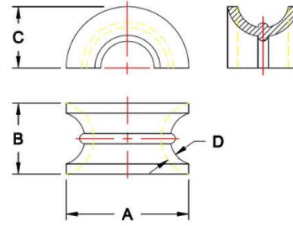


# CERAMIC RANDOM SADDLES

## PHYSICAL PROPERTIES



Size MM(Nominal)	19 mm	25 mm	38 mm	50 mm	75 mm
A	26 +/- 2.6	34 +/- 3	51 +/- 3	68 +/- 4	102 +/- 5
B	18 +/- 1.8	24 +/- 2	35 +/- 2	47 +/- 2.8	72 +/- 3
C	13 +/- 1.3	17 +/- 2	25.5 +/- 2	34 +/- 3	51 +/- 2
D	10.5 +/- 1	14 +/- 1	22 +/- 1	30 +/- 1.8	45 +/- 3
E	2.5 +/- 2.5	3.5 +/- 0.5	4.5 +/- .05	6 +/- 1	9 +/- 1
F	1.75	2.5	3.5	5	7.5 +/- 1
G	1.75	2.5	1.75	2.5	3.5 +/- 0.5

## CHEMICAL COMPOSITION

SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub> +Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>
74-77%	15-23%	>92%	1.5%

Quantity (Approx +/- 10% Nos. per cubic meter Dumped	162500	70000	21000	9300	3000
Weight (Approx +/- 10% Kg per cubic meter Dumped	593	586	594	560	540
% Free Space (Approx) Dumped	71	77	80	79	80
Contact Surface M <sub>2</sub> /M <sub>3</sub> (Approx) Dumped	239	199	139	108	96
Relative Efficiency M <sub>2</sub> /M <sub>3</sub> of free space Dumped	337	258	174	137	120
Relative Scrubbing Capacity M <sub>2</sub> /M <sub>3</sub> x Free Space Dumped	170	153	111	85	77
Packing Factor	110	98	52	40	22

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**MATERIAL SAFETY DATA SHEET****1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY**

PRODUCT: Ceramic Saddle , material: Porcelain any dimensions

MANUFACTURER: Hisina Industrial Co.,Ltd.

DATE OF ISSUE: APR. 10, 2008

**2. COMPOSITION:**

	Percentage	Carcinogen (Y/N)
Aluminum Oxide	17-23	N
Silicon Dioxide	73	Y
Iron Oxide	0-1	N
Titanium Dioxide	0-1	N
Calcium Oxide	0-1	N
Magnesium Oxide	0.5	N
Sodium Oxide	0-4	N

The ceramic honeycomb are not a regulated chemical as they don't release or otherwise result in exposure to a hazardous chemical under normal conditions of use

**3. PHYSICAL AND CHEMICAL DATA**

STATE OF AGGREGATION: SOLID

SPECIFIC GRAVITY: 2.3g/cm<sup>3</sup>

SOLUBILITY: in water: insoluble

In alcohol: insoluble

Other solvents: insoluble

SOFTEN POINT: 1400C

**4. FIRE AND EXPLOSIVE HAZARD DATA**

As sold the material is inflammable and there is no risk for fire or explosive

**5. CORROSIVITY AND REACTIVITY**

Silicate Products may react, although not violently, with hydro fluoric acid or active fluorides.

**6. HEALTH, FIRST AID AND MEDICAL DATA**

**a) INHALATION:** In normal use dust creation is not possible. Dust can only be created in case of machining, grinding or similar operations normally not foreseen for this products. If dust is created, there is the possibility of breathing in irritant powders. Prolonged exposure to Silica can lead to silicosis. Silica may be a possible carcinogen. More than 97 % of the Silica in this material is chemically bound as Silicates and glass-phase. The content of Silica in the dust of this material is very, very low.

**b) SKIN: Absorption:** n/a

**Handling:** These articles are hard and abrasive and may have sharp broken edges.

**c) EYE:** Dust may cause irritation. Breaking the material may result in fine and sharp

fragments.

**In case of contact:** irrigate with water. Do not wipe away fragments or particles. Call for medical assistance if fragments are in eyes.

**d) INGESTION:** n/a

## **7. PERSONAL PROTECTION INFORMATION**

**Respiratory Protection:** wear dust masks if dust is created

**Ventilation:** local ventilation recommended if dust is created

**Protective gloves:** recommended

**Eye protection:** recommended

**Other equipment:** adequate covering to protect from sharp edges. Other equipment as customer's policies dictate

## **8. STORAGE, HANDLING AND USE PROCEDURES**

a) Stacking height of pallets max. 2,5m

b) Avoid rough handling to avert abrading or crushing the articles.

c) Minimize dust.

d) Watch footing if articles fall onto walking surfaces.

e) Protect against sharp, broken edges.

f) Waste disposal method: landfill in accordance with local, state and federal regulation. Be guided by extraneous matter to which these articles may have been exposed in the user's process.

## **9. OTHER PRECAUTIONS**

As sold these articles are solid, inert and non-hazardous. If Customers processing introduces hazardous (toxic), flammable or explosive materials to the articles, be guided by their nature.