



Xiamen All Carbon Corporation

ACC Microsilica<sup>®</sup>

Datasheet & Quality Certificate

(For Construction)





## ACC® Densified Microsilica

### For Construction

#### Introduction

ACC® Construction used Microsilica is a by-product of the manufacture of silicon metal or ferrosilicon alloys, with SiO<sub>2</sub> content range from 85% to 97%. With bulk density is 500 -- 700kg/m<sup>3</sup>. They are classified as Grade 85D, Grade 90D, Grade 92D and Grade 95D. It's collected, and packed from silicon metal or ferrosilicon factories directly, the automatic and integrated production process guarantees the consistent quality.

#### The effect in Construction application

- ✧ Improve compressive strength and bond strength.
- ✧ Reduces permeability.
- ✧ Improve abrasion resistance.
- ✧ Protecting reinforcing steel from corrosion.

#### Feature

- High Pozzolanic Activity Index.
- Low Loss on Ignition, LOI.
- High Compressive Strength.

#### Advantage

- Without blending, no impurity, the SiO<sub>2</sub> content of each gram can be 100% guaranteed qualified.
- Already approved by many reputed laboratories.
- Integrated production, including microsilica collection and package.
- Long-term stable supply with same source.

#### Packing advantage

Water-degradable paper bag:

- Imported packing materials.
- 100% degradable.
- Bags can be directly threw into the agitation tank for concrete production.
- The packing bags can be adjusted according to proportion in concrete production.

Jumbo bag:

- Double plastic woven Jumbo bag, much stronger.
- With waterproof, UV-Proof and aging-resistant.



# ACC® Microsilica G85D

## Concrete

### Grade 85D for construction

#### Feature

- High Pozzolanic Active Index.
- High Compressive Strength.
- Low LOI.

#### Packaging

The product is supplied in a range of packaging:

- 950/1000kg double plastic woven Jumbo bag.
- 10/12/20kg water-degradable paper bag.
- 20/25kg woven bags with PE liner.

Special packaging can be supplied on request.

#### Quality Control

ACC Microsilica® is certified according to ISO 9001.

The chemical composition and physical properties are regularly tested in accordance with international standards.

#### Standards

ACC Microsilica® Grade 85D conforms to the mandatory requirements of the relevant standards from:

- American Society for Testing and Materials (ASTM C 1240)
- European Committee for Standardisation.

Analysis/Properties		Value
SiO <sub>2</sub>	Silicon Dioxide, Amorphous	85% min
SO <sub>3</sub>		2.0% max
Cl		0.3% max
Free CaO		1.0% max
Free Si		0.4% max
Alkalies(as equivalent NaO <sub>2</sub> )		Report
Moisture		3.0% max
LOI	Loss on Ignition	6.0% max, typical 2.10%
Specific surface(BET)		15 m <sup>2</sup> /gram min
Bulk Density		500-700kg/m <sup>3</sup> D
Pozz.Activity Index – 7days accelerated curing		105% min
Retained on 45 micron sieve		10% max
Variation from avg.retained on 45 micron		5% max

The above specification refers to analysis performed using the ASTM Standard Test Methods and Elemental Analysis for ACC Microsilica®

ACC Microsilica® is a registered trademark and belongs to Xiamen All Carbon Corporation.

#### Xiamen All Carbon Corporation

TEL: +86 592 2278129 FAX: +86 592 2278123

E-MAIL: info@allcarbon.com.cn Http://www.allcarbon.com.cn

Add: Unit K, 28/F, Guangming Building, Xiahe Road Xiamen, China, 361003



# ACC® Microsilica G90D

## Concrete

### Grade 90D for construction

#### Feature

- High Pozzolanic Active Index.
- High Compressive Strength.
- Low LOI.

#### Packaging

The product is supplied in a range of packaging:

- 950/1000kg double plastic woven Jumbo bag.
- 10/12/20kg water-degradable paper bag.
- 20/25kg woven bags with PE liner.

Special packaging can be supplied on request.

#### Quality Control

ACC Microsilica® is certified according to ISO 9001.

The chemical composition and physical properties are regularly tested in accordance with international standards.

#### Standards

ACC Microsilica® Grade 90D conforms to the mandatory requirements of the relevant standards from:

- American Society for Testing and Materials (ASTM C 1240)
- European Committee for Standardisation.

Chemical and physical requirements		Specification
SiO <sub>2</sub>	Silicon Dioxide, Amorphous	90% min
H <sub>2</sub> O	(moisture content when packed)	1.0% max
Loss on Ignition, LOI		6.0% max, typical 2.12%
Retained on 45 micron sieve		1.0% max
Bulk Density (when packed)		500-700kg/m <sup>3</sup>

The above specification refers to analysis performed using the ASTM Standard Test Methods and Elemental Analysis for ACC Microsilica®

ACC Microsilica® is a registered trademark and belongs to Xiamen All Carbon Corporation.

#### Xiamen All Carbon Corporation

TEL: +86 592 2278129 FAX: +86 592 2278123

E-MAIL: info@allcarbon.com.cn Http://www.allcarbon.com.cn

Add: Unit K, 28/F, Guangming Building, Xiahe Road Xiamen, China, 361003



# ACC® Microsilica G92D

## Concrete

### Grade 92D for construction

#### Feature

- High Pozzolanic Active Index.
- High Compressive Strength.
- Low LOI.

#### Packaging

The product is supplied in a range of packaging:

- 950/1000kg double plastic woven Jumbo bag.
- 10/12/20kg water-degradable paper bag.
- 20/25kg woven bags with PE liner.

Special packaging can be supplied on request.

#### Quality Control

ACC Microsilica® is certified according to ISO 9001.

The chemical composition and physical properties are regularly tested in accordance with international standards.

#### Standards

ACC Microsilica® Grade 92D conforms to the mandatory requirements of the relevant standards from:

- American Society for Testing and Materials (ASTM C 1240)
- European Committee for Standardisation.

Chemical and physical requirements		Specification
SiO <sub>2</sub>	Silicon Dioxide, Amorphous	92% min
H <sub>2</sub> O	(moisture content when packed)	1.0% max
Loss on Ignition, LOI		6.0% max, typical 2.13%
Retained on 45 micron sieve		1.0% max
Bulk Density (when packed)		500-700kg/m <sup>3</sup>

The above specification refers to analysis performed using the ASTM Standard Test Methods and Elemental Analysis for ACC Microsilica®

ACC Microsilica® is a registered trademark and belongs to Xiamen All Carbon Corporation.

#### Xiamen All Carbon Corporation

TEL: +86 592 2278129 FAX: +86 592 2278123

E-MAIL: info@allcarbon.com.cn Http://www.allcarbon.com.cn

Add: Unit K, 28/F, Guangming Building, Xiahe Road Xiamen, China, 361003



# ACC® Microsilica G95D

## Concrete

### Grade 95D for construction

#### Feature

- High SiO<sub>2</sub> content.
- High Pozzolanic Active Index.
- High Compressive Strength.
- Low LOI.

#### Packaging

The product is supplied in a range of packaging:

- 950/1000kg double plastic woven Jumbo bag.
- 10/12/20kg water-degradable paper bag.
- 20/25kg woven bags with PE liner.

Special packaging can be supplied on request.

#### Quality Control

ACC Microsilica® is certified according to ISO 9001.

The chemical composition and physical properties are regularly tested in accordance with international standards.

#### Standards

ACC Microsilica® Grade 95D conforms to the mandatory requirements of the relevant standards from:

- American Society for Testing and Materials (ASTM C 1240)
- European Committee for Standardisation.

Analysis/Properties		Value
SiO <sub>2</sub>	Silicon Dioxide, Amorphous	94% min
Fe <sub>2</sub> O <sub>3</sub>	Iron Oxide	Typical 0.07%
Al <sub>2</sub> O <sub>3</sub>	Aluminum Oxide	Typical 0.35%
CaO	Calcium Oxide	Typical 0.21%
MgO	Magnesium Oxide	Typical 0.11%
K <sub>2</sub> O	Potassium Oxide	Typical 0.22%
Na <sub>2</sub> O	Sodium Oxide	Typical 0.09%
P <sub>2</sub> O <sub>5</sub>	Phosphorus Pentoxide	Typical 0.74%
MnO	Manganese Oxide	Typical 42 PPM
PAI	Pozz. Activity Index(%) - with Portland cement at 7 days	Typical 129%
LOI	Loss on Ignition	Typical 2.85%
Coarse Particles >45um(325 mesh)		Max 1%
Bulk Density(as packed)		500-700kg/m <sup>3</sup>

The above specification refers to analysis performed using the ASTM Standard Test Methods and Elemental Analysis for ACC Microsilica®

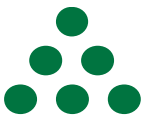
ACC Microsilica® is a registered trademark and belongs to Xiamen All Carbon Corporation.

#### Xiamen All Carbon Corporation

TEL: +86 592 2278129 FAX: +86 592 2278123

E-MAIL: info@allcarbon.com.cn Http://www.allcarbon.com.cn

Add: Unit K, 28/F, Guangming Building, Xiahe Road Xiamen, China, 361003



# ACC Package

## ACC Packing List

Item	Packing material	Packing list
950 or 1000kg	Plastic woven	950 or 1000kg/bag, 2bags/pallet, 19 or 20MT/20GP, 26.6 or 27MT/40HQ;
20 or 25kg	Woven bag with PE liner	20 or 25kg/bag, with pallet, 17MT±10%/20GP;
		20 or 25kg/bag, no pallet, 20MT±10% /20GP;
10/12/20kg	Water-soluble paper	12/20kg water-soluble paper bag, no pallet, 20MT±10%/20GP;
		10/20kg water-soluble paper bag, with pallets, 16MT±10% /20GP;

## Loading Pictures



### Xiamen All Carbon Corporation

TEL: +86 592 2278129 FAX: +86 592 2278123

E-MAIL: info@allcarbon.com.cn Http://www.allcarbon.com.cn

Add: Unit K, 28/F, Guangming Building, Xiahe Road Xiamen, China, 361003