

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Light Brown Color, Solid (Article)
 ODOR : No odor
 SOLUBILITY IN WATER : Insoluble
 SOLUBILITY IN ORGANIC SOLVENTS : Insoluble

10. STABILITY AND REACTIVITY

STABILITY : Stable under normal condition and anticipated storage.

PHYSICAL CONDITIONS CHANGE :

When combusted, harmful gases (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 ²⁾ Phenol resin ; LD₅₀ 5g/kg (Rat : ORAL) , LD₅₀ 2g/kg (Rat : DERMAL)
 Calcium hydroxide ; LD₅₀ 7.34g/kg (Rat : ORAL)
 Hexamethylenetetramine ; LD₅₀ 9.2g/kg (Rat : ORAL)
 Aluminium oxide ; LD₅₀ >5g/kg (Rat : ORAL)

Note) LD₅₀ : Lethal dose 50% kill

SKIN CORROSION/IRRITATION :

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

Calcium hydroxide and Hexamethylenetetramine causes severe skin burns. But not when formed into a brake pad.

SERIOUS EYE DAMAGE/EYE IRRITATION :

Dust causes eye hurt. Calcium hydroxide and Hexamethylenetetramine cause serious eye damage.

RESPIRATORY SENSITIZATION/SKIN SENSITIZATION :

Hexamethylenetetramine may cause allergy or asthma symptoms or breathing difficulties if inhaled, and an allergic skin reaction.

GERM CELL MUTAGENICITY :

Mutagenicity tests were positive. (Phenol resin)

CARCINOGENICITY ³⁾⁴⁾ :

IARC ; Group 3 (Not classifiable as to their carcinogenicity to humans) : Phenol resin, Aramid fiber, Rock wool

ACGIH; A4 (Not classifiable as a human carcinogen) : Phenol resin

EPA ; D (Not classifiable as to human carcinogenicity) : Phenol resin

REPRODUCTIVE TOXICITY :

Phenol resin may damage fertility or the unborn child (Category 1B).

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY – SINGLE EXPOSURE :

Category 1 : Has been reported to cause damage to organ (Respiratory system,

ZA01 (Article)