

Sample Information				FOR OFFICIAL USE
No.	Sample Description	Sampling Date	Sample Matrix*	Lab Sample No.
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***Sample Matrix Abbreviation Key**

Aggregate = A Cement/Lime = C/L Stabilised material = SM Gypsum = G Water for corrosivity testing = S/W

Please specify:

Sampling done by: _____

Signature: _____

Reference of the sampling method (if available): _____

Project name: _____

Special Instructions (when applicable): sample storage/disposal; outsourced tests

CHEMICAL ANALYSIS OF AGGREGATES

Note: The laboratory will select the test parameters on behalf of the client, when a signed quotation is attached to this request form.

No.	Test Parameters	Reference Method	Tick
1.	Preparation of test Samples of aggregates Sample	WHK METH A 001 Based on SANS 197:2006	<input type="checkbox"/>
2.	pH value on a soil suspension (2:5)	WHK METH A 023 based on BS1377-3-2018+a102021	<input type="checkbox"/>
3.	pH on a saturated paste	WHK METH A 028 based on SANS 5854:2006	<input type="checkbox"/>
4.	Conductivity on saturated paste	WHK METH A 022 based on SANS 6240: 2008	<input type="checkbox"/>
5.	Soil redox potential on a soil suspension (1:2)	WHK METH A 026 based on In-house based on Metrohm application Bulletin 71/3 e	<input type="checkbox"/>
6.	Soundness of stone (magnesium sulphate method), max 20 cycles	WHK METH A 014 based on SANS 5839:2008	<input type="checkbox"/>
7.	Soundness of fine aggregates (magnesium sulphate method), max 5 cycles	WHK METH A 014 based on SANS 5839:2008	<input type="checkbox"/>
8.	Durability test for ballast stone (ethylene glycol durability)	WHK METH A 015 based on SATS S406 (1984), App. B	<input type="checkbox"/>
9.	Chloride content of aggregates	WHK METH A 017 based on SANS 202 :2008	<input type="checkbox"/>
10.	Water soluble sulphates of fines in aggregates	WHK METH A 006 based on SANS 5850_1 850-1:1998	<input type="checkbox"/>
11.	Acid soluble sulphate content	WHK METH A 008 based on BS 1377:3-2018+a21	<input type="checkbox"/>
12.	Total water-soluble salts content of fines in aggregates	WHK METH A 005 based on SANS 5849:2008 849	<input type="checkbox"/>
13.	Organic impurities in fine aggregates (limit test)	WHK METH A 003 based on SANS 5832:2006	<input type="checkbox"/>
14.	Detection of sugar in fine aggregates	WHK METH A 004 based on SANS 5833:2006	<input type="checkbox"/>
15.	Deleterious clay content of fines in aggregates (MB adsorption test)	WHK METH A 002 based on SANS 6242:2008	<input type="checkbox"/>
16.	Available lime in limes for soil stabilisation	WHK METH A 010 based on SANS 6296:2006	<input type="checkbox"/>
17.	Cement or lime content of stabilizing materials (ICP-OES):	WHK METH A 009 based on TMH1 A 15 (b)	<input type="checkbox"/>
18.	Analysis of aggregate, cement and stabilised material	WHK METH A 009 based on TMH1 A 15 (b)	<input type="checkbox"/>
19.	Additional stabilised material	WHK METH A 009 based on TMH1 A 15 (b)	<input type="checkbox"/>
20.	Initial consumption of lime ("gravel ICL", 0-6%	WHK METH A 012 based on SANS-3001-GR-2014	<input type="checkbox"/>
21.	Determination of the carbonate content	WHK METH A 007 based on BS 1377: Part 3:1990 (titrimetric)	<input type="checkbox"/>
24.	Determination of organic carbon	WHK METH S 007 based on BS 1377: Part 3:1990	<input type="checkbox"/>
25.	Bulk densities and voids content of aggregates	WHK METH A 020 based on SANS 5845: 2006	<input type="checkbox"/>
	Shell content (ignition method)	WHK METH A 019 based on SANS 5840:2008	<input type="checkbox"/>
26.	Acid insolubility test	WHK METH A 021 based on SANS 6242:2008	<input type="checkbox"/>
27.	Low density material content	WHK METH A 018 based on SANS 5837:2008	<input type="checkbox"/>
28.	Gypsum analysis		
	XRF (silica, SO ₃ , CaO)	WHK METH A 029 based on In-house method on pulp	<input type="checkbox"/>
29.	Moisture (40-45°C)	WHK METH A 030 based on VGB-M 701 (2 nd Ed)	<input type="checkbox"/>
30.	Crystallisation water (360°C)	WHK METH A 031 based on VGB-M 701 (2 nd Ed)	<input type="checkbox"/>
31.	Assessment of aggressiveness of chemical environment: soil		
32.	pH of soil suspension 2.5:1 w/s	WHK METH A 023 based on BS 1377: -3-2018+a21	<input type="checkbox"/>
33.	Conductivity on saturated paste	WHK METH A 022 based on BS 1377: -3-2018+a21	<input type="checkbox"/>
34.	Water soluble sulphates 2:1 w/s	WHK METH A 006 based on SANS 580-1 850-1:1998	<input type="checkbox"/>
35.	Water soluble magnesium 2:1 w/s	WHK METH A 030 based on ICP-OES	<input type="checkbox"/>
36.	Water soluble ammonium 2:1 w/s	WHK METH A 031 based on AWWA	<input type="checkbox"/>
37.	Water soluble nitrite 2:1 w/s	WHK METH A 032 based on Spectroquant	<input type="checkbox"/>
38.	Water soluble chloride 2:1 w/s	WHK METH A 017 based on SANS 202-2006	<input type="checkbox"/>
39.	Acid soluble sulphates	WHK METH A 008 based on BS 1377: -3-2018+a21	<input type="checkbox"/>
40.	Carbonates	WHK METH A 007 based on BS 1377: -3-2018+a21	<input type="checkbox"/>

NB: Complete page 1-2 and all other pages applicable to your request

CHEMICAL ANALYSIS OF AGGREGATES

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No.	Test Parameters	Reference Method	Tick
41.	Sulphides	WHK METH A 033 based on BS 1377: -3-2018+a21	<input type="checkbox"/>
42.	Resistivity	WHK METH A 034 based on BS 1377: -3-2018+a21	<input type="checkbox"/>
43.	Particle size analysis	WHK METH A 024 based on ISO-11277-2020	<input type="checkbox"/>
44.	Particle size analysis (2000, 1000, 500, 212, 106, 53µm)	WHK METH A 024 Based on In-house, combination of dry and wet screening)	<input type="checkbox"/>
45.	Particle size analysis, 2000 - 53µm + silt and clay	WHK METH A 024 Based on an In-house, combination of sieving and pipette method	<input type="checkbox"/>
46.	Particle size analysis (sand, silt and clay)	WHK METH A 024 Based on Soil – pipette, method ISO-11277-2020	<input type="checkbox"/>

GROUP TESTS

No.	Test Parameters	Reference Method	Tick
1.	Construction Aggregates pH, EC, Total Sulphates, Chloride, Total Soluble Salts, Carbonate Organic Impurities Presence of Sugar, Deleterious Clay Content-MBT		<input type="checkbox"/>
2.	Corositiivity Test of Aggregates: pH, EC, Sulphates, Chloride, Total Soluble Salts, Ca, Mg, NH4, Total Alkalinity		<input type="checkbox"/>
3.	Basson Index pH, EC, Sulphates, Chloride, Total Soluble Salts, Ca, Mg, NH4, Total Alkalinity		<input type="checkbox"/>

Note: Prices are specified on FM 7.1-5