

Material Safety Data Sheet (MSDS)

(This material Occupational Safety and Health Act was written in accordance with the provisions of Article 41)

1. chemical product and Information about the company

- I. Product Natural Power
- II. Recommended use and restrictions on use of the product
 Recommended use of the product : Rightness of the inner wall and ceiling finishes building
 Restrictions on use of the product : Do not use for exterior walls
- III. Manufacturer / importer / distributor information
 Company Dongyang E&P
 address 148-90, Gwanteo-ro, Haemi-myeon, Seosan-si
 Chungnam, 356-821, Korea.
 Emergency Phone Number +82-41-688-9971~3

2. Hazard, risk

I. Essential information for emergencies (NFPA Index) Health, fire, reactivity

SUBSTANCE (COMPANY)	Health	fire	reactivity
WATER	0	0	0
Sericite powder	1	0	0
Acrylic ester copolymer	1	0	0
Titanium Dioxide	1	0	0
S	1	0	0

II. Effect on eyes: By stimulating mucosal hyperemia, tearing, and may cause a faint symptoms.

III. Effects on the skin: Be irritating to the skin and can cause disease.

IV. Inhalation: Mild irritation and dizziness may occur.

V. Ingestion: Nausea, vomiting, can cause digestive disorders.

VI. chronic and Symptoms: Long-term exposure can be a loss of metabolic function during long-term exposure may be a loss of metabolic function and can cause damage to organs

3. Composition / information on ingredients

SUBSTANCE (COMPANY)	CAS Number	Content (%)
WATER	7732-18-5	35~40%
Sericite powder	12001-26-2	50~55%
Acrylic ester copolymer	30445-28-4	1~8%
Titanium dioxide	1317-80-2	1~4%
S		1~10%

4. First Aid

- I. Eye contact
 - In case of contact with eyes may cause eye irritation.
 - Much of the flow of water or normal saline 15 minutes using a chemical wash to remain professional when you do not receive treatment.
 - Wash your hands well when the eyelid to wash well to every corner of the eye.
- II. Skin contact
 - Can be irritating to the skin.
 - Using soap or large amounts of water for at least 15 minutes until no chemical wash.
 - Contaminated clothing and shoes should ever promptly removed and reused after washing.
- III. Inhalation
 - May cause mild irritation.
 - Immediately move to fresh air and take the next stable.
 - If unstable, uneven breathing and oral breathing, and, should receive specialized treatment.
- IV. Ingestion
 - Vomiting, and paralysis may occur.
 - Rinse your mouth thoroughly with water, if vomiting occurs prevent aspiration to head lower than hips to help, and should receive professional help immediately.
- V. Professional medical attention.
 - No specific antidote exists, so that symptoms are treated according to the functionality.

5. Fire-Fighting Measures

- I. Flash point : Not applicable.
- II. Autoignition : No data available.
- III. Explosion (combustion / low flammability limits) : No possibility of explosion.
- IV. Fire Services by Category and Regulatory information : Not applicable.
- V. fire-extinguishing : Carbon dioxide, powder, halogen, sand, etc.
- VI. Extinguishing and Equipment
 - Use appropriate protective equipment.
 - If it can be done without risk, move containers from fire area
 - Digest at once given by a fire extinguisher.
 - Cool containers with water spray cooling down period as far as possible, sprinkle away.
 - Avoid inhalation of vapors downwind stand.
- VII. Hazardous Combustion
 - Thermal decomposition products may include carbon oxides, solid particles, complex mixtures, such as gas particles or gases may be generated.
- VIII. Extinguishing media which must not be used : Not applicable.

6. Accidental Release Measures

- I. Personal precautions and protective equipment
 - Safety glasses, protective gloves, protective clothing, breathing apparatus, such as a respirator should be worn and suitable protective equipment.
 - Isolate hazard area and access is prohibited.
 - Does not come into direct contact with spilled material.

II. Measures to protect environment

- Immediately remove pollutants and contaminants out of town and prevent leaks.
- Prevent soil or water leakage.

III. Purification or How to remove

- Dry sand, and the bulwark adsorbed completely wipe them in a sealed container for disposal according to waste management should be disposed of legally.

7. Handling and Storage

I. Handling

- Work in a well ventilated, and the appropriate respirator, chemically resistant gloves, safety glasses, protective wear.
- When working in confined space for adequate ventilation quasi - work, or to install ventilation systems.

II. safe storage

- And a substance isolated from a mixed risk, avoid contact with acids or oxidizing agents.
- Keep in a cool place with no static buildup.
- Heat, sparks, flames, etc. are isolated.
- Keep out of reach of children.

8. Exposure Controls and Personal Protection

I. Engineering Controls

- In order to allow compliance with the standards of local exhaust ventilation or exhaust attenuated to install facilities.

II. Respiratory Protection : Canister equipped with organic solvents to wear chemical splash protection.

III. Eye Protection : To protect the face but, goggles should be worn.

IV. Hand Protection : Debris to avoid skin contact with appropriate protective gloves should be worn.

V. body protection : Organic solvents or chemicals are not permeable and impermeable protective equipment should be worn.

VI. Hygienic precautions : Avoid repeated skin contact and inhalation

Wash your hands after work.

9. Physical and Chemical Properties

I. Appearance : Fluid liquid

II. Smell : Sheepishness

III. pH : 7 - 8

IV. Solubility : Water-soluble

V. Melting / Freezing : No data available.

VI. Initial boiling point and boiling range: No data available. X III. Viscosity : 95 - 103KU (20°C)

VII. Explosive : Not an explosive substance.

VIII. Oxidative: Not Oxidant.

IX. Vapor Pressure: No data available.

X. Specific gravity: 1.38

XI. Partition Coefficient: No data available.

XII. Vapor Density: Heavier than air.

X III. Viscosity : 95 - 103KU (20°C)

X IV. Molecular Weight : No data available.

10. Stability and Reactivity

- I. Chemical stability and the possibility of hazardous reactions : Room temperature, atmospheric conditions are stable.
- II. Conditions to avoid and Substance : – Avoid heating containers.
 – Acids, bases or oxidizing agents to avoid close contact with.
 – Heat, sparks, open flame or other ignition source does not come into contact with.
- III. Hazardous Decomposition Products : Carbon monoxide, carbon dioxide and other toxic carbon compounds.
- IV. The possibility of hazardous materials response : Not available.

11. Toxicological Information

- I. Based on chemical exposure

SUBSTANCE (COMPANY)	Acute Toxicity(Oral)	Acute Toxicity (percutaneous)	Acute Toxicity (Dust attraction)
Natural Power	Not available	Not available	Not available

SUBSTANCE (COMPANY)	Acute Toxicity(Oral)	Acute Toxicity (percutaneous)	Acute Toxicity (Dust attraction)
WATER	Not available	Not available	Not available
Sericite powder	Not available	Not available	Not available
Acrylic ester copolymer	Not available	Not available	Not available
Titanium dioxide	Not available	Not available	Not available
S	Not available	Not available	Not available

II. Subacute toxicity : No data available.

III. Chronic Toxicity : No data available.

IV. Mutagenicity: No data available.

V. Reproductive Toxicity : No data available.

VI. Carcinogenicity: No data available.

VII. Other Information: No data available.

12. Environmental Effect Information

SUBSTANCE (COMPANY)	Aquatic, terrestrial, ecological toxicity	Mobility in soil	Persistence and Degradability	Bioaccumulation potential
WATER	Not available	Not available	Not available	Not available
Sericite powder	Not available	Not available	Not available	Not available
Acrylic ester copolymer	Not available	Not available	Not available	Not available
Titanium dioxide	Not available	Not available	Not available	Not available
S	Not available	Not available	Not available	Not available

13. Disposal Information

- I. Restrictions on disposal management: Central and local governments must comply with the provisions of.
- II. Methods of disposal
 - Paints, container companies through licensed waste disposal consignment contract shall keep a handle.
 - If the coating process, such as waste incineration at high temperature with small amount in the appropriate waste treatment facilities to handle.
- III. Disposal Considerations
 - Do not dispose of unauthorized.
 - Should not be entering the environment.
 - Appropriately licensed waste disposal companies acquired or self-handling to be consigned.

 - Shall comply with waste management.

14. Transport Information

- I. Regulations on Ship Transportation and Storage of Hazardous Materials in Ships Safety Act and regulations by Category : No data available.
- II. Precautions for transportation
 - Be carried at room temperature.
 - Completely sealed under the transfer must be delivered.
 - Leakage drain / sewer / river / stream, such as to discourage the inflow.
 - Other matters and local governments must comply with regulations.
- III. Other countries' regulations related to transportation Classification and regulation in: No data available.
- IV. transportation risk classification ; land transport code GGVSE/ADR and ID ground transportation ADR, railway transportation RID, marine transportation GGVSee/IMDG-Code, air transportation ICAOTI/IATA-DGR ; Not available

15. Regulatory

- I. Regulations prescribed by Industrial Safety and Health Act :
 - Article 39 of the display of harmful substances
 - Article 41 The creation of Material Safety Data Sheets, Beach, etc.
- II. Regulated by the Toxic Chemicals Control Act : Not available
- III. Regulatory : Not available
- IV. Waste management regulations by : Not available
- V. Other Information : Not available

16. Other Notes

- I. The source of data : Material Safety Data Sheet(GHS MSDS)Practice writing
(Occupational Safety and Health Research Institute)
Material safety data sheets are created, based on the Beach, etc.
(Ministry of Labor Notice No. 97-27)
Toxic Substances Control Association
(Inventory of Existing Commercial Chemical Substances)
MSDS for each raw material received from suppliers
- II. First created. : 2011-8-18
- III. Revision number and date
Number of amendments : 2 , Date of last revision: 2017-11-15
- IV. etc.
 - This material was written on the basis of current knowledge.
 - For purposes other than intended use of this product that may occur at a rate to be careful about the risk.