



POLYCHLOR OMEGA

Interim TIPES Certificate
Certificate No: I/24/002

OFFICES IN:

ADELAIDE, BRISBANE, CANBERRA, LAUNCESTON, MELBOURNE, PERTH,
SYDNEY, AND NEW ZEALAND

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POLYCHLOR OMEGA

PRODUCT SUMMARY

This Interim Certificate relates to POLYCHLOR OMEGA, a proprietary (trademarked) stabiliser and dust suppressant composed of a water-based adhesive formulated for soil applications. When mixed in specific (designed) quantities with certain soils or gravels, POLYCHLOR OMEGA is intended to:

- increase the bearing strength of unsealed pavements and shoulders
- reduce the moisture sensitivity and erosion potential of unsealed pavements and shoulders
- reduce dust generation when applied to the surface of pavements and shoulders.

THIS INTERIM CERTIFICATE RELATES TO THE FOLLOWING:

- Compliance with TIPES requirements for application, specifically for use in unsealed roads and/or unsealed shoulders.
- The instructions for usage developed by Five Elements International Ltd set out in the POLYCHLOR OMEGA Application Guide, dated April 2024 (including mix design and suitability with contemporary industry stabilisation and dust suppression techniques).
- The evaluation criteria set by the TIPES Product Evaluation Panel, including laboratory testing on a limited number of gravels and soils treated with POLYCHLOR OMEGA in accordance with the dosage rates nominated by Five Elements International Pty Ltd.

NTRO

Nigel Powers
Governance Manager, TIPES

Richard Yeo
Chief Operating Officer

Date of Issue

2/7/24
for 12 months



This Interim Transport Infrastructure Product Evaluation Scheme (TIPES) Certificate is issued by NTRO and has been issued on assurance that compliance is still achieved with the conditions stated. The product has been assessed by a TIPES Product Evaluation Panel as being fit for its intended use in unsealed pavements and/or unsealed shoulders.

ORIGINAL TECHNICAL CLAIM

POLYCHLOR OMEGA's intended purpose is to reduce the moisture sensitivity and erosion potential and increase the durability of unsealed pavement and shoulder materials, as best demonstrated through the results obtained from laboratory California Bearing Ratio, capillary rise and RMS T133 durability testing.

The product can also be used as a surface treatment on unsealed roads to suppress dust.

STATEMENT OF TECHNICAL OPINION

POLYCHLOR OMEGA was evaluated by a TIPES Product Evaluation Panel (PEP) established for this product and its proposed applications. The PEP's Technical Opinion is that the product can increase the bearing strength and durability; and reduce the moisture sensitivity and erosion potential of certain materials where demonstrated by appropriate accompanying laboratory test results.

The PEP has recommended the issue of an Interim TIPES Certificate, with the special conditions outlined later in this document. This Interim Certificate will be reassessed after the construction and monitoring of a Field Trial.

The above Statement of Technical Opinion was issued in respect of POLYCHLOR OMEGA being the particular Product submitted for evaluation under TIPES by Five Elements International Pty Ltd. It is expressly restricted to the Product having the same composition, features, and characteristics as when submitted for the original TIPES evaluation. The original Technical Opinion is not applicable to, or valid in respect of, any subsequent modification, variation, enhancement or redevelopment of the Product and any representation that this Technical Opinion is referable to any other product is expressly forbidden.

APPLICATION GUIDANCE

INTENDED APPLICATION

POLYCHLOR OMEGA is intended for use in accordance with the Application Guide (dated April 2024), Overspray Application Instructions and Vortex Mixer Standard Operating Procedure provided by Five Elements International Pty Ltd at the time of applying for TIPES Certification.

Importantly, the Application Guide also makes reference to the stabilisation of sealed pavements, whereas this Interim Certificate **only** applies to the stabilisation of unsealed pavements, unsealed shoulders and/or dust suppression. Also, the efficacy of POLYCHLOR OMEGA is highly material dependent and its suitability for use must therefore be confirmed on a project-specific basis.

MATERIAL SAFETY DATA SHEET

As provided with original application.

PRODUCT MANUFACTURE

In accordance with Five Elements International Pty Ltd quality assurance system.

NATIONAL AND LOCAL TECHNICAL GUIDANCE

Consideration of the following technical guidance documentation is required, where applicable:

- Austroads Guide to Pavement Technology series.
- AustStab guidance on pavement stabilisation.
- Pertinent state road authority and/or local specifications on pavement design and material specifications for bound or modified pavement layers.

SPECIAL TECHNICAL CONDITIONS OF INTERIM CERTIFICATION

1. The award of Interim Certification is based on the original application supplied to the PEP and the supporting evidence within. This was further supported by the satisfactory completion of an advised schedule of laboratory testing and feedback received from users.
2. The following special conditions apply:
 - a. A Field Trial must take place within 12 months of this Interim Certificate issuance, at a suitable site/s, as agreed in advance with NTRO Certification. The results of this Field Trial would then inform a PEP recommendation regarding the award of Full Certification or otherwise.
 - b. The Field Trial must include:
 - submission of information relating to the host material properties and material mix design
 - an untreated control segment (to compare to the POLYCHLOR OMEGA treated segment)
 - demonstration of product claims in comparison to control segment/s
 - collection and submission of site data, including construction details, application records and quality assurance records
 - taking of site photographs and video both during and immediately after construction
 - undertaking documented in-service performance monitoring for a minimum 12-month period after opening to traffic (must include at least 3 months post wet season monitoring)
 - c. The Field Trial construction and performance must be witnessed by a representative from NTRO.
3. The product continues to demonstrate conformance with the performance requirements originally outlined and as observed thus far.
4. Is used and continues to be used in accordance with Five Elements Pty Ltd procedures.
5. A register of all Australian sites where the product is used during the Interim Certification will be maintained, which can be requested by NTRO Certification at any time.

SPECIAL COMPLIANCE CONDITIONS OF INTERIM AND FULL CERTIFICATION

1. It is a continued condition of this Interim, and any subsequent Full, Certification that records are kept of all applications of POLYCHLOR OMEGA in road construction in Australia, by Five Elements International Pty Ltd and/or its registered users. The records shall include material classification and mix design and quality assurance data that allow the verification of the quality of production and installation of the product. In addition, any post-construction monitoring or assessments should also be maintained. These records shall be made

available to NTRO Certification on request and will be the subject of review for re-accreditation (i.e. at the end of the term of a Full Certificate) or should any technical deposition be made regarding any stated issues with the performance of the product and its utilization.

GENERAL CONDITIONS OF CERTIFICATION

1. This Interim Certificate:
 - relates only to the product that is named and described on the front page of, and within this Certificate, and is expressly restricted to the product having the composition, features and characteristics when originally submitted for TIPES evaluation
 - is not applicable to, or valid in respect of, any subsequent modification, variation, enhancement, or redevelopment of the product
 - any representation that this certificate is referable to any other product is expressly forbidden
 - is valid only within Australia
 - has to be read, considered, and used as a whole document, it may be misleading and will be incomplete to be selective
 - is licensed for the promotion or sale of the product only to the company, firm, organisation or person named on the front page. No other company, firm, organisation, or person may hold or claim that this Interim Certificate has been issued to them.
 - is copyright and property of NTRO.
 - is governed by the laws of the State of Victoria, Australia, and the jurisdiction of the courts of that State and courts of appeal therefrom.
2. Publications, documents, specifications, legislation, regulations, standards, and the like referenced in the original Product Application were those that were current and/or deemed relevant by NTRO at the date of Application.
3. Any Full Certificate ultimately issued will remain valid for a 3-year period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:
 - are maintained at or above the levels which have been assessed and found to be satisfactory by NTRO
 - continue to be checked as and when deemed appropriate by NTRO under arrangements that it will determine
 - are reviewed by NTRO as and when it considers appropriate.
4. NTRO has used due skill, care and diligence in preparing this Interim Certificate, but no warranty

is provided.

5. In issuing this Interim Certificate and any subsequent Full Certificate, NTRO and the PEP is not responsible and is excluded from any liability to any company, firm, organisation, or person, for any matters arising directly or indirectly from:
 - the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
 - the right of the Interim Certificate holder to manufacture, supply, install, maintain, or market the product/ system actual installations of the product/ system, including their nature, design, methods, performance, workmanship and maintenance
 - any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
6. Any information relating to the manufacture, supply, installation, use, maintenance, and removal of this product/system which is contained or referred to in this Interim Certificate are the minimum required to be met when the product/system is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Australian Work Health and Safety (WHS) Act 2010, or of any other statutory, common law or other duty which may exist at the date of issue of this Interim Certificate; nor is conformity with such information to be taken as satisfying the requirements of these Acts or of any statutory, common law or other duty of care.
7. The TIPES logo & symbol(s) use are governed by any conditions for usage stated by NTRO.
 - any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance, and removal.