

# Material Safety Data Sheet



WPS FC

SSANGKOM PTY LTD

Version: 5

Issue Date: 11/12/20012  
Revision Date: 09/06/2023

## SECTION 1 Chemical Product and Company Identification

### Product Identification

Product name	WPS FC
Use of Product	Elastic membrane waterproof agent

### Company Identification

Registered company name	SSANGKOM PTY LTD
Address	29 Annie Street, Coopers Plains QLD 4108
Department	Technical Research Institute
Website	www.ssangkom.com.au

### Emergency telephone number

For Korea	82-31-768-3030 / 82-80-768-3030
For Australia	AUSTRALIAN POISONS INFORMATION CENTRE: 13 11 26 (24 HOUR SERVICE), 000 (POLICE OR FIRE BRIGADE)

## SECTION 2 Hazards Identification

### A. Hazards, Risks Classification of Substance

Skin Corrosion / Irritation	Category 2
Serious Eye Damage	Category 2B

### B. Warning Signs Elements including Precaution Phrase

▶ Pictograph:



▶ Signal word: Warning

▶ Hazard and risk statements:

H315 Causes skin irritation.

H320: Causes eye irritation

▶ Precautionary statement(s) Prevention

P264: Thoroughly wash the contact body part after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

▶ Precautionary statement(s) Response

P302+P352: If on skin: Rinse with plenty of water.

P305+P351+P338: If in eyes: Rinse cautiously with water for a few minutes. If possible, remove contact lenses.

Keep washing up.

P321: Take emergency measures.

P332+P313: If skin irritation occurs: Seek medical attention/advice.

P337+P313: If eye irritation occurs: Seek medical attention/advice.

P362+P364: Take off contaminated clothing and wash it before reuse.

▶ Precautionary statement(s) Storage

NONE03: Not applicable

▶ Precautionary statement(s) Disposal

NONE04: Not applicable

### C. Other hazards and risks not included in the criteria for classification of hazards and risks.

### NFPA Grade (0-4 Step)

Chemical Substance Name	Health Care	Fire	Reactivity
Water	0	0	0



Acryl Easter Copolymer	1	0	0
Calciumcarbonate	2	0	0
S1 (Trade Secret)	0	0	0

### SECTION 3 Composition Name and Content

Name	CAS No.	Content (%)	Remarks
Water	7732-18-5	2-10	
Acryl Easter Copolymer		35-45	
Calciumcarbonate	1317-65-3	50-60	
S1 (Trade Secret)		0-1	

### SECTION 4 First Aid Measures

#### A. When it gets into your eyes:

- ▶ If in contact with the substance, immediately flush the eyes with running water for at least 20 minutes.
- ▶ Get medical attention immediately.
- ▶ If the chemical comes into contact with the eyes, seek medical attention and treatment immediately.

#### B. When it comes into contact with your skin:

- ▶ If in contact with the substance, immediately flush the skin with running water for at least 20 minutes.
- ▶ Remove contaminated clothing and shoes, and isolate them.
- ▶ Thoroughly wash clothing and shoes before reuse.
- ▶ Remove contaminated clothing and shoes, and isolate the contaminated area
- ▶ Get medical attention immediately.
- ▶ Prevent the spread of contaminated body part in case of minor skin contact.

#### C. When inhaled:

- ▶ Immediately transfer the patient to a place with fresh air, provide warmth, and give a rest.
- ▶ If there is no respiration, perform artificial respiration.
- ▶ If not breathing, give artificial respiration
- ▶ Give oxygen if breathing is difficult.

#### D. When eaten:

- ▶ Don't feed anything orally to an unconscious person.
- ▶ Get medical attention immediately.
- ▶ If the patient is conscious and not experiencing convulsions, induce vomiting using an emetic and water.
- ▶ If the patient doesn't vomit, perform gastric lavage carefully, ensuring it is only done by qualified personnel and water.
- ▶ If the chemical is ingested or swallowed, seek medical attention and treatment and water.

#### E. Other doctor's notes

- ▶ Ensure that the medical personnel are aware of the substance and take protective measures.
- ▶ Don't administer adrenaline preparations.

### SECTION 5 Countermeasures against Explosion and Fire

#### A. Appropriate (Inappropriate) fire extinguishing agents:

- ▶ Small fires: Dry sand, dry chemical, alcohol resistant foam, water spray, normal foam, CO2 (appropriate extinguishing agent)
- ▶ Large fires: Water spray/fog, normal foam (appropriate extinguishing agent)
- ▶ High pressure water injection (inappropriate extinguishing agent)

#### B. Specific hazards arising from the chemical:

- ▶ Can be ignited by heat, spark, or flame
- ▶ When heated, the container may explode.
- ▶ Some can burn, but not easily ignite.
- ▶ May produce irritating and toxic gases in case of fire.
- ▶ Inhalation of substances can be harmful
- ▶ Some liquids may produce vapors that cause dizziness and suffocation

#### C. Protective equipment to be worn and prevention measures in case of fire extinguishing:

##### Calcium Carbonate

- ▶ If it is not dangerous, move the container from the fire area.
- ▶ Some may be transported at a high temperature.
- ▶ Leaked substance may cause contamination.
- ▶ Contact may cause the skin and eye burn.
- ▶ Dig a ditch for the disposal of fire extinguishing water, and confine it to prevent the substance from scattering.

- ▶ If it is not dangerous, move the container from the fire area.
- ▶ In the event of a tank fire, cool the container with plenty of water even after fire has been extinguished.
- ▶ In the event of a tank fire, if there is high sound from the pressure relief device or the tank is discolored, step back
- ▶ In the event of a tank fire, step back from the tank surrounded by flame.

**Water**

- ▶ In the event of a tank fire, cool the container with plenty of water even after fire has been extinguished.
- ▶ In the event of a tank fire, if there is high sound from the pressure relief device or the tank is discolored, step back
- ▶ In the event of a tank fire, step back from the tank surrounded by flame.
- ▶ Scattered water from a heated or exploded container can cause burns to the skin and eyes.

**Acryl ester copolymer**

- ▶ Not applicable.

**S1 (Trade Secret)**

No data

**SECTION 6 Measures against Accidental Release**

**A. Measures and protective equipment required to protect human body:**

- ▶ Remove all the sources of ignition.
- ▶ If it is not dangerous, stop leaking.
- ▶ Pay attention to the substances and conditions to avoid.
- ▶ Ventilate the contaminated area.
- ▶ Avoid touching or walking on the exposed substances.
- ▶ Prevent the formation of dust.
- ▶ Don't enter the area without an appropriate respirator such as an Open-Circuit SCBA or a Supplied Air Respirator until adequate air supply (oxygen concentration of 18-23.5%) is ensured.

**B. Measures required to protect the environment:**

- ▶ Prevent the inflow of the substance into the drains or streams.
- ▶ In the event of contamination of sewers, streams, or lakes, immediately contact the appropriate local waste management company and environmental authorities.
- ▶ Prevent the inflow into waterways, sewers, cellars, and enclosed spaces.
- ▶ Construct and manage an embankment to dispose of the spilled substance.
- ▶ Construct containment areas such as pits or sumps to store the spilled substance.
- ▶ Store it in a place isolated from water and sewage.

**C. Cleaning up or removing methods:**

- ▶ Absorb leaks In case of a small spill, flush the contaminated area with plenty of water.
- ▶ In case of a small spill, absorb with sand or non-flammable substance and place in a container.
- ▶ In case of a large spill, make a trench away from the liquid spillage.
- ▶ Use a clean shovel to transfer the spillage into a clean and dry container. Close the container loosely, then move it away from the spill area.
- ▶ In case of a powder spill, cover with a plastic sheet to prevent further spreading and keep in a dry state.
- ▶ Absorb or suppress the spillage with incombustible materials such as sand or soil.
- ▶ Cover the spilled substance with absorbent sheets, pads, or cushions to prevent the spread of it.
- ▶ Clean thoroughly with a detergent.
- ▶ Place a container outside the building and handle its disposal according to the disposal method (refer to paragraph 13).
- ▶ Due to its high dispersibility, avoid using water if possible.

**SECTION 7 Handling and Storage**

<p><b>Safe handling method:</b></p>	<ul style="list-style-type: none"> <li>▶ Pay attention to substances and conditions to be avoided.</li> <li>▶ Thoroughly wash after handling.</li> <li>▶ Perform the task referring to Engineering Management and Personal Protective Equipment.</li> <li>▶ Beware of high temperatures.</li> <li>▶ In case of a spill, it can reduce the oxygen concentration in the air and cause suffocation in an enclosed space. Therefore, be careful to prevent the substance from spilling.</li> <li>▶ As its high concentration in the air can cause oxygen deprivation leading to a risk of loss of consciousness or even death, check the oxygen concentration before entering the area.</li> <li>▶ In case of a spill, due to the rapid evaporation of the liquid, which replaces the air, there is a serious risk of suffocation when in an enclosed space. Therefore, be careful to prevent the substance from spilling</li> <li>▶ In case of a spill, due to the rapid dispersion of this gas in the air, reaching its hazardous concentration, be careful to prevent the substance from spilling.</li> <li>▶ If sprayed, the airborne particles can very quickly reach the hazardous concentration. Therefore, don't spray.</li> </ul>
-------------------------------------	--



	<ul style="list-style-type: none"> <li>▶ Maintain the temperature below 20°C as this substance evaporates relatively slowly at 20°C, gradually reaching the hazardous concentration.</li> <li>▶ Although evaporation is almost negligible at 20°C, if sprayed, the airborne particles can very quickly reach the hazardous concentration. Therefore, don't spray.</li> <li>▶ Although evaporation is almost negligible at 20°C, if sprayed or sprinkled, the airborne particles can very quickly reach the hazardous concentration. Therefore, don't spray or sprinkle. (Especially, in case of powders)</li> <li>▶ Although evaporation is almost negligible at 20°C, if sprayed, the airborne particles can very quickly reach the hazardous concentration. Therefore, don't spray. (Especially, in case of powders)</li> <li>▶ Check the oxygen concentration before entering the area.</li> <li>▶ Don't spray or sprinkle as it evaporates more quickly if sprayed or sprinkled.</li> <li>▶ Please observe general precautions when handling chemicals.</li> <li>▶ Avoid direct contact with the body.</li> <li>▶ After using chemicals, clean your body and clothing.</li> <li>▶ Use in a well-ventilated area.</li> </ul>
Safe storage method	<ul style="list-style-type: none"> <li>▶ Keep sealed.</li> <li>▶ Store in a cool, dry place.</li> <li>▶ Pay attention to substances and conditions to be avoided.</li> <li>▶ Avoid contact with strong oxidizing agents.</li> <li>▶ Store in a sealed container.</li> <li>▶ Store in a cool, dry place.</li> <li>▶ Store with caution to prevent static electricity generation in the container.</li> <li>▶ Designate a hazardous area for isolation and prohibit access and entry by anyone other than the concerned person.</li> <li>▶ Install the storage facility with fire-resistant construction.</li> <li>▶ Use appropriate and certified safety and protective equipment.</li> </ul>

## SECTION 8 Exposure Prevention and Personal Protective Equipment

### A. Exposure standards of chemical substances, biological exposure standards and etc.:

Name	Domestic Regulations	ACGIH Regulations	Biological Exposure Standards
Water	No data	No data	No data
Acryl Easter Copolymer	No data	No data	N/A
Calciumcarbonate	TWA - 10 mg/m <sup>3</sup>	No data	No data
S1 (Trade Secret)	No data	No data	No data

### B. Appropriate engineering control:

- ▶ Implement process isolation, local exhaust, or other engineering controls to adjust air levels below the exposure limits.
- ▶ Wear insulating gloves.

### C. Personal protective equipment:

#### Calcium Carbonate

- ▶ Wear a respirator that has been certified by the Korea Occupational safety and Health Agency in accordance with the physical and chemical characteristics of the substance to be exposed.
- ▶ Wear a half-face respirator equipped with the appropriate type of filter when the exposure concentration is below 100mg/m<sup>3</sup>.
- ▶ Wear a continuous flow dust mask or a loose-fitting hood/helmet-type Powered Air-Purifying Respirator (PAPR) equipped with the appropriate type of filter when the exposure concentration is below 250mg/m<sup>3</sup>.
- ▶ Wear a full-face or powered half-face or atmosphere-supplying continuous flow/pressure demand half-face equipped with the appropriate type of filter, when the exposure concentration is below 500mg/m<sup>3</sup>.
- ▶ Wear a full-face or helmet/hood-type pressure demand Supplied Air Respirator equipped with the appropriate type of filter, when the exposure concentration is below 10,000mg/m<sup>3</sup>.
- ▶ Wear a pressure demand Self-Contained Breathing Apparatus (SCBA) or a Self-Contained Breathing Apparatus (SCBA) equipped with the appropriate type of filter, when the exposure concentration is below 100,000mg/m<sup>3</sup>.

#### Water

- ▶ Wear a respirator that has been certified by the Korea Occupational safety and Health Agency in accordance with the physical and chemical characteristics of the substance to be exposed.

#### Acryl ester copolymer

##### Respiratory protection

- ▶ Wear a respirator that has been certified by the Korea Occupational Safety and Health Agency.

#### S1 (Trade Secret)

No data

Eye protection: No data.

Hand protection: No data.

Body protection: No data.



## SECTION 9 Physical and Chemical Properties

A. Appearance: Light blue paste shape	K. Vapor pressure: No data
B. Odor: Slight acrylic acid odor	L. Solubility: No data
C. Odor threshold: No data	M. Vapor density: No data
D. pH : 8±1	N. Specific gravity: 1.30-1.50
E. Melting point / Freezing point: 0°C	O. N-octanol/water partition coefficient: No data
F. Boiling point / Boiling point range: 100°C	P. Autoignition temperature: No data
G. Flash point: No data	Q. Decomposition temperature: No data
H. Evaporation rate: No data	R. Viscosity: : 30,000-35,000 mPa.s /25°C)
I. Flammability (solid, gas): No data	S. Molecular weight: No data.
J. Upper/Lower limit of flammability or explosive range: No data	

## SECTION 10 Stability and Reactivity

### A. Chemical stability and potential for hazardous reactions

#### Calcium Carbonate

No data.

#### Water

- ▶ Stable under normal temperature and pressure conditions.
- ▶ The container may explode when heated.

#### Acryl ester copolymer

- ▶ Stable under normal temperature and pressure conditions.

#### S1 (Trade Secret)

No data

### B. Condition(s) to avoid

#### Calcium Carbonate

No data

#### Water

- ▶ Heat, contamination

#### Acryl ester copolymer

- ▶ High temperature (above 40°C) or extreme cold (below 0°C)

#### S1 (Trade Secret)

No data

### C. Substance(s) to avoid

#### Calcium Carbonate

No data

#### Water

- ▶ Water-reactive substances

#### Acryl ester copolymer

- ▶ Strongly acidic , strongly alkaline, strong oxidizing agent

#### S1 (Trade Secret)

No data

### D. Hazardous substance(s) produced during decomposition

#### Calcium Carbonate

No data

#### Water

No data

#### Acryl ester copolymer

No data

#### S1 (Trade Secret)

No data

**SECTION 11 Toxicological Information****A. Information about the highly possible exposure routes****Calcium Carbonate**

No data

**Water**

No data

**Acryl ester copolymer**

No data

**S1 (Trade Secret)**

No data

**B. Information on health hazard**

Acute toxicity	
Oral	Water: LD50 90000 mg / kg Rat (LD50 > 90 ml/kg (rat)) Calcium Carbonate, Acryl Ester Copolymer, S1: No data
Percutaneous	No data
Inhalation	No data
Skin corrosion or irritation	Acryl Ester Copolymer: Category 2 (1%≤skin corrosion (Category 1) content<5%)
Severe eye damage or irritation	No data
Respiratory hypersensitivity	No data
Carcinogenicity	No data
Occupational Safety and Health Act	No data
Notification of the Ministry of Employment and Labor	No data
IARC	No data
OSHA	No data
ACGIH	No data
NTP	No data
EU CLP	No data
Germ cell mutagenicity	No data
Reproductive toxicity	No data
Specific target organ toxicity (single exposure)	Calcium Carbonate: Inhalation causes irritation Water, Acryl Ester Copolymer, S1: No data
Specific target organ toxicity (repeated exposure)	No data
Inhalation hazard	No data

**SECTION 12 Environmental Impact**

Ecotoxicity	
Fishes	No data
Shellfishes	No data
Birds	No data
Persistence and Degradability	
Persistence	Water : log Kow -1.38 Acryl Ester Copolymer: Doesn't biodegrade quickly. While the main ingredients may undergo fragmentation and moisture may evaporate to disappear, there are also a small amount of substances in the product that persist to accumulate in the environment.
Degradability	Acryl Ester Copolymer: Doesn't biodegrade quickly. While the main ingredients may undergo fragmentation and moisture may evaporate to disappear, there are also a small amount of substances in the product that persist to accumulate in the environment.
Bioaccumulation	No data
Accumulation	No data
Biodegradability	No data
Soil mobility	No data
Other harmful impact	No data

**SECTION 13 Disposal Consideration**

**A. Disposal method****Calcium Carbonate**

- ▶ Dispose of the contents and container according to the regulations if specified in the Wastes Control Act.

**Water**

- ▶ Dispose of the contents and container according to the regulations if specified in the Wastes Control Act.

**Acryl ester copolymer**

- ▶ Comply with government and local authority regulations.
- ▶ Handle in accordance with the standards of the Environment Management Act.

**B. Precautions for Disposal****Calcium Carbonate**

- ▶ Dispose of the contents container (in accordance with the provisions specified in the relevant regulations).

**Water**

- ▶ Dispose of the contents container (in accordance with the provisions specified in the relevant regulations).

**Acryl ester copolymer**

- ▶ Don't discharge into sewers or streams, etc.

**S1 (Trade Secret)**

No data

**SECTION 14 Information Required for Transportation**

<b>A. UN number (UN No.)</b>	Calcium Carbonate: There is no UN Transportation Hazardous Substance Classification Information. Water: There is no UN Transportation Hazardous Substance Classification Information. Acryl ester copolymer: No data, S1 (Trade Secret): No data
<b>B. Proper shipping name</b>	No data
<b>C. Dangerousness class in transport</b>	No data
<b>D. Container class</b>	No data
<b>E. Marine pollutants</b>	No data
<b>F. Special safety measures that users need or need to know about transportation or means of transportation</b>	No data
<b>G. Emergency measures in case of a spill</b>	Calcium Carbonate, Water, S1 (Trade Secret) : No data Acryl Ester Copolymer: Prevent the inflow into rivers, streams, and seas in case of a spill.

**SECTION 15 Legal Regulations Status**

<b>Regulation by Occupational Safety and Health Act</b>	Calcium Carbonate: Substances subject to workplace environmental monitoring (diagnostic cycle: 6 months) Substances subject to special inspection ( monitoring cycle: 24 months) Water: No data. Acryl Ester Copolymer: Article 41 S1 (Trade Secret) : No data
<b>Regulation by Chemical Substances Management Act</b>	No data
<b>Regulation by Hazardous Goods Safety Management Act</b>	No data
<b>Regulation by Waste Management Act</b>	No data
<b>Regulation by Other Domestic and Foreign Laws</b>	
- Domestic Regulation	
<b>Persistent Organic Pollutant Management Act</b>	No data
- Overseas regulations	
<b>U.S. Management Information (OSHA Regulation)</b>	No data
<b>U.S. Management Information (CERCLA Regulation)</b>	No data
<b>U.S. Management Information (EPCRA 302 Regulation)</b>	No data
<b>U.S. Management Information (EPCRA 304 Regulation)</b>	No data
<b>U.S. Management Information (EPCRA 313 Regulation)</b>	No data



U.S. Management Information (Rotterdam Convention Substances)	No data
U.S. Management Information (Stockholm Convention Substances)	No data
U.S. Management Information (Montreal Protocol Substances)	No data
EU Classification Information (Determinate Classification Result)	No data
EU Classification Information (Danger phrase)	No data
EU Classification Information (Safety phrase)	No data

## SECTION 16 Other References

### A. Data sources

- Calcium Carbonate  
Corporate Solution From Thomson  
Micromedex(<http://csi.micromedex.com>) (Physical state)  
Corporate Solution From Thomson  
Micromedex(<http://csi.micromedex.com>) (Color)  
Corporate Solution From Thomson  
Micromedex(<http://csi.micromedex.com>) (PH)  
International Uniform Chemical Information  
Database(IUCLID)(<http://ecb.jrc.it/esis>) (Melting point/freezing point)  
International Uniform Chemical Information  
Database(IUCLID)(<http://ecb.jrc.it/esis>) (Specific gravity)  
Corporate Solution From Thomson  
Micromedex(<http://csi.micromedex.com>) (. Molecular weight)  
International Uniform Chemical Information  
Database(IUCLID)(<http://ecb.jrc.it/esis>) (Oral)  
International Uniform Chemical Information  
Database(IUCLID)(<http://ecb.jrc.it/esis>) (Skin corrosion or irritation)  
International Uniform Chemical Information Database(IUCLID) (Severe eye damage or irritation )  
National Library of Medicine/Chemical Carcinogenesis  
Research Information  
System(NLM/CCRIS)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CCRIS>) (germ cell mutagenicity)  
ECOTOX (Fish)  
Ecological Structure Activity Relationships(ECOSAR) Bird  
Quantitative Structure Activity Relation(QSAR) (Condensability)  
Quantitative Structure Activity Relation(QSAR) (Soil mobility)  
The Chemical Database, The Department of Chemistry at the University of Akron(<http://ull.chemistry.uakron.edu/erd>)  
No data  
- WATER, Acryl ester copolymer  
No data

### B. Date of the initial preparation: 2012-12-11

### C. Number of revisions and the date of the last revision

Number of revisions: 5

Date of the last revision: 2023-06-09

### D. Others

\*This MSDS refers to the data from the Korea Occupational Safety & Health Agency, National Institute of Environmental Research, National Institute of Food and Drug Safety Evaluation, the U.S. Department of Health and Human Services, the U.S.Environmental Protection Agency, and the European Chemicals Agency

\*The prepared Material Safety Data Sheet is edited and partially modified with referring to the MSDS provided by the Korea Occupational Safety and Health Agency.

\*The data is prepared based on the MSDS of raw materials received from each company of raw materials.





