

SIRIM QAS International Sdn. Bhd. (Company No.: 199601037981 (410334-X))

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TEST REPORT

REPORT NO : 2024CB0101 PAGE : 1 OF 5

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.

THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

Applicant : VIVO RAISER SDN. BHD.

No: 9 & 10, Jalan PKNK 3/7,

Kawasan Perusahaan Sungai Petani,

08000 Sungai Petani, Kedah, Malaysia.

Manufacturer : Same as above

Product : TPS Superplasticiser

Reference Standard / : MS EN 934-2: 2012,

Method of Test Admixture for concrete, mortar, and grout – Part 2: Concrete Admixture –

Definitions, requirements, conformity and marking and labelling (First

Revision)

Clause 4.1: General requirement

Clause 4.2: Requirement for specific types of admixture

Description of sample: Five (5) packets of 150 gram TPS Superplasticiser were received for testing.

Brand: TPS

Product description: High quality highly concentrated water based cellulose

polymer superplasticiser

Date Received of

Complete Application

: 02 August 2023

Job No. : J20231430478

Description of Test

Results

The test report covers only test clauses as requested by Applicant to SIRIM QAS International Sdn. Bhd. The test results for the submitted test samples

as described in this test report complied with the requirements of the above

reference standard at the respective clauses tested.

Issued Date : 05 February 2024

Approved Signatory;

(HANON NAZIR BIN MOHD BAS Senior Testing Executive CONSTRUCTION CONSTRUCTION

ernation

SECTION

DR SIHA BINTI RAJA ABDUL HANAN) Head

Civil & Construction Section Testing Services Department REPORT NO : 2024CB0101 PAGE : 2 OF 5

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TEST RESULTS:

Product : TPS Superplasticiser Method of test : 1) MS EN 934-2: 2012,

Admixture for concrete, mortar, and grout – Part 2: Concrete Admixture – Definitions, requirements, conformity and marking and labelling (First

Revision)

2) BS EN 480-1: 2006,

Admixtures for concrete, mortar, and grout - Test Methods. Part 1:

Reference concrete and reference mortar for testing

3) BS EN 480-2: 2006,

Admixtures for concrete, mortar and grout. Test methods - Determination of

setting time

CLAUSE	REQUIREMENTS	TEST RESULT	REMARK*
4.2	Requirement for specific types of admixture - Type of admixture: Specific requirement for water resisting admixtures (refer to Table 10) 1) Compressive strength - at 28 day: test mix ≥ 100 % of control mix	Control mix: 38.9 MPa Test Mix: 42.9 MPa Percentage ratio between test mix and control mix for 28	Pass
	2) Setting time - Initial: test mix ≥ control mix (280 min) +	days: 110 % Test Mix: 390 min	Pass
	90 minutes = 370 min - Final: test mix ≤ control mix (345 min) + 360 minutes = 705 min	Test Mix: 430 min	Pass

Note

2) Testing Location - Civil & Construction Laboratory, Building 22, SIRIM Complex, Shah Alam, Selangor

3) Testing period – 23rd October 2023 to 23th December 2023.



^{1) *}Simple acceptance rule is used for the conformity statement. The level of risk regarding the probability of false accept is up to 50% according ILAC G8:09.

REPORT NO : 2024CB0101 PAGE : 3 OF 5

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TEST RESULTS:

Product : TPS Superplasticiser Method of test : 1) MS EN 934-2: 2012,

Admixture for concrete, mortar, and grout – Part 2: Concrete Admixture – Definitions, requirements, conformity and marking and labelling (First

Revision)

2) BS EN 480-1: 2006,

Admixtures for concrete, mortar, and grout - Test Methods. Part 1:

Reference concrete and reference mortar for testing

3) BS EN 12350-2: 2019, Testing fresh concrete - Slump test

4) BS EN 12350-7: 2019,

Testing fresh concrete - Air content. Pressure methods

CLAUSE	REQUIREMENTS	TEST RESULT	REMARK*
4.2	Requirement for specific types of admixture - Type of admixture: Specific requirement for water resisting admixtures (refer to Table 10)		
	3) Water Reduction - test mix ≥ 5 % compared with control mix	Control mix: 4000 ml Test Mix: 3000 ml Percentage water reduction between test mix and control mix: 25 %	Pass
	 4) Air content in fresh concrete, - Test mix ≤ 2 % (by volume) above control mix 	Control Mix: 1.9 % Test mix: 1.7 %	Pass

Note:

- 1) *Simple acceptance rule is used for the conformity statement. The level of risk regarding the probability of false accept is up to 50% according ILAC G8:09.
- 2) Testing Location Civil & Construction Laboratory, Building 22, SIRIM Complex, Shah Alam, Selangor
- 3) Testing period 23rd October 2023 to 23rd December 2023.



REPORT NO : 2024CB0101 PAGE : 4 OF 5

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Photo 1: Shows the samples of TPS Superplasticiser 150 gram

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REPORT NO: 2024CB0101	PAGE : 5 OF 5
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CONDITIONS RELATING TO THE USE OF SIRIM QAS INTERNATIONAL TEST REPORT

- A Test Report will be issued in respect of Testing Services conducted and shall relate only to the sample actually tested. SIRIM QAS International
 makes no warranty whatsoever and the Applicant shall not represent in any manner that any duplication or mass production of the Product is same
 as the sample actually tested or that SIRIM QAS International has tested any of the duplicated or mass-produced Product. Measurement uncertainty
 shall be included in the Test Report when there is no statement of conformity required. When a statement of conformity to a specification or standard
 is applied, the Simple Acceptance Rule is used. Unless otherwise stated, the Acceptance Rule with Guard Band is used.
- 2. The Test Report shall not be misused, amended, changed, varied or modified in any manner whatsoever by the Applicant or otherwise.
- 3. If the Test Report is to be furnished to any third party or to the public, each such Test Report shall be furnished in full, legible and in its entirety.
- 4. The Test Report shall not be reproduced and shall not in any event be used for any advertising purposes or whatsoever without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International of No 1, Persiaran Dato' Menteri, Building 8, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan.
- 5. Customer (Applicant/Manufacture/Factory,etc.) is not permitted to use any SIRIM QAS International, SIRIM or other SIRIM's subsidiaries logo or words on packaging, sample's manual, technical specification, items and products.
- 6. Subject to consent and written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International, the customer (Applicant/Manufacture/Factory,etc.) may use SIRIM QAS International logo or word on the promotional materials and the Applicant shall only include the phrase, "A sample of this product has been tested by SIRIM QAS International ...(Test Report No) ...(dated) ...(for what test) ...(to which standard)" or such similar words which stress that only the sample was actually tested. This phrase shall only be used for the purpose of product advertisement or product promotion (eg; brochures/flyers/official website). For avoidance of doubt, the statement shall not be used on the sample, packaging of the sample, items and products.
- 7. In the event there is an investigation from a Government Regulatory Agency concerning the Applicant's Test Report, SIRIM QAS International may disclose the information pertaining to the Test Report for purposes of such investigation.
- 8. In the event the Applicant is found in breach of this provision, SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries without prejudice to any other rights and remedies may take whatever action necessary including but not limited to:
 - a) Informing and placing a notice in the media;
 - b) Obtaining an injunction from Court (cost on a solicitor-client basis to be borne by the Applicant);
 - c) Refusing to accept any further Product for Testing Services from the Applicant or whosoever related to the Applicant, whether subsidiary or otherwise:
 - d) Instructing the Applicant to withdraw and recall the advertisement, statement or document in question and advertise a clarification and apology to SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries twice in a national publication of SIRIM QAS International's choice at the Applicant's sole cost; and
 - e) Informing or lodging a report pertaining the Applicant's Test Report with the relevant authorities.
- 9. SIRIM QAS International is committed in supporting an environmentally-friendly business practices by reducing paper consumption, therefore we do not issue any hard copy of Test Report to the Applicant. However, additional certified true copy(ies) or softcopy of the Test Report may be issued upon request by the Applicant upon payment of the relevant fee. The certified true copy(ies) or softcopy of test report shall only be given for test report issued not more than three (3) years from the date of issuance.
- 10. Issuance of Amendment Report due to the following reasons are chargeable to the Applicant:
 - a) Changes in details of the Applicant name and/or address;
 - b) Changes in details of the Manufacturer's name and/or address;
 - c) Changes in details of the Factory location name and/or address;
 - d) Changes in details of the model and/or type designation
- 11. However, issuance of Supplementary Report due to the following reasons are FOC:
 - a) Misprints and typo errors;
 - b) Missing technical information as agreed in PP1 form;
 - c) Test data not reported;
 - d) Mistake in reporting of test data
- 12. Corrections to report shall only be allowed if the date of issuance of the original report has not exceeded 6 months and shall be limited to a maximum 3 times, after either case whichever occurs earlier, an Amendment or a Supplementary Report shall not be issued.