

## Safety Data Sheet(SDS)

### 1. Identification of the substance/mixture and of the company/undertaking

1) Product identifier : PVC STRAIGHT HRTP4000

2) Relevant identified uses of the substance or mixture and uses advised against

○ Relevant identified uses

48.Others (Used for a variety of purposes such as high heat-resistant cables, wear-resistant cables/hoses, aut)

○ Uses advised against

Used for recommended use

3) Supplier information

○ Company name [Manufacture]

Company : LG Chem, Ltd.

Address : 55, Yeosusandan 2-ro, Yeosu-si, Jeollanam-do, Republic of Korea

Emergency number : +82-61-680-1131

○ Company name [Distributor]

Company : LG CHEM, LTD.

Address : 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea (Marketing Team)

Emergency number : +82-2-3773-7705

### 2. HAZARD IDENTIFICATION

1) Hazard classification

- Not applicable

2) Allocation label elements

Hazard pictograms

Signal word

- NONE

Hazard statements

Not applicable

Precautionary statements

No data available

### 3) Other hazards

- No data available

○ Product NFPA Level

Health	Flammability	Reactivity
0	1	0

( ※ 0 = Stable , 1 = Low , 2 = Medium , 3 = High , 4 = Very High)

## 3. Composition/Information on ingredients

Components	Common name	CAS No.	PCT(wt%)
Poly(vinyl chloride)	Poly(vinyl chloride)	9002-86-2	>99.7
Water	Water	7732-18-5	<0.3

## 4. FIRST AID MEASURES

### 1) Following eye contact

- In case of contact with material, immediately flush eyes with running water for at least 15 minutes.
- Get medical aid immediately.
- do not rub your eyes

### 2) Following skin contact

- Get medical aid immediately.
- In case of contact with material, flush skin with running water.
- Remove and isolate contaminated clothing and shoes.
- Wash clothes and shoes before reuse.
- Take off contaminated clothing and shoes and wash immediately with soap and water for at least 15 minutes. Wash contaminated clothing (adequately) before reuse.

### 3) Following inhalation

- Move to fresh air.
- Give artificial respiration if victim is not breathing.

- Administer oxygen if breathing is difficult.
  - Seek immediate medical assistance.
- 4) Following ingestion
- If unconscious but breathing, never give anything by mouth.
  - Get medical aid immediately.
  - Immediately rinse your mouth with water.
- 5) Advice to physician
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
  
  - Inform medical personnel of the contamination situation so they can take appropriate protective measures.

## 5. FIRE FIGHTING MEASURES

### 1) Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media
  - Large fire: Water spray/fog, regular foam (Suitable extinguishing media).
  - Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2 (Suitable extinguishing media).
- Unsuitable extinguishing media
  - High-pressure water (risk of fire spread).
  - Avoid extinguishing fire using direct water.

### 2) Special hazards arising from the substance or mixture

- Pyrolytic product
  - Specific hazards arising from chemicals: Carbon oxides
- Risk of fire and explosion
  - May ignited from heat, friction or contamination.
  - Containers may explode when heated.
  - Some may burn, but not rapidly.
  - Fire may produce irritating and/or toxic gases.
- Other
  - May cause toxic effects if inhaled.

### 3) Special protective equipment for firefighters

- Move containers from fire area if you can do it without risk.
- Dike fire-control water for later disposal; do not scatter the material.
- Fire involving Tanks: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
  
- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.
- Avoid inhalation of material or combustion products.

## 6. ACCIDENTAL RELEASE MEASURES

### 1) Health considerations and protective equipment

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Stop leak if you can do it without risk.
- Please note that materials and conditions to be avoided.
- Ventilate the contaminated area.
- Prevent dust cloud.
- Avoid skin contact and inhalation.
- Provide ventilation before entering confined spaces.
- Wear appropriate personal protective equipment.

### 2) Environmental precautions

- Prevent entry into waterways, sewers, ground water, soil and confined spaces.
- If the amount of leakage is large, report it to 119 or the Ministry of Environment, local environmental management office, or city/province (Environmental Guidance Department).
- Prevent leaks from entering sewage facilities and water systems.

### 3) For cleaning up

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
- Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
- Dispose in accordance with the Waste Management Act (Ministry of Environment).
- Collect spilled material in suitable container for disposal.
- Large spill: Avoid low-lying areas and stay upwind. Construct and manage an embankment to dispose of leaked substances.

## 7. HANDLING AND STORAGE

### 1) Precautions for safe handling

- Please note that materials and conditions to be avoided.
- Wash thoroughly after handling.
- Handling refer to engineering control/personal protection section.
- CAUTION: High temperature.
- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

### 2) Conditions for safe storage (including any incompatibilities)

- Store in a dry place. Store in a closed container.
- Please note that materials and conditions to be avoided.
- Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources
- Store only in original container.
- Prevent static electricity and avoid storing near heat sources such as boilers or combustibles.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
Poly(vinyl chloride)	TWA : Not applicable STEL : Not applicable	TWA : 1mg/m <sup>3</sup> , Respirable Particulate Matter STEL : Not applicable	Not applicable
Water	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

\* The exposure standard for other dusts according to Ministry of Employment and Labor Notice No. 2020-48 is TWA: 10mg/m<sup>3</sup>.

## 2) Appropriate engineering controls

- Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

## 3) Personal protection equipment

### ○ Respiratory protection

- In case of insufficient oxygen (<19.6%), wear a supplied air mask or self-contained respirator.
- In the case of particulate matter, the following respiratory protection is recommended: - Facepiece filtering dust mask or air filtering dust mask (high-efficiency particulate filter material) or electric fan attached dust mask (filter material for dust, mist, fume)
- If there is a direct contact or exposure, wear a certified appropriate respiratory protection.
- Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.

### ○ Eye protection

- Provide emergency showers and eyewash.
- Wear Non-moisture permeable goggle for dust protection.

### ○ Hand protection

- Wear suitable protective gloves.

### ○ Body protection

- Wear suitable protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid (Powder)
Physical state	Solid
Colour	White
Odour	No Odor
Odour threshold	Not available
pH	No data available
Melting point/freezing point	302°C
Initial boiling point and boiling range	No data available
Flash point	391°C

Evaporation rate	Not available
Flammability(solid, gas)	Not available
Upper/lower flammability or explosive limits	Lower Limit 125g/m <sup>3</sup>
Vapour pressure	Not available
Solubility(ies)	Not soluble
Vapour density	Not available
Relative density	1.406g/cm <sup>3</sup>
n-octanol/water partition coefficient	Not available
Auto ignition temperature	435°C
Decomposition temperature	Not available
Viscosity	No data available
Molecular weight(mass)	60,000 ~ 150,000 g/mol

## 10. STABILITY AND REACTIVITY

- 1) Stability and hazardous reactivity
  - Stable under normal temperatures and pressures.
- 2) Conditions to avoid
  - Ignition source(heat, spark, flame, etc.).
- 3) Incompatible materials
  - No data available
- 4) Hazardous decomposition products
  - No data available

## 11. TOXICOLOGICAL INFORMATION

- 1) Exposure route information
  - Inhalation
    - After inhalation: No data
  - Skin Contact
    - Following skin contact: No data
  - Eye Contact
    - After eye contact: No data
  - Ingestion
    - After ingestion: No data

## 2) Health hazard information

- Acute toxicity
  - Acute toxicity(Oral) PRODUCT : Not classified
    - Poly(vinyl chloride) : No data available
    - Water : LD50 90000 mg/kg Test species: Rat (LD50 > 90 ml/kg (Rat))
  - Acute toxicity(Dermal) PRODUCT : Not classified
    - Poly(vinyl chloride) : No data available
    - Water : No data available
  - Acute toxicity(Inhalation:Gases) PRODUCT : Not classified
    - Poly(vinyl chloride) : No data available
    - Water : No data available
  - Acute toxicity(Inhalation:Vapours) PRODUCT : Not classified
    - Poly(vinyl chloride) : No data available
    - Water : No data available
  - Acute toxicity(Inhalation:Dust/mist) PRODUCT : Not classified
    - Poly(vinyl chloride) : No data available
    - Water : No data available
- Skin corrosion/irritation PRODUCT : Not classified
  - Poly(vinyl chloride) : No data available
  - Water : Not applicable
- Serious eye damage/eye irritation PRODUCT : Not classified
  - Poly(vinyl chloride) : No data available
  - Water : Not applicable
- Respiratory sensitization PRODUCT : Not classified
  - Poly(vinyl chloride) : No data available
  - Water : Not applicable
- Skin sensitization PRODUCT : Not classified
  - Poly(vinyl chloride) : No data available
  - Water : Not applicable
- Carcinogenicity PRODUCT : Not classified
  - Poly(vinyl chloride) : IARC (GROUP 3) ACGIH (A4)
  - Water : No data available
- Germ cell mutagenicity PRODUCT : Not classified
  - Poly(vinyl chloride) : In vitro Salmonella typhimurium Ames test, negative with or without metabolic activation in mouse lymphoma, Source: National Library of Medicine/Chemical Carcinogenesis

Research Information System(NLM/CCRIS)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgenCCRIS>)

- Water : Not applicable
- Reproductive toxicity PRODUCT : Not classified
  - Poly(vinyl chloride) : No data available
  - Water : Not applicable
- Specific target organ toxicity single exposure PRODUCT : Not classified
  - Poly(vinyl chloride) : Edema, alveolar hemorrhage were found in the lungs, but not sufficient to classify them.
  - Water : Not applicable
- Specific target organ toxicity repeated exposure PRODUCT : Not classified
  - Poly(vinyl chloride) : Repeated, long-term exposure to dust particles in the lungs may cause fibrosis, but not sufficient to classify them.
  - Water : Not applicable
- Aspiration hazard PRODUCT : Not classified
  - Poly(vinyl chloride) : No data available
  - Water : Not applicable

## 12. ECOLOGICAL INFORMATION

### 1) Aquatic toxicity > PRODUCT : Not classified

- Fish
  - Poly(vinyl chloride) : No data available
  - Water : No data available
- Crustacea
  - Poly(vinyl chloride) : No data available
  - Water : No data available
- Aquatic algae
  - Poly(vinyl chloride) : No data available
  - Water : No data available

### 2) Persistence and degradation

- n-octanol water partition coefficient
  - Poly(vinyl chloride) : No data available
  - Water : log Kow = -1.38
- Degradation
  - Poly(vinyl chloride) : No data available
  - Water : No data available
- Biodegradation
  - Poly(vinyl chloride) : No data available
  - Water : No data available

3) Bioaccumulative potential

- Poly(vinyl chloride) : No data available
- Water : No data available

4) Mobility in soil

- Poly(vinyl chloride) : No data available
- Water : No data available

5) Other adverse effects > PRODUCT : Not classified

- Poly(vinyl chloride) : No data available
- Water : No data available

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## 13. DISPOSAL CONSIDERATIONS

1) Disposal methods

- Recyclables must be collected in portable bins and disposed of legally according to national regulations.

2) Precautions (including disposal of contaminated container of package)

- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)
- Avoid direct spillage to rivers, lakes, soil and drains.
- Discuss it according to waste regulation.
- Use a certified waste disposal company.

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## 14. TRANSPORT INFORMATION

1) UN No. : Not applicable

2) Proper shipping name : Not applicable

3) Class or division : Not applicable

4) Packing group : Not applicable

5) Marine pollutant : Not applicable

6) Special safety response for transportation or transportation measure :

Emergency measures in case of fire : Not applicable

Emergency measures in the effluent : Not applicable

- ADR

- Tunnel restriction code : Not applicable

- IMDG

- Marine pollutant : Not applicable

- Air transport(IATA)

- UN No. : Not applicable
- Proper shipping name : Not applicable

- Class or division : Not applicable
- Packing group : Not applicable

## 15. REGULATORY INFORMATION

1) Occupational Safety and Health Act in Korea  
PRODUCT : Not applicable

2) Toxic Chemical Control Act in Korea  
PRODUCT : Not applicable

3) Safety Control of Dangerous Substances Act in Korea  
PRODUCT : Not applicable

4) Wastes Control Act in Korea  
PRODUCT : Designated waste (Not Applicable)

-In case of disposal, it must be disposed of in accordance with Article 13 of the Waste Management Act.

5) Other regulations in KOREA and Abroad regulations

- ETC regulation
- Act on the registration and evaluation of chemicals
  - Poly(vinyl chloride) : Existing Commercial Chemical Substances
  - Water : Exemption from Registration or Reporting of Chemical Substances, Existing Commercial Chemical Substances

## 16. OTHER INFORMATION

1) Reference

- Ministry of Employment and Labor
- Ministry of Environment

2) Print date : 2024-03-11

3) Revision date

- Revised date count : 0
- Last revised date : 2024-03-11
- Last revised history :

4) Other