



Material Safety Data Sheet

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Number	3

1. Identification of substance

- ① Product Name : HI-TAL P1, P2, P3 (Magnesium Aluminium hydroxy Carbonate Hydrate)
- ② Recommended use of the chemical and restrictions on use :
- Recommended use : Heat stabilizer for PVC and ultraviolet resistant, Neutralizer for Ziegler catalyst
Infrared ray absorber and auxiliary flame retardant, etc.
 - Restrictions on use : No data
- ③ Information on manufacture/supplier/distributor :
- Company name : SINWON INDUSTRIAL CO., LTD.
 - Address : No. 1203-4, Wonjeong-Ri, Posung-Eup, Pyeongtaek-City, Gyeonggi-Do, Korea
 - Tel. : +82-31-684-6688 / Fax : +82-31-682-6055
 - Responsible department : Q.C & Research Department

2. Hazards identification

- ① Hazards classification : No data
- ② Label elements including precautionary statements
- Pictograms : No data
 - Signal word : No data
 - Hazard statements : No data
 - Precautionary statements
 - Prevention : No data
 - Countermeasure : No data
 - Storage
P405 Keep in sealing up
 - Disposal
P501 Dispose in accordance with all applicable regulations .
- ③ Other hazards which do not result in classification : Not available information

3. Composition/Information on ingredient

Chemical name	Trivial Name	CAS NO.	percent (%)
Magnesium Aluminium hydroxy Carbonate Hydrate	[carbonato(2-)] hexadecahydroxybis(aluminium) hexamagnesium	11097-59-9	> 97
Fatty acid C16~18		67701-03-5	< 3

4. First aid measure

- ① Contact with eyes
- Wash with plenty of water for over 15 minutes.
 - Get a medical treatment in case of continual irritation.
- ② Contact with skins

- Wash with warmly soapy water in case of serious contact.
- Get a quick medical treatment in case of continual irritation.

③ Inhalation

- Move to clean area in case of side effects.
- Consult a doctor after artificial respiration by confirmed the airway with loosing cloth when breathing gets weak or stops.

④ Ingestion : Get a medical treatment in case of swallowing large quantity.

⑤ Most important acute and delayed symptoms/effects : No data

⑥ First aid and notes for physicians : No data

5. Countermeasure for explosion

① Fire and explosion hazards : It may have slight fire hazards and a mixture of air may be exploded and ignited

② Suitable extinguishing methods

- Evacuate people to the safe place.
- Be cautious of harmful gasses by pyrolysis or combustion in case of fires.
- Block the supply of combustion by avoiding any danger.

③ Suitable extinguishing agent

- Available for powered extinguishing agents and carbon dioxide.
- The efficiency of water is weak.

6. Countermeasure for leakage

① Measures required for personal protection and protective equipment : Dustproof masks, protective gloves and clothes.

② Measures for environmental protection : No data

③ Purification or how to remove : No data

7. Handling and storage

① Precautions for safe handling

- Handling should be in good place for ventilation.
- Avoid contacting with skin or coming in eyes

② Conditions for safe storage : Store under dry condition without any humidity.

8. Exposure controls & personal protection

① Exposure limits of the chemical substance, biological exposure limits, etc. : No data

② Engineering controls : No data

③ Personal protective equipment

- Respiratory protection : Dustproof mark
- Eye protection : Expensive goggles
- Hand protection : Protective gloves
- Body protection : Impervious clothes

9. Physical and chemical properties

① Appearance : White powder

- ② Odor and odor threshold : None
- ③ PH : 8.5~9.5 (2% EtOH solution)
- ④ Melting point/freezing point : Irrelevant
- ⑤ Initial boiling point and boiling range : Irrelevant
- ⑥ Flash point : None
- ⑦ Evaporation rate : Irrelevant
- ⑧ Flammability(Solid, gas) : None
- ⑨ The upper/lower limits of explosive range : None
- ⑩ Vapour pressure : None
- ⑪ Solubility in water : Insoluble
- ⑫ Vapour density : None
- ⑬ Specific gravity(water=1) : 2.1
- ⑭ Partition coefficient : n-octanol/water : None
- ⑮ Natural ignition temperature : None
- ⑯ Decomposition temperature : 400°C (752°F)
- ⑰ Viscosity : Irrelevant
- ⑱ Molecular rate : 773.91

10. Safety and reactivity

- ① Chemical stability : Stable at a normal temperature and pressure
- ② Possibility of hazardous reactions : None
- ③ Conditions to avoid : Avoid heat, flames, sparks and other sources of ignitions. Avoid contact with incompatible materials.
- ④ Incompatible materials : Acids
- ⑤ Hazardous decomposition products : Pyrolysis products and the other products

11. Toxicological information

- ① Information on the likely routes of exposure
 - Respiratory system : No data
 - Oral : No data
 - Skin: No data
 - Eye : No data
- ② Delayed and immediate effects and chronic effects from short or long term exposure
 - Acute toxicity :
 - Oral : > 10000mg/Kg for Oral, LD50 for Mouth
 - Skin : No data
 - Inhalation : No data
 - Skin corrosion/irritation : No data
 - Serious eye damage/eye irritation : No data
 - Hypersensitiveness of respiratory : No data
 - Hypersensitiveness of skin : No data
 - Carcinogenicity : No data
 - Germ cell mutagenicity : No data
 - Reproductive toxicity : No data
 - Specific target organ toxicity(single exposure) : No data

- Specific target organ toxicity (repeated exposure) : No data
- Aspiration hazard : No data
- ③ Numerical measures of toxicity(acute toxicity estimation (ATE), etc.) : No data

12. Ecological information

- ① Aquatic, terrarium and ecological toxicities : No data
- ② Persistence and degradability : No data
- ③ Bioaccumulation : No data
- ④ Mobility in soil : No data
- ⑤ Other adverse effects : No data

13. Disposal considerations

- ① Disposal methods : Disposal must be done in accordance with official regulations.
- ② Precautions for disposal : Consider the precautions expressed by the official regulations.

14. Information of transport

- ① UN number : None
- ② UN proper shipping name : Irrelevant
- ③ Hazard classes : Irrelevant
- ④ Classes for containers : Irrelevant
- ⑤ Marine pollutant : Irrelevant
- ⑥ Information on any special precautions, which a user needs to be aware of, or needs to comply with.
 - A kind of emergency measures in case of fire : Irrelevant
 - A kind of emergency measures in case of release : Irrelevant

15. Regulatory information

- ① Industrial Safety and Health Law : Irrelevant
- ② Control Law for toxic chemical : Irrelevant
- ③ Safety Control Law for dangerous goods : Irrelevant
- ④ Wastes Management Law : Irrelevant
- ⑤ Domestic or overseas regulations for the others
 - Control Law for persistent organic pollutants : Irrelevant
 - Classified information in EU
 - Definite classified result : Irrelevant
 - Dangerous words : Irrelevant
 - Precaution words : Irrelevant
 - Control information in USA
 - OSHA regulations (29CFR1910.119) : Irrelevant
 - CERCLA 103 regulations (40CFR302.4) : Irrelevant
 - EPCRA 302 regulations (40CFR355.30) : Irrelevant
 - EPCRA 304 regulations (40CFR355.40) : Irrelevant
 - EPCRA 313 regulations (40CFR372.65) : Irrelevant
 - The Rotterdam Convention products : Irrelevant
 - The Stockholm Convention products : Irrelevant
 - The Montreal Protocol products : Irrelevant

16. Others information

① The source of data.

ECB-ESIS(European chemical Substances Information System)(<http://ecb.jrc.it/esis>)

IUCLID Chemical Data Sheet, EC-ECB

② The first date of drawing up : 3 January, 2006

③ Number of revision times and the latest revision date : 7 April 2009 (2nd)

④ Others

○ This information was prepared in accordance with the 41st article of the Korean law of industrial safety and healthy.

○ This product should be used in accordance of the above regulation and standards.

○ The above information is accurate to the best of our knowledge, and it is not meant for guaranteeing the specific properties of the product.