

Building Product Information Sheet

Class 1

Product Name:

BIS-P PolyPRO Gen 2 Injection Adhesive

Date of Report:

26 / 09 / 2023

Product Line:

ICCONS Chemselect

Product Description and its intended use:

When its CODE BLUE its PolyPRO.

ICCONS[®] BIS-P Gen2 PolyPRO is a Fast Cure, Styrene Free, Marine Grade concrete Injection System for Anchoring Threaded Rod into Concrete, Hollow Brick and Block. Now with ETA Assessment Option 1 for cracked and non-cracked concrete and C1 & C2 seismic performance ratings. ETA approved for use in wet and water flooded holes. This economical chemical concrete adhesive anchor is ideal for medium load requirement jobs in both the professional and DIY spaces

Key technical specifications:

- Product type: Chemical Anchor
- Load rating: Medium
- Cracked concrete suitable: Yes
- Earthquake Seismic Approval: C1 and C2
- ETA Approved
- CE Certification: Yes
- Suitable for: Masonry Brickwork, Rebar, Threaded Stud / Insert
- Working Time (mins) @ 20C (Dry Holes): 6 minutes
- Curing Time (mins) @ 20C (Dry Holes): 45 hours
- National Code Compliant: AS 5216
- Green Projects: LEED A+ Approved Low VOC
- Applications: overhead applications, water filled holes, core drilled holes.

Product Identifier

BIS-P Gen 2 PolyPRO Injection Adhesive

Place of Manufacture:

Overseas

Manufacturer:

ICCONS PTY LTD

Importer:

Sesto Fasteners Limited

Address: 5e Piermark Drive
Rosedale, Auckland
Postcode: 0632
Website: www.sestofasteners.co.nz
Email: orders@sestofasteners.co.nz
Phone: +64 94158564
NZBN: 9429041704103

Relevant Building Code Clauses:

- B1 Structure: Performance clauses B1.1, B1.2, B1.3.1, B1.3.2, B1.3.3, B1.3.4:
- B2 Durability: Performance clauses B2.2
- F2 Hazardous Building Materials: Performance clause F2.3.1

Statement on how the building product is expected to contribute to compliance:

- B1 Structure: clauses B1.1, B1.2, B1.3.1, B1.3.2, B1.3.3, B1.3.4:
 - ICCONS BIS-P Gen 2 PolyPRO Injection Adhesive is compliant with the requirements referenced in National Construction Code (NCC), AS 5216:2018 and European Assessment (ETA) Documents and Guidelines (ETA-20/0450). AS 5216 (Design of post-installed and cast-in fastenings in concrete) outlines the minimum requirements for the selection, design and assessment of cast-in anchor channel and post installed fasteners.
 - ICCONS BIS-P Gen 2 PolyPRO Injection Adhesive is ETA Assessment Option 1 approved for use in cracked and non-cracked concrete C20/25 to C50/60.
 - Suitable for use with static and quasi-static loads: Threaded rod M8 to M24, Rebar \varnothing 8 to \varnothing 25.
 - Seismic Action for performance category C1: Threaded rod M8 to M16.
 - Seismic Action for performance category C2: Threaded rod M12 to M16.
 - ETA approved for use in dry, wet and flooded holes.
 - Structures subject to dry internal and permanent damp internal conditions.
 - Structures subject to external atmospheric exposure.
 - Overhead installation allowed.
 - CE Certified
 - Medium load performance rating
 - Potable Water approved.
 - Testing data is available for installation dimensions and design resistance in dry and wet holes across a range of embedment depths and concrete classes. Values vary based on application, rebar size and the conditions of the tests performed. Refer to document 'BIS-P PolyPro Adhesive Brochure' for the testing data available in the link below:
https://sestofasteners.co.nz/products/bis-p-polypro-gen-2?_pos=1&_sid=67dbcd46f&_ss=r
 - For recommended loads in hollow masonry blockwork, see document '2027.1 - BIS-P GEN2 and BIS-V Hollow Masonry TDS'
 - For recommended loads in grout filled masonry, see document '2028.1 - BIS-P GEN2 and BIS-V Grout Filled Masonry TDS'
 - For recommended loads in brickwork, see document '2029.1 - BIS-P GEN2 and BIS-V Brickwork TDS'
 - Processing time, curing time in dry holes and in wet holes varies based on concrete temperature. Cartridge Temperature must be between +5°C and +40°C. Refer to document 'BIS-P PolyPro Adhesive Brochure' for these values, available in the link above. Refer to document 'BIS-P PolyPro Adhesive Brochure' for performance data, available in the link above.
 - Combined tension and shear loading data is performed in accordance with New Zealand standard EN 1992-4:2018 (Design of concrete structures, Design of fastenings for use in concrete) and Australian standard AS 5216:2018 (Design of post-installed and cast-in fastenings in concrete. Refer to document 'BIS-P PolyPro Adhesive Brochure' for performance data, available in the link above. Refer to ICCONS Designfix software or contact ICCONS engineering department engineering@iccons.com.au for further information.
 - B2 Durability: Performance clauses B2.2
 - ICCONS BIS-P Gen 2 PolyPRO Adhesive is a fast cure, styrene free, marine grade concrete injection system for anchoring threaded rod into concrete, hollow brick and block.
 - Ideal for medium load requirement jobs in both the professional and DIY spaces.
 - ICCONS BIS-P Gen 2 PolyPRO has been tested for chemical resistance against a range of chemical substances. The data available is applicable to brief periods of chemical contact with full cured adhesive (e.g. temporary contact with adhesive during a spill). PolyPRO has also been tested for mortar properties for uv resistance, watertightness, temperature stability and other factors. Refer to document 'BIS-P PolyPro Adhesive Brochure (page 11)', available in the link below:
https://sestofasteners.co.nz/products/bis-p-polypro-gen-2?_pos=1&_sid=67dbcd46f&_ss=r
 - F2 Hazardous Building Materials: Performance clause F2.3.1
 - ICCONS BIS-P Gen 2 PolyPRO Adhesive (component A and B) has been assessed under Chemwatch Hazard Alert Level 2 (moderate hazardous chemical).
 - Chemwatch Hazard Alert Safety Data Sheets (ref. 5396-40, composition A and 5396-41, composition B) are available for this product according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements.
 - Refer to document 'Chemwatch SDS Form A' and 'Chemwatch SDS Form B' for full guidelines regarding the relevant use, hazards identification, first aid measures, safe storage and other hazardous product requirements.
 - Good judgment, protective measures and care is required to ensure this product is used safely. Read both SDS documents, and apply all relevant safety requirements in use storage and handling. Available below:
https://sestofasteners.co.nz/products/bis-p-polypro-gen-2?_pos=1&_sid=67dbcd46f&_ss=r
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- H1 Energy Efficiency: Objective clause H1.1
 - ICCONS BIS-P Gen 2 PolyPRO Adhesive is A+ LEED tested as having low volatile organic compounds, suitable for green projects.

Limitations on the use of the building product:

- Working times and curing times are based on 20°C dry concrete. Curing time temperatures stated in document 'BIS-P PolyPro Adhesive Brochure' require that cartridge temperature must be between +5°C and +40°C.
- ICCONS / B+BTec BIS-P Gen 2 injection mortar may be applied in the temperature ranges given in the technical document (page 2). An elevated base material temperature leads to a reduction of the bond resistance.
- The data provided in the above technical document is subject to the specific requirements as stated in (page 5). Correct setting, standard embedment depth and temperature ranges are required. See 'BIS-PE Pure Epoxy Technical Information' available in the link below:

https://sestofasteners.co.nz/products/bis-pe-gen-3-pure-epoxy?_pos=1&_sid=b4b0da728&_ss=r

- Performance standard AS 5216:2018 covers post installed fasteners for 'Safety Critical' applications in concrete only. Safety critical applications are where failure may endanger human life, result in collapse or partial collapse of the structure, and/or cause considerable economic loss. All other types of fastening design including seismic design, fire design and stress development of rebar (ref. to AS3600) etc. For applications outside the scope of AS 5216:2018 / SA TS 101:2015 please refer to anchor manufacturers for guidance. Can I use a fastener with an ETA (European Technical Assessment/approval)? Yes, products that carry a current ETA comply with the requirements in AS 5216:2018 / SA TS 101:2015. A suitably qualified design engineer must determine suitability of these fasteners prior to use.

Refer to document 'NCC FAQ' for full information regarding the use of AS 5216:2018 products. Note, AS 5216:2018 is an Australian standard that establishes the minimum requirements for the selection, design and assessment of cast-in anchor channel and post installed fasteners. It does not hold binding legal obligation in the New Zealand market as in the Australian market, but is useful when considering the applicability of NCC compliant products to your application. If you are unsure, consult a suitably qualified design engineer prior to use. Available in the link below:

https://sestofasteners.co.nz/products/bis-hy-gen-2-hybrid-injection-adhesive?_pos=1&_sid=437ea47a1&_ss=r

- ICCONS BIS-P PolyPRO Gen 2 Injection Adhesive is a class 2 moderate hazardous product, that must be handled, used, stored and disposed of safely. Good judgment, training, protective equipment and care is required. Refer to the documents 'Chemwatch SDS Form A' and 'Chemwatch SDS Form B' or information regarding proper use, required safety procedure and toxicity data, available in the link below:

https://sestofasteners.co.nz/products/bis-p-polypro-gen-2?_pos=1&_sid=67dbcd46f&_ss=r

- ICCONS Chemselect products should be stored away from direct sunlight. Chemselect adhesives, foams and sealants & fillers are perishable products. Shelf life, storage conditions and identification on packaging varies based on product. Refer to document 'Adhesive Shelf Life' as well as the information on the product label to determine the product's useful life, available in the link above.

Design requirements that would support the use of the building product:

ICCONS BIS-P PolyPRO Gen 2 Injection Adhesive has been designed for use in the following applications:

- Infrastructure construction (roads, viaducts, sound barriers, crash barriers, harbours, high rise construction, steel construction).
- Production facilities (installation of cranes, robots, conveyor lines etc).
- Suitable for threaded rod and rebar into base materials such as concrete, hollow brick and block (hollow base materials may require mesh or plastic sleeves for correct application).

Features that support the use of the product:

- MEDIUM Load Performance
- ETA Approved for use in dry, wet and waterflooded holes.
- Fast 45min cure at 20°C dry concrete
- Application temperature to -5°C
- Seismic approved for threaded rod (C1 and C2 - refer to TDS for details).
- Cracked concrete compliant for threaded rod.

Use conditions:

- Static and quasi-static loads; threaded rod M8 to M24, rebar Ø8 to Ø25.
 - Seismic action for performance category C1: threaded rod M8 to M16.
 - Seismic action for performance category C2: threaded rod M12 to M16.
 - In reinforced or unreinforced, cracked and non-cracked concrete classes C20/25 to C50/60
 - In dry, wet and flooded holes.
 - Structures subject to dry internal and permanent damp internal conditions.
 - Structures subject to external atmospheric exposure.
 - Overhead installation allowed.
 - See tech data sheets for more information.
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Installation requirements:

- Installation requirements and steps vary based on the application and method used. Refer to document to document 'BIS-P PolyPro Adhesive Brochure' for installation information, available in the link below:
https://sestofasteners.co.nz/products/bis-p-polypro-gen-2?_pos=1&_sid=67dbcd46f&_ss=r

Maintenance requirements:

N/A, no on-going maintenance required.

Is the building product subject to warning or ban under section 26?:

No

