

# Australian Standard®

AS 1141.31:2015

## Methods for sampling and testing aggregates

### Method 31: Light particles

#### PREFACE

*This Standard incorporates Amendment No. 1 (December 2018). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

#### 1 SCOPE

This Standard sets out the method for determining the amount of light particles (i.e. particles whose density is less than 2.0 g/mL) in fine and coarse aggregates.

**WARNING: SOME OF THE CHEMICALS OR PROCEDURES SPECIFIED IN THIS STANDARD COULD LEAD TO A HAZARDOUS SITUATION IF CORRECT SAFETY MEASURES ARE NOT FOLLOWED. PERSONS USING THIS AUSTRALIAN STANDARD MUST BE FAMILIAR WITH NORMAL LABORATORY PRACTICE. THIS STANDARD DOES NOT ADDRESS THE SAFETY PROBLEMS, IF ANY, ASSOCIATED WITH ITS USE. IT IS THE RESPONSIBILITY OF THE LEGAL ENTITY USING THIS STANDARD TO ESTABLISH APPROPRIATE SAFETY AND HEALTH PRACTICES, TO ENSURE COMPLIANCE WITH ANY NATIONAL, STATE OR LOCAL REGULATORY REQUIREMENTS, AND TO INSTRUCT IN, AND ENFORCE COMPLIANCE OF, THE SAFETY AND HEALTH PRACTICES.**

#### 2 APPLICATION

This method may be applied to coarse and fine ‘normal weight’ aggregates (i.e. aggregates of particle density between 2.1 t/m<sup>3</sup> and 3.2 t/m<sup>3</sup>) drawn from sources that may contain light particles (e.g. coarse and fine particles from river gravels, estuaries, beach, lake or swamp deposits, or other consolidated sediments and some ridge gravel deposits). The test is also applicable to testing coarse vesicular aggregates (some coarse slags and scorias).

Unless required by specification it is not usually necessary to test coarse, crushed, ‘normal weight’ aggregates from hard rock quarries. A visual inspection for light particles, similar to that used for recycled aggregate will normally suffice to guard against the possibility of contaminants. Manufactured sands or crusher dusts from hard rock quarries may be tested using this method, especially if contamination is suspected.

#### 3 NORMATIVE REFERENCES

The following are the normative documents referenced in this Standard.

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

##### AS

- 1141 Methods for sampling and testing aggregates
- 1141.1 Part 1: Definitions
- 1141.2 Part 2: Basic testing equipment
- 1141.3.1 Method 3.1: Sampling aggregates