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**Melt-solidified slag aggregate for  
concrete derived from municipal  
solid waste and sewage sludge**

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## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS A 5031**:2010 is replaced with this Standard.

However, **JIS A 5031**:2010 may be applied in the **JIS** mark certification based on the relevant provisions of Article 19 Clause 1, etc. of the Industrial Standardization Law until October 19, 2017.

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# Melt-solidified slag aggregate for concrete derived from municipal solid waste and sewage sludge

## Introduction

This Japanese Industrial Standard was established in 2006 for the purpose of facilitating the efficient utilization of melt-solidified slag aggregate. It was then partly revised in 2010 as a tentative measure for preventing the occurrence of popouts in concrete buildings that became a social problem in 2008.

This revision was initiated to incorporate into this Standard the popout test using melt-solidified slag aggregate for concrete which was newly developed, and the contents of “Guidance for introducing environmentally sound quality and inspection method to slag aggregate for concrete” issued on July 12, 2011 as Annex 1 of “Guide for the inclusion of environmental aspects in architecture sector standards” (decision on March 28, 2003 by Technical Committee on Civil Engineering and Technical Committee on Architecture) by Technical Committee on Civil Engineering and Technical Committee on Architecture under Japanese Industrial Standards Committee. The comparison table between previous and current editions of this Standard on technically significant revisions is given in Annex F.

No corresponding International Standard has been established at this point.

## 1 Scope

This Standard specifies the melt-solidified aggregate for concrete manufactured by melting the municipal solid waste, sewage sludge and their burned ashes at a temperature at least as high as 1 200 °C and cooling and solidifying them (hereafter referred to as molten slag aggregate).

The molten slag aggregate is an aggregate manufactured for the purpose of efficient utilization of the municipal solid waste, sewage sludge, etc. in their melt-solidifying facilities, and includes the following.

- a) The molten slag aggregate produced in private melt-solidifying facilities which are entrusted by the municipal authorities to treat municipal solid waste, or that produced when municipal solid waste is treated together with industrial waste whose reuse is approved by the municipal authorities
- b) The molten slag aggregate subjected to magnetic selection, particle size adjustment, etc. property modification in the melt-solidifying facilities or separate facilities
- c) Slag manufactured from melting furnace fly ash, though not normally included in the molten slag aggregate, which has been produced in melt-solidifying facilities equipped with control system meeting the environmental safety quality criteria specified in **5.7**.

The application of molten slag aggregate for concrete shall be as follows.