	mg/l
Normal value in marine water	0,008	mg/l
Normal value for fresh water sediment	0,013	mg/kg
Normal value for marine water sediment	0,001	mg/kg
Normal value for water, intermittent release	0,774	mg/l
Normal value of STP microorganisms	8,42	mg/l
Normal value for the terrestrial compartment	0,003	mg/kg

###### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers			
	Acute local	Acute systemic			Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					0,07 mg/m3	0,07 mg/m3	0,035 mg/m3	0,035 mg/m3

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

#### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

##### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

##### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

##### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

##### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

##### ENVIRONMENTAL EXPOSURE CONTROLS



The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	SLIGHT YELLOW	
Odour	odourless	
Odour threshold	Not available	
pH	Not available	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point	> 169,5 °C	
Evaporation Rate	Not available	
Flammability of solids and gases	Not available	
Lower inflammability limit	Not available	
Upper inflammability limit	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Vapour pressure	Not available	
Vapour density	Not available	
Relative density	1,13 g/cc	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	Not available	
Explosive properties	Not available	
Oxidising properties	Not available	

### 9.2. Other information

VOC (Directive 2010/75/EC) :	0
VOC (volatile carbon) :	0

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

#### HEXAMETHYLENE-DI-ISOCYANATE

Decomposes at 255°C/491°F. Polymerises at temperatures above 200°C/392°F.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

#### HEXAMETHYLENE-DI-ISOCYANATE

May form explosive mixtures with: alcohols,bases.May react violently with: alcohols,amines,strong bases,oxidising agents,strong acids,water.

### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

#### HEXAMETHYLENE-DI-ISOCYANATE

Avoid exposure to: high temperatures,moisture.

### 10.5. Incompatible materials

#### HEXAMETHYLENE-DI-ISOCYANATE



# Tenax Spa

## GLAXS ORIGINAL CARTUCCIA PARTE B

Revision nr.2  
Dated 28/05/2019  
First compilation  
Printed on 28/05/2019  
Page n. 6 / 10

### SECTION 10. Stability and reactivity ... / >>

Incompatible with: alcohols, carboxylic acids, amines, strong bases.

#### 10.6. Hazardous decomposition products

HEXAMETHYLENE-DI-ISOCYANATE

May develop: nitric oxide, hydrogen cyanide.

### SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

#### 11.1. Information on toxicological effects

##### Metabolism, toxicokinetics, mechanism of action and other information

Information not available

##### Information on likely routes of exposure

Information not available

##### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

##### Interactive effects

Information not available

##### ACUTE TOXICITY

LC50 (Inhalation) of the mixture:	10,82 mg/l
LD50 (Oral) of the mixture:	Not classified (no significant component)
LD50 (Dermal) of the mixture:	Not classified (no significant component)

##### ALIPHATIC POLYISOCYANATE

LD50 (Oral)	> 2500 mg/kg Rat
LD50 (Dermal)	> 2000 mg/kg Rat
LC50 (Inhalation)	0,39 mg/l/4h

##### HEXAMETHYLENE-DI-ISOCYANATE

LD50 (Oral)	746 mg/kg Rat
LD50 (Dermal)	570 mg/kg Rabbit
LC50 (Inhalation)	0,124 mg/l/4h Rat

##### SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

##### SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

##### RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin  
May produce an allergic reaction.

Contains:

HEXAMETHYLENE-DI-ISOCYANATE  
HEXAMETHYLENE-DI-ISOCYANATE

##### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

##### CARCINOGENICITY



### SECTION 11. Toxicological information ... / >>

Does not meet the classification criteria for this hazard class

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

#### STOT - SINGLE EXPOSURE

May cause respiratory irritation

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

#### 12.1. Toxicity

##### ALIPHATIC POLYISOCYANATE

LC50 - for Fish	> 100 mg/l/96h
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h Desmodesmus subspicatus
Chronic NOEC for Algae / Aquatic Plants	100 mg/l Desmodesmus subspicatus

##### HEXAMETHYLENE-DI-ISOCYANATE

EC50 - for Algae / Aquatic Plants	> 77,4 mg/l/72h Desmodesmus subspicatus
Chronic NOEC for Algae / Aquatic Plants	11,7 mg/l Desmodesmus subspicatus

#### 12.2. Persistence and degradability

##### ALIPHATIC POLYISOCYANATE

NOT rapidly degradable

##### HEXAMETHYLENE-DI-ISOCYANATE

NOT rapidly degradable

#### 12.3. Bioaccumulative potential

##### HEXAMETHYLENE-DI-ISOCYANATE

Partition coefficient: n-octanol/water	3,2
BCF	3,2

#### 12.4. Mobility in soil

Information not available

#### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

#### 12.6. Other adverse effects

Information not available







### SECTION 15. Regulatory information ... / >>

related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

### SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Resp. Sens. 1</b>	Respiratory sensitization, category 1
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>H331</b>	Toxic if inhaled.
<b>H332</b>	Harmful if inhaled.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H334</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>H317</b>	May cause an allergic skin reaction.
<b>EUH204</b>	Contains isocyanates. May produce an allergic reaction.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament



### SECTION 16. Other information ... / >>

8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament  
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament

10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament

11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament

12. Regulation (EU) 2016/1179 (IX Atp. CLP)

13. Regulation (EU) 2017/776 (X Atp. CLP)

14. Regulation (EU) 2018/1480 (XIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 10 / 11 / 12 / 15 / 16.