



FULL GLOSS OIL AND PETROL RESISTANT ENAMEL

1 SCOPE

This specification applies to solvent based exterior topcoats that are resistant to oil and petrol.

2 BACKGROUND

- a) To obtain a broad overview of the Australian Paint Approval Scheme (APAS), refer to APAS document AP-D001.
- b) To obtain an overview of restricted ingredients in APAS certified products, refer to APAS document AP-D123.
- c) To obtain the current list of APAS participating manufacturers (and suppliers) and resellers, refer to APAS document AP-D152.
- d) To obtain an overview of how to participate in the APAS, refer to APAS document AP-D177.
- e) APAS approval to this specification may be gained by compliance with the requirements detailed in this specification and those in APAS document AP-D192.

3 DESCRIPTION AND GUIDE FOR USERS

3.1 General Requirements

- a) Products approved under this specification are oil and petrol resistant air-drying full gloss enamels for exterior and interior use on the topsides of ships, machinery and equipment. They are normally ordered to Australian Standard AS 2700 colours.

3.2 Sub-Classes

- a) This specification does not incorporate any sub-class.

3.3 Basis of this Specification

- a) This specification is based on AS/NZS 3750.22 with the following modifications:
 - i. Minimum 45% volume solids
 - ii. Clause 4.5.7.4 (Resistance to Petroleum Spirit) shall be carried out using unleaded automotive fuel.
- b) Products approved under this specification comply with Paint Reference Number (PRN) C20 of AS/NZS 2312.

4 REFERENCED DOCUMENTS

- a) The following standards are referenced in this document:
 - i. **AS/NZS 1580** – Paints and related materials: Methods of test.
 - ii. **AS 2700** – Colour standards for general purposes
 - iii. **AS/NZS 2312** - Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings
 - iv. **AS/NZS 3750.22** – Paints for steel structures, Part 22: Full gloss enamel - Solvent-borne

These documents may be purchased through the Reference Standards Australia website:
<https://www.standards.org.au/>

- v. **The Poisons Standard June 2021:** Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) No. 33, Part 2: Control on Medicines and Poisons, Section Seven / Appendix I Paint or Tinters

This document is available from the Australian Government Federal Register of Legislation web site at:
<https://www.legislation.gov.au/Details/F2021L00650>

- b) The following APAS documents are referenced in this document:
 - i. AP-D001 Rules Governing How APAS® Operates
 - ii. AP-D123 Restrictions on Ingredients in Product Formulations
 - iii. AP-D152 APAS® Participating Manufacturers and Resellers
 - iv. AP-D177 Rules Governing How Product Manufacturers participate in APAS®
 - v. AP-D181 Volatile Organic Compounds (VOC) Limits
 - vi. AP-D192 Rules Governing APAS® Product Certification Scheme

All APAS documents are available for download from the APAS website: <https://vs.csiro.au/apas/documents/>

5 COMPOSITIONAL REQUIREMENTS

5.1 Binder

- a) The binder shall be typically comprised of short to medium oil length alkyd resin suitably modified to impart the properties listed in clause 7, Table 1 below.

5.2 Volatiles

- a) There is no restriction placed on the type of volatiles used. Of primary importance is the compliance with the technical requirements detailed in clause 7, Table 1 below.
- b) For VOC content restrictions, refer to APAS document AP-D181.

5.3 Pigmentation

- a) There is no restriction placed on the type(s) of pigment used, with the exception that they are non-toxic and anti-corrosive and comply with the requirements of SUSMP. Of primary importance is the compliance with the technical requirements detailed in clause 7, Table 1 below.

5.4 Colour

- a) Products approved under this specification are normally available in a wide range of colours – refer to the manufacturer's Product Data Sheet (PDS) or Technical Data Sheet (TDS).



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6 PRODUCT APPROVAL REQUIREMENTS

6.1 General Requirements

- a) The product and its application for approval shall comply with the relevant requirements of APAS document AP-D192 during the life of the approval.

6.2 Technical Requirements

- a) The product shall comply with **all** the requirements of clause 7, Table 1 below.
- b) The manufacturers own quality control schedule of tests and limits shall be allowed subject to the approval of the Executive Officer, APAS.
- c) On request, the Executive Officer, APAS may request the results of the tests for a batch and compare these with previous batches.
- d) Density and non-volatile content by weight (NVCW) figures for each production batch of the approved product shall be within $\pm 3\%$ of the actual (not theoretical) figures quoted in the original product approval submission (APAS document AP-D139).
- e) Subject to compliance with all the requirements of this specification, the level of Approval appropriate to the application shall be given to the system.

6.3 Health and Safety Requirements

- a) The manufacturer's Safety Data Sheet (SDS) must be studied closely prior to using the product and complied with during use of the product.
- b) Products intended for sale in Australia shall comply with all the requirements of the SUSMP. Products intended for sale in other countries shall comply with all local OH&S and environmental requirements.
- c) The product shall comply with all requirements of clause 6.3 and 6.4 of APAS document AP-D192.



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7 TABLE 1: PERFORMANCE PROPERTIES

TEST	AS/NZS 1580 METHOD	REQUIREMENTS
General Requirements	AS/NZS 3750.22	Shall comply with all the requirements of clause 4 Material Requirements except as modified by clause 3.3 a) above. All results shall be reported.
Non-Volatile Content by Volume (Volume Solids)	301.2	Minimum 45%. <ul style="list-style-type: none">Volume solids may be determined theoretically from raw material data except where solid constituents incorporate sealed air voids.
VOC Content	APAS AP-D181	Refer to APAS document AP-D181 for method and limits. If the APAS specification is not listed on AP-D181, a declaration of VOC content is still required .



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8 APPENDIX A

Document History

Status: Current
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Document Version No.:	Date Published:	Summary of Changes:
10	26-08-2021	<ul style="list-style-type: none">• General format change to clause 1, 5.1 and 5.4• Updated background information in clause 2• Updated SUSMP information• Updated APAS website information
9	06-11-2020	<ul style="list-style-type: none">• Addition of Appendix A Document History and removal of the Editorial Note previously used in specification versions• Updated document to the current format• Updated internal and external document references and website details• Inclusion of VOC Content requirement to Table 1 Performance Properties• Addition of "People + Product = Protection" to Footer
8	12-06-2009	<ul style="list-style-type: none">• Deleted sub-class 0024/2 and updated the format
7	07-04-2003	<ul style="list-style-type: none">• Deleted reference to GPC numbering and incorporated a general format update
6	19-01-2001	<ul style="list-style-type: none">• Initiated the second stage of the move to new specification numbering with prominence given to the new number (previously GPC-E-24 and GPC-E-25)