

FEATURES & BENEFITS

INCAST® high-purity, 99%+ quartz foundry sand improves casting quality with better surface finish and superior tensile strength. The high-purity grain's hardness ensures lower attrition that increases sand reclamation. Cleaner sand boosts your commitment to the team's working conditions. All INCAST foundry sand is processed and sized with rigid adherence to the Covia QIPSM statistical and quality assurance program.

PARTICAL SIZE ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Mesh Size		INCAST® Grades				
	ASTM	MICRONS	45	53	55	60	70
Typical mean % retained on individual sieves	30	600	tr	–	–	–	–
	40	425	17.7	7.3	10.9	1.0	0.5
	50	300	43.3	28.6	30.0	21.5	11.3
	70	212	26.7	35.7	31.2	36.9	30.8
	100	150	8.5	25.6	18.7	26.9	34.9
	140	106	3.2	2.6	7.6	11.3	18.0
	200	75	0.6	0.2	1.5	2.2	4.1
	270	53	tr	–	0.1	0.2	0.4
	PAN	PAN	–	–	–	–	tr
AFS-GFN	–	–	46	52	54	61	69
Calculated surface area (cm ² /g)	–	–	134	160	164	191	221

PHYSICAL PROPERTIES

Typical Mean Values. These Do Not Represent A Specification.

INCAST® Foundry Sand		
Grain Shape	Round	AFS 107-87-S
Clay Content (%)	<0.1	AFS 110-87-S
Acid Demand Value (ADV)	1.4	AFS 114-87-S
Melting Point (°F/°C)	3135/1724	ASTM C-24
Specific Gravity (g/cm ³)	2.65	ASTM C-128
Moisture Content (%)	<0.1	ASTM C-566
Bulk Density/Loose (lb/ft ³)	92-95	ASTM C-29
Bulk Density/Compacted (lb/ft ³)	98-100	ASTM C-29

CHEMICAL ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Typical Mean Percent by Weight	
	45, 55-70	53
Silicon Dioxide (SiO ₂)	99.49	99.46
Iron Oxide (Fe ₂ O ₃)	0.03	0.04
Aluminum Oxide (Al ₂ O ₃)	0.20	0.20
Calcium Oxide (CaO)	0.03	0.05
Titanium Dioxide (TiO ₂)	0.01	0.01
Magnesium Oxide (MgO)	0.02	0.03
Potassium Oxide (K ₂ O)	0.14	0.14
Sodium Oxide (Na ₂ O)	0.01	0.01
Loss on Ignition (LOI)	0.07	0.08

SHIPPING/ORDERING INFORMATION

- Shipping Point: Ottawa, MN
- Originating Carrier: Union Pacific (UP)
- Availability: Bulk, 3000 lb IBC
Truck and Rail

CUSTOMER SERVICE

US & Canada: 1-800-243-9004

Fax: 1-800-243-9005

Worldwide: 1-203-442-2500

Fax: 1-203-972-1378

3 Summit Park Drive, Suite 700, Independence, OH 44131 | CoviaCorp.com

GRADE NUMBERS INDICATE RELATIVE VALUES OR RESULTS. THEY ARE NOT A SPECIFICATION OR WARRANTY OF PERFORMANCE.

Health Hazard Warnings: Prolonged inhalation of dust associated with the materials described in this data sheet can cause delayed lung injury including Silicosis, a progressive, disabling and sometimes fatal lung disease. IARC and NTP have determined that crystalline silica can cause lung cancer in humans. Risk of injury is dependent on the duration and level of exposure. Follow OSHA or other relevant safety and health standards for the form of crystalline silica called Quartz. Current safety data sheet, containing safety information, is available and should be consulted before usage.

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Silica/Silica Containing

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