1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Serres Solidifying agent
CODE OF THE PREPARATION: 57557, 57567-0, 57587-0, 57557-2, 57567-2,
57587-2, 57557JP, 57567-0JP, 57587-0JP,
57557-9, 57567-9, 57587-9, 57577, 57550,
57553, 570557, 570567-0, 570587-0, 570550,
570553, 57551

MANUFACTURER
NAME: Serres Oy
ADDRESS: Keskustie 23
FI-61850 Kauhajoki as FINLAND

TELEPHONE NUMBER (INFORMATION): +358 20 746 4400
EMERGENCY TELEPHONE NUMBER: +358 9 471 977 Poison information center in Finland, for local centers please contact your distributor.

2. HAZARD IDENTIFICATION (Follow all regulation in your country.)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

PHYSICAL HAZARDS
FLAMMABLE LIQUIDS: Not applicable

HEALTH HAZARDS
ACUTE TOXICITY (ORAL): Not classified
ACUTE TOXICITY (SKIN): Classification not possible
ACUTE TOXICITY (INHALATION: GAS): Not applicable
ACUTE TOXICITY (INHALATION: VAPOR): Classification not possible
ACUTE TOXICITY (INHALATION: DUST, MIST): Classification not possible
SKIN CORROSION / IRRITATION: Not classified
SERIOUS EYE DAMAGES / EYE IRRITATION: Not classified
RESPIRATORY SENSITIZATION: Classification not possible
SKIN SENSITIZATION: Not classified
GERM CELL MUTAGENICITY: Classification not possible
CARCINOGENICITY: Classification not possible
REPRODUCTIVE TOXICITY: Classification not possible
SPECIFIC TARGET ORGAN TOXICITY: Classification not possible

SINGLE EXPOSURE
SPECIFIC TARGET ORGAN TOXICITY: Classification not possible

REPEATED EXPOSURE
ASPIRATION HAZARD: Classification not possible

ENVIRONMENTAL HAZARDS
AQUATIC TOXICITY (ACUTE): Classification not possible
AQUATIC TOXICITY (CHRONIC): Classification not possible
HAZARDOUS TO THE OZONE LAYER: Classification not possible

GHS LABEL ELEMENTS INCLUDING PRECAUTIONARY STATEMENTS

SYMBOL: —
SIGNAL WORD: —
HAZARD STATEMENT: —
PRECAUTIONARY STATEMENTS
[PREVENTION] · Do not handle until "SAFETY DATA SHEETS" has been read and understood well.
· Keep away from flames and heat.
· Avoid inhaling, swallowing, contact with eyes and skin. Wear safety glasses, gloves and face protection.
Wash hands and face thoroughly and rinse mouth after handling.

[RESPONSE]
- IN CASE OF FIRE: Use carbon dioxide, dry chemical powder and foam for extinction.
- IN CASE OF MAJOR FIRE: Use foam and a large amount of water fog to extinguish.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN: Wash with plenty of soap and water.
- IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF EXPOSED OR CONCERNED: Get medical advice/attention.

[STORAGE]
- Keep container tightly closed and store in a well-ventilated place.

[DISPOSAL]
- Dispose of contents/container in accordance with national and regional regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS (The contents are representative values.)

<table>
<thead>
<tr>
<th>SUBSTANCE/MIXTURE:</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CROSS-LINKED</td>
<td>-</td>
</tr>
<tr>
<td>COMPONENTS AND CONTENTS</td>
<td>Wt.%</td>
</tr>
<tr>
<td>Cross-linked acrylic acid polymer sodium salt</td>
<td>97%</td>
</tr>
<tr>
<td>Water</td>
<td>3%</td>
</tr>
<tr>
<td>CAS RN#</td>
<td>Proprietary</td>
</tr>
<tr>
<td>HAZARDOUS INGREDIENT (S) - JAPANESE REGULATION-</td>
<td>Wt.%</td>
</tr>
<tr>
<td>Acrylic acid polymer sodium salt</td>
<td>96%</td>
</tr>
<tr>
<td>Silica</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

IF INHALED:
- Remove to fresh air and keep at rest in a position comfortable for breathing.
- Get medical advice/attention, if you are experiencing respiratory symptoms.

IF ON SKIN:
- Wash immediately with plenty of soap and water. Get medical advice/attention, if necessary.

IF IN EYES:
- Rinse cautiously for 15 minutes or more. Get medical advice/attention immediately.

IF SWALLOWED:
- Rinse mouth immediately. Get medical advice/attention, if necessary.
- Do not give anything by mouth to the victim when not conscious.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:
- Carbon dioxide, dry chemical powder, foam, water fog

UNSUITABLE EXTINGUISHING MEDIA:
- Water jet

SPECIFIC EXTINCTION METHOD:
- Eliminate all ignition sources, and use suitable extinguishing media.
- Spray water on the surrounding equipment for cooling.

SPECIAL PROTECTIVE ACTION FOR FIRE-FIGHTERS:
- Extinguish from the windward to prevent poisonous gas from being inhaled.
6. ACCIDENTAL RELEASE MEASURES
PERSONAL PRECAUTIONS:
· Wear appropriate protective equipment (gloves, safety goggles, etc.).
· Wet powders and solutions are very slippery.
ENVIRONMENTAL PRECAUTIONS:
· Do not allow spillage out into the environment causing pollution e.g., rivers, waterways.
· Do not let the product enter into drains.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:
· Keep away from ignition sources.
· Collect spillage into container(s) by sweeping, shoveling, etc. avoiding creation of dust.
· Remove spillage by vacuuming, etc. avoiding creation of dust.
· In case of very small spillage, clean with plenty of water.

7. HANDLING AND STORAGE
HANDLING
TECHNICAL MEASURES:
· Handle in a well-ventilated area. Wear safety glasses, gloves and face protection, etc. Avoid direct contact.
LOCAL-VENTILATION/WHOLE-VENTILATION:
· Set local exhaust or general ventilation of as described in chapter "8. EXPOSURE CONTROLS/PERSONAL PROTECTION".
NOTES:
· Avoid contact with strong oxidizing agents, etc.
· Keep fire away.
· May form explosive dust-air mixtures.
SAFETY TREATMENT NOTES:
· Wash hands and face thoroughly and rinse mouth after handling.
STORAGE
CONDITION FOR SAFE STORAGE:
· Keep container tightly closed and store in a well-ventilated indoors.
· May change color, in case to store under hot and humid conditions for a long time.
· Keep container closed tightly to avoid picking up moisture.
PACKAGING MATERIAL:
· Store in original containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
FACILITY AND EQUIPMENT MEASURES:
· Establish the adequate local exhauster if vapor, dust or mist occurs.
· Use explosion-proof equipment and take precautionary measures against static discharge in case of explosive dust-air mixtures.
· Establish eye washing and body washing facilities near the work areas.

OCCUPATIONAL EXPOSURE LIMITS
ACGIH: Particles (insoluble or poorly soluble) Not Otherwise Specified [PNOS] : TWA (1)
10mg/m³(I)
Our recommend limit : 0.05mg/m³

PERSONAL PROTECTIVE EQUIPMENT
RESPIRATORY PROTECTION: ·Wear dust mask. Use an approved dust respirator for concentration in excess of the applicable exposure limit.

HAND PROTECTION: ·Impervious gloves

EYE PROTECTION: ·Safety glasses

SKIN AND BODY PROTECTION: ·Work clothes with long sleeves

9. PHYSICAL AND CHEMICAL PROPERTIES (representative values)
APPEARANCE (at 20°C)
PHYSICAL STATE: Powder
COLOR: White
ODOR: Almost odorless
pH: 6.1 (0.5% suspension in physiological salt soln.)
BOILING POINT: Thermo degradation before boiling point.
MELTING POINT: Decompose below melting point.
FLASH POINT: Not combustible (Decomposes) (Seta Closed Cup)
AUTO-IGNITION TEMPERATURE: No data
EXPLOSIVE PROPERTIES: No data
BULK SPECIFIC GRAVITY: 0.60(at 25°C)
SOLUBILITY: Water ... Insoluble, swellable
Toluene, Xylene, Methanol...Insoluble
VISCOSITY: No data
DUST EXPLOSIVE: Minimum explosive concentration : >1,200g/m³ (2)
VAPOR PRESSURE: No data
DECOMPOSITION TEMPERATURE: No data
OCTANOL/WATER PARTITION COEFFICIENT: No data

10. STABILITY AND REACTIVITY
STABILITY: Stable under normal conditions.
POSSIBILITY OF HAZARDOUS REACTIONS: React with strong oxidizing agents, etc.
CONDITION TO AVOID: No data
INCOMPATIBLE MATERIALS: Strong oxidizing agents, etc.
HAZARDOUS DECOMPOSITION PRODUCTS: No data
OTHERS: No data

11. TOXICOLOGICAL INFORMATION (DATA for this product or similar product.)
ACUTE TOXICITY [ORAL]: Not classified
LD₅₀> 2000 mg/kg (rat) (Not classified) (2)
ACUTE TOXICITY [SKIN]: Classification not possible [Cross-linked acrylic acid polymer sodium salt] Classify in 'Not classified', since this component is polymer.
ACUTE TOXICITY [INHALATION: GAS]: Not classified by the GHS definition of gas.
ACUTE TOXICITY [INHALATION: VAPOR]: Classification not possible [Cross-linked acrylic acid polymer sodium salt] Classify in 'Not classified', since this component is polymer.
ACUTE TOXICITY [INHALATION: DUST, MIST]: Classification not possible [Cross-linked acrylic acid polymer sodium salt] Classify in 'Not classified', since this component is polymer.
SKIN CORROSION / IRRITATION: Not classified
Negative (human patch test) (Not classified) (2)
Primary irritation: Non-irritant (guinea pig, 2% physiological salt solution) (2)
(Not classified)
Cumulative irritation: Non-irritant (guinea pig, 14 days, 2% physiological salt solution) (Not classified)

SERIOUS EYE DAMAGE/EYE IRRITATION: Not classified
Non irritant (rabbit, eye washed group) (Not classified) (2)
(reference) Powder may mechanically injure cornea.

RESPIRATORY SENSITIZATION: Classification not possible
(reference) Exposure to low levels of dust can result in lung irritation and inflammation.

SKIN SENSITIZATION: Not classified
Non sensitizer (guinea pig) (Not classified) (2)

GERM CELL MUTAGENICITY: Classification not possible
(reference) Negative (Ames) (2)

CARCINOGENICITY: Classification not possible
IARC: Not listed on IARC Monographs. (3)

REPRODUCTIVE TOXICITY: Classification not possible
No data

SPECIFIC TARGET ORGAN TOXICITY; SINGLE EXPOSURE: Classification not possible
No data

SPECIFIC TARGET ORGAN TOXICITY; REPEATED EXPOSURE: Classification not possible
No data

ASPIRATION HAZARD: Classification not possible
No data

12. ECOLOGICAL INFORMATION (DATA for this product or similar product.)
AQUATIC TOXICITY [ACUTE]: Classification not possible
ECOTOXICITY: No data
AQUATIC TOXICITY [CHRONIC]: Classification not possible
PERSISTENCE/DEGRADABILITY: No data
BIOACCUMULATION POTENTIAL: No data
MOBILITY IN SOIL: No data
OTHER DATA: No data
HAZARDOUS TO THE OZONE LAYER: Classification not possible
No data

13. DISPOSAL CONSIDERATIONS
Dispose of contents/container in accordance with national and regional regulations.

14. TRANSPORT INFORMATION
INTERNATIONAL REGULATIONS
LAND: Transport in accordance with national and regional regulations (RID, ADR, DOT, etc.).
SEA: Transport in accordance with IMDG Code.
AIR: Transport in accordance with ICAO-TI/IATA-DGR.

UN CLASSIFICATION
UN CLASS: Not applicable
UN NO.: Not applicable
PROPER SHIPPING NAME: Not applicable
EMERGENCY RESPONSE GUIDELINE NUMBER: 171
15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS
UNITED STATES INVENTORY (TSCA 8B): All components are listed or authorized to exempt from registration.
CANADA INVENTORY (DSL): All components are listed or authorized to exempt from registration.
AUSTRALIA INVENTORY (AICS): All components are listed or authorized to exempt from registration.
CHINA INVENTORY (IECSC): All components are listed or authorized to exempt from registration.
JAPAN INVENTORY (ENCS): All components are listed or authorized to exempt from registration.
PHILIPPINES INVENTORY (PICCS): All components are listed or authorized to exempt from registration.
KOREA INVENTORY (ECL): All components are listed or authorized to exempt from registration.

COMMENT
(1) Please use this product in such specific applications as described below on the responsibility of user after implementation of effective precaution measures.
(a) Production and/or application for directly contact with food or raw material of food.
(b) Production and/or application for contact with food or raw material of food, through the absorbed water with this material.
(c) Production and/or application for directly contact with eyes and mouth.
(d) Production and/or application for eating by accident.
(2) Storage
(a) Absorbent polymer has some possibility of coloring in hot and humid conditions. Absorbent polymer absorbs water, rain and so on. Keep containers tightly closed in storing absorbent goods containing absorbent polymer.
(b) Water gel of absorbent polymer becomes liquid state gradually by exposing to light for a long time. In case of use as water gel, please avoid exposing water gel to the direct sunlight.

16. OTHER INFORMATION

REFERENCES
(1) TLVs and BEIs, ACGIH, 2013
(2) Results of Safety Testing Center
(3) A publication of Japan Chemical Industry Ecology-Toxicology & Information Center (JETOC)

* All specifications which were created based on the information which was available at the time and may be revised at anytime according to new information.
* To the best of our knowledge, the information contained herein is accurate. However, Serres Oy assumes no liability whatsoever for the accuracy or completeness of the information contained herein. All materials may present unknown health hazards and should be used with caution.
Final determination of suitability of any material is the sole responsibility of the user.