

## 9. PHYSICAL AND CHEMICAL PROPERTIES<sup>1)</sup>

Appearance : Gray solid  
Odor : -  
Solubility : Insoluble in water

## 10. STABILITY AND REACTIVITY

Stability : Stable under normal condition and anticipated storage.

Physical conditions change :

- When combusted, harmful gases (ammonia, carbon monoxide, metal fume, etc) may be generated.

## 11. TOXICOLOGICAL INFORMATION

Dust is harmful and if inhaled in high dose, it may cause health disorder.

Acute toxicity<sup>1)2)</sup>

Rat (Oral)	Phenol-formaldehyde polymer	LD <sub>50</sub> 5000 mg/kg
	Aluminum oxide	LD <sub>50</sub> 5000 mg/kg
	Calcium hydroxide	LD <sub>50</sub> 7340 mg/kg
Rat (Dermal)	Phenol-formaldehyde polymer	LD <sub>50</sub> 2000 mg/kg

LD<sub>50</sub> : Lethal dose 50% kill

Skin corrosion/irritation<sup>1)2)</sup> :

Dust and calcium hydroxide cause mild skin irritation and corrosion. Wash all exposed area of skin with plenty of soap and water so that transient skin reaction (pruritus, erythema) may not occur.

Serious eye danger/eye irritation<sup>1)</sup> :

Dust causes eye hurt. Calcium hydroxide may be corrosive to eyes.

Respiratory sensitization/Skin sensitization<sup>1)</sup> :

Aluminum oxide may cause respiratory sensitization.

Germ cell mutagenicity : -

Carcinogenicity<sup>1)3)4)</sup> :

Chemical name	IARC	ACGIH
Aramid fiber	Group 3	-
Zirconium oxide	-	A4
Aluminum oxide	-	A4

IARC Group 3 (Not classifiable as to their carcinogenicity to humans)

ACGIH A4 (Not classifiable as a human carcinogen)

Reproductive toxicity<sup>1)</sup> : -

Specific target organ systemic toxicity – Single exposure<sup>1)</sup> :

Aluminum oxide : May cause damage to respiratory system.

Calcium hydroxide : Has been reported to cause damage to respiratory organs.

Specific target organ systemic toxicity – Repeated exposure<sup>1)</sup> :

Aluminum oxide : Has been reported to cause damage to respiratory system.

Copper : Has been reported to cause damage to liver.

Calcium hydroxide : May cause damage to respiratory system.

Aspiration hazard<sup>1)</sup> : May cause chemical pneumonia if inhaled.

Other information : -