

SAFETY DATA SHEET

Date Printed: January 20, 2020

Version : 5

Revision date: January 20, 2020

Regulation: In accordance with Commission Regulation (EU) CLP 1272/2008

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifier

Product name: CP-430, CP-450, CP-705, CP-710, CP-430F, CP-450F, CP-710F, CP-430N, KCM-12, KCH-12, KCH-15, KCH-15S, ECM70

EC No.: -

REACH Registration No.: -

CAS No.: 9003-22-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Identified Uses

- It is also used for the main material of paint, adhesive, ink, sealing and resins for making tile and etc.

1.2.2. Recommended use

- It is also used for the main material of paint, adhesive, ink, sealing and resins for making tile and etc.

1.2.3. Restrictions on use

- Do not use for purposes other than those recommended
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1.3 Details of the supplier of the safety data sheet

1.3.1 Manufacturer

Company name: Hanwha Solutions Co, Ltd.

Address: Ulsan plant, Hanwha Solutions Co, Ltd ,22, Saneop-ro 440 beon-gil, Nam-gu, Ulsan, Korea

Prepared by: PVC Production 1 Team, PVC Production 2 Team

Contact Telephone: +82-52-279-5314, +82-52-279-5345

1.3.2 Supplier&Distributor

Company name: Hanwha Solutions Co, Ltd.

Address: Hanwha Solutions Co, Ltd., Hanwha Building, 85 , Cheonggyecheon-ro, Jongno-gu, Seoul, Korea

Prepared by: PSR Sales Team

Contact Telephone: +82-2-729-2773, +82-2-729-4079

Email Address: brandon@hanwha.com, jaeyoung.lee@hanwha.com

1.4. Emergency telephone number

Emergency Telephone: +82-2-729-2773 (Sales) / +82-52-279-5314 (Plant), +82-52-279-5345 (Plant)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Physical / Chemical Hazards:

Not classified

Health Hazards:

Not classified

Environmental Hazards:

Not classified

2.2 Label elements

Hazard pictograms: Not applicable
Signal word: Not applicable
Hazard statement: Not applicable
Additional precautionary statements: Not applicable
Precautionary statements
 - **Precaution:** Not applicable
 - **Treatment:** Not applicable
 - **Storage:** Not applicable
 - **Disposal:** Not applicable

2.3 Other hazards

- **Additional precautionary statements:** Not applicable
 - **National Fire Protection Association (NFPA)**
Health: 0
Flammability: 0
Reactivity: -

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	EC No.	Conc. / %	Classification according to 1272/2008/EEC	(Pre) registration No.
Vinyl chloride, vinyl acetate polymer	9003-22-9	-	100	Not classified	01-2119458772-30-0000 01-2119471301-50-0000

*Under EU REACH regulation, monomers in Vinyl chloride, vinyl acetate polymer are registered.

4. FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1. General

information: Remove soiled or soaked clothing immediately, do not allow to dry.
 Adhere to personal protective measures when giving first aid.
 Clean body thoroughly (Bad, shower).

4.1.2. Following

inhalation: Specific medical treatment is urgent.
 Move victim to fresh air.
 Give artificial respiration if victim is not breathing.
 Administer oxygen if breathing is difficult.

4.1.3. Following

skin contact: In case of contact with substance, immediately flush skin with running water at least 20 minutes.
 Remove and isolate contaminated clothing and shoes.
 Get immediate medical advice/attention.

4.1.4. Following

eye contact: In case of contact with substance, immediately flush eyes with running water at least 20 minutes.
 Get immediate medical advice/attention.

4.1.5. Following

ingestion: Do not let him/her eat anything, if unconscious.
 Get immediate medical advice/attention.

4.1.5. Self-protection of the first aider: First aider : Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delay Acute effects :

- Symptoms and effect : None known

4.3 Indication of immediate medical attention and notes for physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
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5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

- Suitable extinguishing media: Use regular foam, water, CO₂, dry fire extinguisher when fighting fires involving this material.
- Unsuitable extinguishing media: Not available

5.2 Special hazards arising from the substance or mixture

- Thermal decomposition products: halogen compound, carbon oxides
- Dust may form explosive mixtures with air.
- May be ignited by heat, sparks or flames.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Fire will produce irritating and/or toxic gases.
- If inhaled, may be harmful.

5.3 Advice for firefighters

- Dike fire-control water for later disposal; do not scatter the material.
 - Move containers from fire area if you can do it without risk.
 - Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
 - 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.
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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- Absorb spills with inert material (e.g., dry sand or earth), then place in a chemical waste container.
- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Please note that materials and conditions to avoid.
- Ventilate the area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 The methods of purification and removal

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
 - Large Spill; Dike far ahead of liquid spill for later disposal.
 - With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
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7. HANDLING AND STORAGE

7.1 Precautions for safe handling

- Please note that materials and conditions to avoid.
- Wash your hands thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.
- Be cautious with the lumbar injury for the resin bag is 25kg. And prevent the resin bag not to spill by peaks and excessive force.

- Be cautious about the safety accidents could happen when carrying and piling up the products.

7.2 Conditions for safe storage, including any incompatibilities

- Protect from sunlight and store in a closed container.
- Store in cool and dry place.
- Please note that there are materials and conditions to avoid.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limits

- o **EU regulation:**
 - Not available
- o **U.S regulation :**
 - NIOSH: Not available
 - OSHA: Not available
- o **ACGIH:** Not available
- o **Biological exposure index:** Not available
- o **Others:**
 - Not available
- o **DNELs, PNECs:** Not available

8.2 Exposure controls

Appropriate engineering controls:

- Good general ventilation (typically 10 air changes per hour) should be used.
- Ventilation rates should be matched to conditions.
- If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.
- If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment:

Respiratory protection:

- Wear EU CLP 1272/2008 approved full or half face piece (with goggles) respiratory protective equipment when necessary.

Eye protection:

- Wear safety goggles as follow if eye irritation or other disorder occur.
 - ; In case of gaseous state organic material: enclosed safety goggles
 - ; In case of vapour state organic material: safety goggles or breathable safety goggles
 - ; In case of particulate material: breathable safety goggles
- An eye wash unit and safety shower station should be available nearby work place.

Hand protection:

- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

Body protection:

- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Description :	Solid
Color :	white
Odor :	Sweet odor
Odor threshold :	Not available

pH :	Not available
Melting point/freezing point :	Not available
Initial boiling point and boiling range :	Not available
Flash point :	391°C
Evaporation rate :	Not applicable
Flammability (solid, gas) :	Not available
Upper/lower flammability or explosive limits :	Not available
Vapor pressure :	Not applicable
Vapor density :	Not available
Relative density:	1.4
Solubility(ies):	Not available
Partition coefficient: n-octanol/water :	Not available
Auto-ignition temperature :	454 °C
Decomposition temperature :	Not available
Viscosity :	Not available
Explosive properties :	Not available
Oxidising properties :	Not available
Molecular weight :	40,000-70,000 (Mw)

10. STABILITY AND REACTIVITY

10.1 Reactivity/Chemical stability/Possibility of hazardous reactions

- Stable under normal temperatures and pressures.
- It is not polymerization.

10.2 Conditions to avoid

- Keep away from heat/sparks/open flames/hot surfaces.

10.3 Incompatible materials

- Not available

10.4 Hazardous decomposition products

- Carbon oxides, Acid halogen compound

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
(a) Acute toxicity	
Oral	Not available
Dermal	Not available
Inhalation	Not available
(b) Skin Corrosion/ Irritation	Not available
(c) Serious Eye Damage/ Irritation	Not available

(d) Respiratory sensitization	Not available
(e) Skin Sensitization	Not available
(f) Carcinogenicity	Not classified
	IARC : Group 3
(g) Mutagenicity	Not available
(h) Reproductive toxicity	Not available
(i) Specific target organ toxicity (single exposure)	Not available
(j) Specific target organ toxicity (repeat exposure)	Not Classified
(k) Aspiration Hazard	Not available

12. ECOLOGICAL INFORMATION

12.1 Toxicity	
Acute toxicity	Not available
Chronic toxicity	Not available
12.2 Persistence and degradability	Not available
12.3 Bioaccumulative potential	Not available
12.4 Mobility in soil	Not available
12.5 Results of PBT and vPvB assessment	Not available
12.6 Hazardous to the ozone layer	Not available
12.7 Other adverse effects	Not available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

13.1.1 Product/Packaging disposal:

- Waste synthetic polymer compounds shall be incinerated.
- If incineration is not possible, Waste synthetic polymer compounds shall be crushed, cut or melted to a size at which the maximum diameter is 15 cm or less and thereafter be disposed in a stable landfill facility.

13.1.2 Waste treatment-relevant information:

- Waste must be disposed of in accordance with directive 2008/98/EC.

13.1.3 Sewage disposal-relevant information:

- Release to the environment or sewage system is prohibited. Must be treated as hazardous waste.

13.1.4 Other disposal recommendations: Not available**14. TRANSPORT INFORMATION****14.1 UN No. :** Not applicable**14.2 UN Proper shipping name:** Not applicable**14.3 Transport Hazard class**

ADR: Not applicable

IMDG: Not applicable

ICAO/IATA: Not applicable

RID: Not applicable

14.4 Packing group: Not applicable**14.5 Environmental hazards:** Not applicable**14.6 Special precautions for user****in case of fire:** Not applicable**in case of leakage:** Not applicable**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture****EU Regulatory Information****EU classification****EU 1272/2008(CLP)****Classification:** Not regulated**Risk phrases:** Not regulated**Safety phrases:** Not regulated**EU SVHC list:** Not regulated**EU Authorisation list:** Not regulated**EU Restriction list:** Not regulated**Waste Framework Directive 2008/98/EC:** Not regulated**Foreign Inventory Status**

- Korea management information: Existing Chemical Substance (KE-35350)
- U.S.A management information: Section 8(b) Inventory (TSCA): Present
- Japan management information: Existing and New Chemical Substances (ENCS): Present
((6)-76, (6)-82)
- China management information: Inventory of Existing Chemical Substances (IECSC): Present
(24733)
- Australia management information: Australian Inventory of Chemical Substances (AICS): Present
- Canada management information: Domestic Substances List (DSL): Present
- New Zealand management information: New Zealand Inventory of Chemicals (NZIoC): May be used as a

single component chemical under an appropriate group standard.

- Philippines management information: Philippine Inventory of Chemicals and Chemical Substances (PICCS): Present

15.2 Chemical safety assessment :

Not available

16. OTHER INFORMATION

Product safety data sheet for prepared in accordance with Regulation (EU) 1272/2008

16.1 Indication of changes:

Preparation date : February 2, 2018

Version : 5

Revision date : January 20, 2020

16.2 Key literature reference and sources for data:

National chemicals information systems ; <http://ncis.nier.go.kr>

Pubchem; <http://pubchem.ncbi.nlm.nih.gov/>

AKRON; <http://ull.chemistry.uakron.edu/erd/>

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>

ECHA; <http://echa.europa.eu/registration-dossier/-/registered-dossier/15859>

OECD SIDS; <http://webnet.oecd.org/>

HSDB; <http://toxnet.nlm.nih.gov/>

NIOSH (The National Institute for Occupational Safety and Health)

ACGIH (American Conference of Governmental Industrial Hygienists)

TOMES-LOLI® ; <http://www.rightanswerknowledge.com/loginRA.asp>

National Emergency Management Agency-Korea dangerous material inventory management system;

<http://hazmat.mpss.kfi.or.kr/index.do>

Waste Control Act enforcement regulation attached [1]

EPISUITE Program ver.4.1

16.3 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008(CLP):

Classification according to Regulation (EC) 1272/2008 (CLP)	Classification procedure
-	-

16.4 Abbreviations

EC₅₀: median effective concentration

LC₅₀: median lethal concentration

LD₅₀: median lethal dose

OEL: Occupational exposure limit

PBT: Persistent, bioaccumulative, toxic chemical

STEL: short-term exposure limit

TWA: time weighted average

vPvB: very persistent, very bioaccumulative chemical

EWC: the European Waste Code

16.5 Other

- Product should be handled, stored, and used in accordance with the generally accepted industrial hygiene practices and in conformity with all the applicable legal regulations.
- The information provided herein is based on the knowledge possessed at this present time from the view point of safety requirements.
- It should, therefore, not be construed as guaranteeing specific properties.