

## Characteristics

		CF2300	CF2600	CF2800	CF3000	CF3100	CF998
Classification Temperature	°C	1260	1430	1540	1650	1700	
Maximum continuous duty temperature	°C	1160	1330	1440	1550	1600	1500
Maximum intermittent use temperature	°C	1210	1380	1490	1600	1650	1550
Density approx.	kg/m <sup>3</sup>	350	380	380	420	420	550
Cold Crushing Strength	MPa	1.2	2.6	3.1	4.2	2.9	9.6
Modulus of Rupture	MPa	0.7	0.9	2.0	2.6	1.8	2.3
Porosity	%	88%	87%	86%	86%	87%	86%
Linear shrinkage after 24hrs. at maximum duty temperature	1230°C	%	0.3				
	1400°C			0.33			
	1510°C				0.12		
	1570°C						1.3
	1620°C					0.43	
	1680°C						0.29
Thermal Conductivity at mean Temperature	200	W/mK	0.13	0.15	0.2	0.18	0.17
	400		0.14	0.17	0.21	0.21	0.19
	600		0.17	0.19	0.22	0.24	0.21
	800		0.19	0.22	0.24	0.26	0.25
	1000		0.21	0.25	0.27	0.3	0.28
	1200		-	0.28	0.3	0.33	0.31
Chemical Analysis	Al <sub>2</sub> O <sub>3</sub>	%	50.2	59.8	65.3	70.4	80.5
	SiO <sub>2</sub>		46.4	38.1	32.1	28.5	17.8
	others		3.4	2.1	2.6	1.1	1.7
Mineral phase composition		Mullite & Corundum & anorthite	Mullite & Corundum & anorthite	Mullite & Corundum	Mullite & Corundum	Mullite & Corundum	Corundum
Standard panel size	mm	650*480*65 & 900*600*50	650*480*65 & 900*600*50	650*480*65 & 900*600*50	650*480*65 & 900*600*50	650*480*65 & 900*600*50	600*450*50
Maximum panel size (Other panel sizes or customized shapes on request)	mm	650*480*70 & 960*650*50	650*480*70 & 960*650*50	650*480*70 & 960*650*50	650*480*70 & 960*650*50	650*480*70 & 960*650*50	800*500*55

Note: Maximum use temperature is depending on variables such as stresses, both thermal and mechanical, heating/cooling rate and the chemical environment that the material experiences. All technical data given herein are typical values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice (e.g. due to new raw materials or to technical development). Therefore, the data given herein should not be used for specification purposes.


### Mounting of the panels

Electron's Cerafoam® products can easily be mounted in (existing) furnace linings. Information about the way of installing the panels in the furnace roof/wall is available on request.

### Your partner Electron

Electron provides customers with the benefit of its experience in the form of designing and manufacturing custom electric heating elements and systems and furnaces accessories and insulation materials. Next to this Electron is a service-oriented company that wants to be your partner by giving advice and assistance in selecting the right products to meet your requirements, together. Don't hesitate to call us by the numbers listed below.

### Material safety

NFPA FIRE HAZARD				
F	Flammability		4	Extreme
H	Health		3	Hihgh
R	Reactivity		2	Moderate
S	Special Hazards		1	Slight
			0	Insignificant
<b>EMERGENCY PHONE: +31 088 848 8000</b>				

### Material identification

<b>Supplier</b>	Electron Technologies BV.
<b>Material name</b>	Ceramic Foam High Temperature Insulation
<b>Common name</b>	High Temperature Insulation
<b>Trade names</b>	Cerafoam®
<b>Products forms</b>	Board

## Composition

Ingredient name	% by weight						EINECS number	CAS number	Molecular formula
	CF2300	CF2600	CF2800	CF3000	CF3100	CF998			
Aluminium Oxide	50.2	59.8	65.3	70.4	80.5	99.8	215-691-6	1344-28-1	Al <sub>2</sub> O <sub>3</sub>
Silica + others	49.8	40.2	34.7	29.6	19.5	0.2			SiO <sub>2</sub>

## Hazard identification

Cerafoam® products are non-hazardous during usage. When the product is being cut, grinded or machined, dust might be generated and might cause irritation of eyes and upper respiratory tract.	
<b>Eye Contact</b>	Slightly to moderately irritating.
<b>Inhalation</b>	Repeated or prolonged breathing of particles of respirable size may cause respiratory tract irritation.

## First aid measures

<b>Eye Contact</b>	Flush with clean water
<b>Inhalation</b>	Remove affected person from source and supply with fresh air

## Fire measures

Cerafoam® products are non-flammable and non-explosive.

## Accidental release measures

Cerafoam® products in still status are non-hazardous to release. If dust is generated when machining Cerafoam®, refer to section 8 for proper personal protection.

## Handling and storage

No special instructions

## Exposure control/Personal protective equipment

During dealing with machining bulk, use common protective equipment like dust respirator and glasses to against the generated dust.

### **Stability and reactivity**

Stability: Stable under normal conditions of use, storage and transportation.  
Hazardous decomposition: None.

### **Toxilogical information**

The product is not toxic.

### **Ecological information**

Cerafoam® is fiber free and inert to the environment.

### **Disposal considerations**

No special instructions for the disposal of the product. Consult local or national regulations for proper disposal.

### **Transport information**

No special instruction.

### **Regulatory information**

Risk phrases: R20 – Harmful by inhalation.  
Safety advise phrases: S22 – Do not breath dust.

### **Others**

MSDS Electron Cerafoam®

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