

1. Name and identification code: (AG)-0/20-T-A
2. Name and contact address of the manufacturer: SIDENOR ACEROS ESPECIALES S.L. Barrio Ugarte s/n 48970- Basauri (BIZKAIA)
3. Intended use: Aggregates for unbound materials for use in civil engineering work and road construction.
4. System of assessment and verification of constancy of performance: SISTEMA 2+.
5. Notified body:
 - Name and no: TECNALIA R&I CERTIFICACIÓN, no 1239
 - Task performed: CONTINUOUS ASSESSMENT OF FACTORY PRODUCTION CONTROL
 - Assessment system: SISTEMA 2+
 - Document issued: FPC CERTIFICATE no 1239/CPR/0821201
 - Date of issue: 18/01/2019
6. Certified standard: EN 13242:2002+A1:2007
7. Declared performances:

ESSENTIAL CHARACTERISTICS	PERFORMANCE
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Particle shape, size and density

Particle size0/20 (d/D)
 Granulometry.....G_A 75 / GT_A25
 Particle shape.....FI20
 Particle density3.9 ± 0.2 Mg/m³

Sieve	20	14	10	6.3	4	2	1	0.5	0.25	0.063
% passing	95-100	71.5-100	50-100	30-85	20-60	10-35	0-20	0-10	0-5	0-3

Cleanliness:

Fines contentf3
 Quality finesNPD

Percentage of crushed or broken coarse aggregate particles.....C_{90/3}

Volume stability:

Steelmaking slag aggregates volume stability.....V₅

Absorption / water suction:

Classification of recycled coarse aggregates.....NPD

Water-soluble sulphates from recycled aggregates.....NPD

Acid-soluble sulphates.....AS_{0.2}

Total sulphur.....S₁

Components that change the setting and hardening speed of hydraulically bound mixtures.....NPD

Wear resistance:

Resistance to coarse aggregate fragmentationLA₂₀

Hazardous substances:

Heavy metal leaching.....Complies*

Release of other hazardous substances.....NPD

Durability against freezing and thawingMS₁₈

Composition / content ...

Humus contentNegative

Lightweight pollutants.....Negative

* Limit values for heavy metal leaching (mg/kg), in accordance with Point 3 of Annex II to Decree 64/2019. Unbound applications for fully impermeable surfaces (type 3)

Sb	As	Ba	Cd	Cr	Cr IV	Cu	Hg	Mo	Ni	Pb	Se	Zn	V
≤0.08	≤0.6	≤25	≤0.05	≤2	≤0.4	≤3	≤0.01	≤2.8	≤0.5	≤0.6	≤0.4	≤5	≤4

The product performances identified in point 1 are in conformity with the declared performances in point 7.
 This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 2.



Emilio Hidalgo Perez
 Environment and Energy Manager

Basauri, December 10th, 2021

Other use-relevant results relevant not included in EN 13043:2002+/AC:2004 standard:

Expansivity.....≤ 0.5%
 Free lime content.....≤ 0.5%
 Magnesium oxide content.....≤ 7.5%
 Aging index result.....< 1%
 Water Absorption.....2%

- Name and identification code: (AG)-0/63-T-A
- Name and contact address of the manufacturer: SIDENOR ACEROS ESPECIALES S.L. Barrio Ugarte s/n 48970- Basauri (BIZKAIA)
- Intended use: Aggregates for unbound materials for use in civil engineering work and road construction.
- System of assessment and verification of constancy of performance: SISTEMA 2+.
- Notified body:
 Name and no: TECNALIA R&I CERTIFICACIÓN, no 1239
 Task performed: CONTINUOUS ASSESSMENT OF FACTORY PRODUCTION CONTROL
 Assessment system: SISTEMA 2+
 Document issued: FPC CERTIFICATE no 1239/CPR/0821201
 Date of issue: 17/02/2017
- Certified standard: EN 13242:2002+A1:2007
- Declared performances:

ESSENTIAL CHARACTERISTICS	PERFORMANCE
Particle shape, size and density	
Particle size	0/63 (d/D)
Granulometry.....	G _A 75 / GT _A 25
Particle shape.....	F120
Particle density	3.9 ± 0.2 Mg/m ³
Cleanliness:	
Fines content	f3
Quality fines	NPD
Percentage of crushed or broken coarse aggregate particles.....	
	C _{90/3}
Volume stability:	
Steelmaking slag aggregates volume stability.....	V ₅
Absorption / water suction:	
Classification of recycled coarse aggregates.....	NPD
Water-soluble sulphates from recycled aggregates.....	NPD
Acid-soluble sulphates.....	AS _{0,2}
Total sulphur.....	S ₁
Components that change the setting and hardening speed of hydraulically bound mixtures.....	NPD
Wear resistance:	
Resistance to coarse aggregate fragmentation	LA ₂₀
Hazardous substances:	
Heavy metal leaching.....	Complies*
Release of other hazardous substances.....	NPD
Durability against freezing and thawing	
	MS ₁₈
Composition / content ...	
Humus content	Negative
Lightweight pollutants.....	Negative

* Limit values for heavy metal leaching (mg/kg), in accordance with Point 3 of Annex II to Decree 64/2019. Unbound applications for fully impermeable surfaces (type 3)

Sb	As	Ba	Cd	Cr	Cr IV	Cu	Hg	Mo	Ni	Pb	Se	Zn	V
≤0.08	≤0.6	≤25	≤0.05	≤2	≤0.4	≤3	≤0.01	≤2.8	≤0.5	≤0.6	≤0.4	≤5	≤4

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 Environment and Energy Manager

Basauri, December 10th, 2021

Other use-relevant results not included in EN 13043:2002+/AC:2004 standard:

Expansivity.....	≤ 0,5%
Free lime content	≤ 0,5%
Magnesium oxide content	≤ 7,5%
Aging index result	< 1%
Water Absorption.....	2%