



NSAI Information Note on Standards & Guidance for Aggregates

NSAI (National Standards Authority of Ireland) as Ireland's official standards body reviews standards and guidance for aggregates on an ongoing basis including by reference to advancements in technology and new research and developments in the construction sector.

In recently received research, the Geological Survey Ireland (GSI) compared European test methods for determining the total sulfur content of aggregates for concrete.

The harmonised European product standards for aggregates for concrete (EN 12620:2002+A1:2008^[1]) identifies total sulfur as an essential characteristic and references the European test standard EN 1744-1^[2].

EN 1744-1:2009+A1:2012 contains 2 test methods for determining the total sulfur of aggregates: the reference method as set out in Clause 11.1 'determination of total sulfur content by acid digestion' ("**AD method**") and an alternative method as set out in Clause 11.2 'determination of total sulfur content by high temperature combustion' ("**HTC method**").

Following completion of its research (in late 2024) GSI has now recommended that the HTC method (or a suitable alternative) should be used in place of the AD method to determine total sulfur within aggregates, for enhanced precision of test results and to minimise the possibility of inexact test results being returned.

NSAI has brought this to the attention of the relevant standards committee within CEN, the European Standards Organisation responsible for developing and defining standards at European level. That committee has confirmed that the relevant harmonised product standards will be revised in the context of the Construction Products Regulation Acquis^[3] which is being led by the European Commission. While the revision of standards for aggregates are a priority on the work programme, it is likely to take several years to complete the revision of these standards.

NSAI has also brought this to the attention of the Department of Housing, Local Government and Heritage.

In advance of the harmonised product standards being updated at European level, NSAI proposes to revise S.R.16 and intends to publish for public consultation a draft revised S.R. 16^[4] in Q1 2025.

NSAI also proposes to revise S.R. 18^[5] (EN 13139:2002&AC:2004) and S.R. 21^[6] (EN 13242:2002&A1:2007), standards which also include the total sulfur essential characteristic.

HEAD OFFICE

1 Swift Square,
Northwood, Santry,
Dublin 9, Ireland
T + 353 1 807 3800
F + 353 1 807 3838
E info@nsai.ie

NSAI.ie

REGIONAL CENTRE

Limerick
Plassey Park Road,
Castletroy, Limerick
T + 353 61 330 708
F + 353 61 330 698

INTERNATIONAL OFFICE

NSAI Inc.
402 Amherst Street,
Nashua,
New Hampshire,
NH 03063, USA
T +1 603 882 4412
F +1 603 882 1985
E info@nsaiinc.com

NSAIinc.com

References

[1] EN 12620:2002+A1:2008 *Aggregates for Concrete*

[2] EN 1744-1 *Tests for Chemical Properties of Aggregates – Part1: Chemical Analysis*

[3] https://single-market-economy.ec.europa.eu/sectors/construction/construction-products-regulation-cpr/acquis_en



[4] Standard Recommendation S.R.16:2016 - Guidance on the use of I.S. EN 12620:2002+A1:2008 - Aggregates for concrete

[5] Standard Recommendation S.R.18:2006 - Guidance on the use of I.S. EN 13139:2002 - Aggregates for mortar

[6] Standard Recommendation S.R.21:2014 - Guidance on the use of I.S. EN 13242:2002+A1:2007 Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction

End.

HEAD OFFICE

1 Swift Square,
Northwood, Santry,
Dublin 9, Ireland
T + 353 1 807 3800
F + 353 1 807 3838
E info@nsai.ie

NSAI.ie

REGIONAL CENTRE

Limerick
Plassey Park Road,
Castletroy, Limerick
T + 353 61 330 708
F + 353 61 330 698

INTERNATIONAL OFFICE

NSAI Inc.
402 Amherst Street,
Nashua,
New Hampshire,
NH 03063, USA
T +1 603 882 4412
F +1 603 882 1985
E info@nsaiinc.com

NSAIinc.com