

ع ت ٥٥٠١/١٣٠٠ الإصدار الأول

مشروع – العداد)

المنتجات الإنشائية الصديقة للبيئة – الركام الصديق للبيئة ental friendly construction products – Environmo-Aggregate Aggregate of the state of the s Environmental friendly construction products—Environmental friendly

> مؤسسة المواصفات والمقاييس المملكة الأردنية الهاشمية

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Foreword

Jordan Standards and Metrology Organization is the national standardization body in Jordan. The work of preparing Jordanian Standards is normally carried out by technical committees composed of the interested parties, which are involved in the scope of the standard. All the interested parties have the right to vote on the draft Jordanian Standard during the enquiry stage, taking into consideration the importance of harmonizing Jordanian Standards with the international, regional or national standards (as much as possible) for the purpose of eliminating technical barriers to trade and facilitating the international trade.

Jordanian Standards are drafted in accordance with the rules given in the Jordanian Directive 1-2/2005, part 2: Rules for the structure and drafting of Jordanian Standards.

The permanent technical committee for Environmental friendly construction products 58 has studied prepared project of the Jordanian Standard 1355:2023 related to "Environmental friendly construction products — Environmental friendly Aggregate", and has recommended to approve the ammended project as a Jordanian Standard 1355:2023, according to article (12) of Standards and Metrology Law No. (22) for the year 2000 and it's amendments.

under amendment.

Environmental friendly construction products — Environmental friendly Aggregate

1-Scope

This Jordanian Standard specifies the requirements for environmental friendly natural and inorganic aggregate.

2- Normative references

The following referenced documents are indispensable for the application of this document, for dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

- JS 2065, Standard specifications for concrete aggregates.

3- Terms and definitions

For the purposes of this Jordanian Standard, the following terms and definitions apply:

3-1

aggregate

granular material used in construction. Aggregate may be natural or recycled

3-2

natural aggregate

aggregate from mineral sources which has been subjected to nothing more than mechanical processing

3-3

recycled aggregate

aggregate resulting from the processing of inorganic material previously used in construction

3-4

inorganic construction waste material

inorganic waste material (excluding metal) among wastes generated in construction site from the construction start point to the completion

3-5

construction

facilities installation, maintenance, repair work, site developing work, machinery facility and other structure installation or break up

3-6

incineration

combustion ash and fly ash such as coal ash-briquette That are generated after the combustion of fuel

3-7

inorganic sludge

sludge separated from powdered inorganic material discharged along with wastewater after cutting and polishing work, etc or incinerating or molten slag on the lake water and sewage sludge

3-8

waste material

disposed material formed before and after using the product

3-9

the disposed material formed after using the product

material that finishes its purpose of use and is disposed after passing through normal distribution stages

3-10

the disposed material formed before using the product

unused material as a product that is generated in a form of scrap in the manufacturing process. However, the material that is generated in the manufacturing process and then used again as raw material in the same process shall be excluded

3-11

usage rate of waste material

weight percentage of waste material amount among the raw materials that are used as products

4- Environment related criteria

Environment related items considering the whole process of aggregate in table 1.

Table 1 — Environment related items considering the whole process of aggregate

Process	Environmental item	Effects on improving the environment
Raw material acquisition		13 July -
Production	Usage rate of waste materials	Recycling available resource
	The drifting sorting process	Saves resources
	The wind force sorting	Reduced use of air pollution materials emission
distribution, usage, consumption	12 m	_
Disposal	The content of harmful ingredient	Reduced emission of harmfu substances
Recycling (**	_	

4-1 Usage rate of waste materials

100 % of inorganic waste material shall be used as the material.

4-2 The drifting sorting process

When applying floatation process for removing the foreign substances, the system for collecting the used water for reuse shall be installed and operated.

4-3. The wind force sorting process

When the wind force sorting process is applied to remove the foreign substance, a system preventing arsenic acid shall be installed and operated.

4-4 The content of harmful elements

The product produced with the designated waste as the ingredient shall comply with table 2 on the harmful ingredients including heavy metal. However, in case of firing processing product, hexavalent chromium (Cr⁶⁺), cyanide (CN), organic phosphorus, trichloroethylene and tetrachloroethylene shall be excluded.

Item	Standard Amount (mg/L)	Item	Standard Amount (mg/L)
Cadmium(Cd)	< 0,3	Mercury(Hg)	< 0,005
Lead(Pb)	<3	Hexavalent chromium(Cr ⁶⁺)	< 1,5
Copper(Cu)	<3	Cyanide(CNT)	<1 38
Arsenic(As)	< 1,5	Organic Phosphorus	<1 9
Trichloroethylene	< 0,3	Tetrachloroethylene	<0.1

5- Test methods
5-1 Hazardous component content.
All test methods shall be conducted by an accredited testing laboratory in accordance with relevant International or Jordanian standard.

5-2 Performance criteria

All test methods shall be conducted by an accredited testing laboratory in accordance with JS 2065 and with related Jordanian standard.

Reference

- Korean eco label, EL746:2012, Aggregate and Fine Powder.