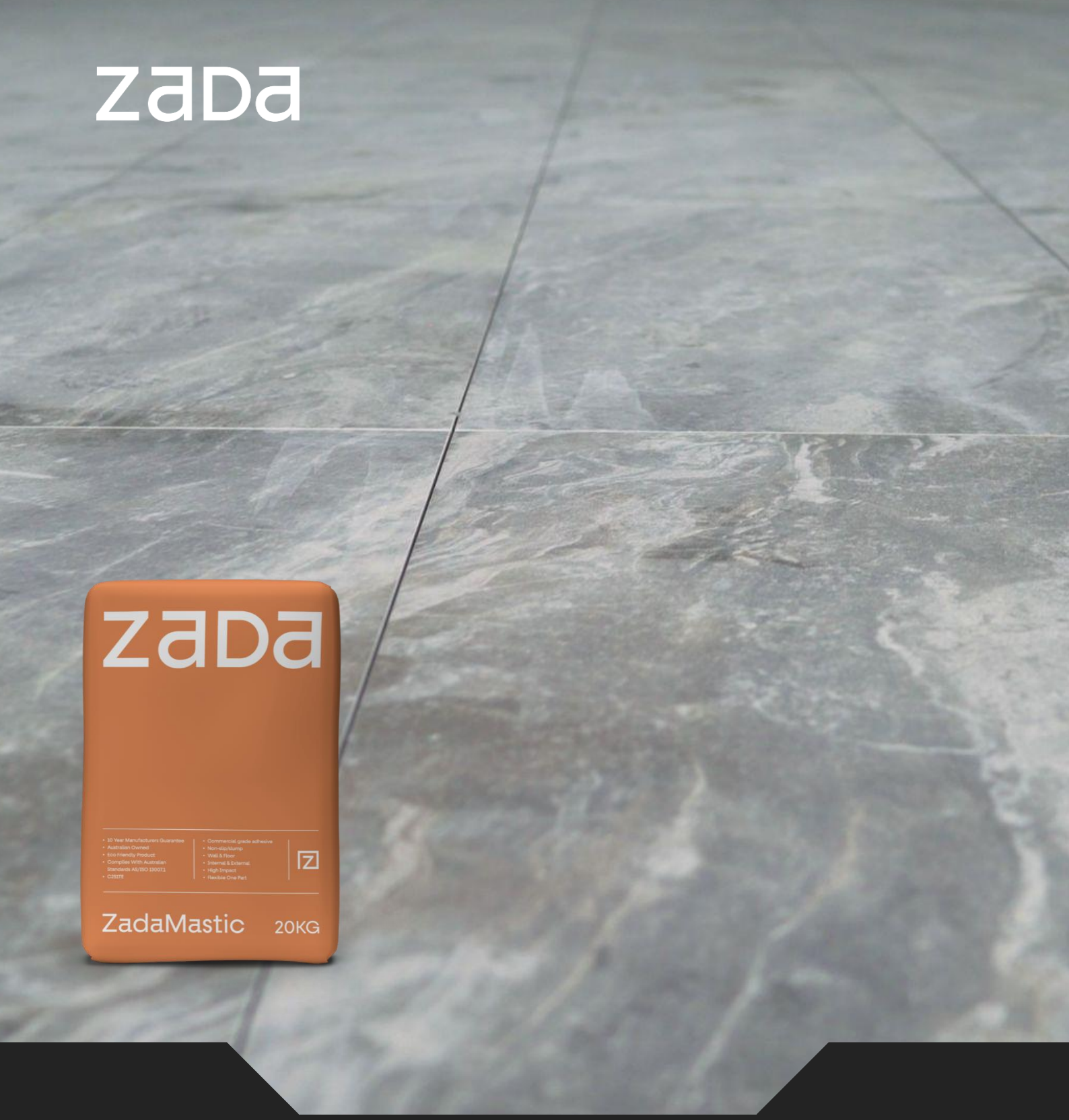

Safety Data Sheet: ZadaMastic

Issue Date: 11/08/2024

Revision Date: 11/08/2029

SECTION 1 Chemical Production and Company Identification

Product Identification

Product name ZadaMastic

Use of Product: Tile adhesive

Company Identification

Registered company name Zada Australia PTY LTD

Contact Details: 02 8043 4733

Website www.zadaaustralia.com.au

Emergency telephone number 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 1

Specific target organ toxicity (single exposure) Category 3 (respiratory tract irritation)

Inhalation hazardousness Category 1

B. Warning Signs Elements including Precaution Phrase

Pictograph: 

Signal word: Danger

Hazard and risk statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

Precautionary statement(s) Prevention

P261: Avoid inhaling dust/fume/gas/mist/vapors/spray.

P264: Thoroughly wash the contact body part after handling.

P271: Use only outdoors or in a well-ventilated area.

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

Precautionary statement(s) Response

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

P304+P340: If inhaled: Move to an area with fresh air and keep at rest in a position comfortable for breathing.

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

Keep rinsing

P310: Immediately seek medical attention from a doctor/medical institution.

P312: If you feel unwell, seek medical attention from a doctor/medical institution.

P321: Take emergency measures.

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

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

Precautionary statement(s) Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Precautionary statement(s) Disposal

P501: Dispose of the contents/containers according to waste disposal regulations.

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 calcium carbonate 1 0 0 Portland Cement No data. No data. No data. Re-dispersible Polymer Powder 1 1 0 Methyl Cellulose 1 1 0

SECTION 3 Composition Name and Content Name

CAS No. Content (%) Remarks calcium carbonate16389-88-1 45-55 Portland Cement 65997-15-1 35-45 Re-dispersible Polymer Powder - 6-8 Methyl Cellulose 9004-67-5 0.1-0.5 S1 (Trade Secret) - 0.1-5

SECTION 4 First Aid Measures

A. When it gets into your eyes:

- Get emergency medical attention.
- if in contact with the substance, if possible, remove contact lenses and immediately flush the skin and eyes with running water for at least 20 minutes.

B. When it comes into contact with your skin:

- If it comes into contact with your skin (or hair), remove all contaminated clothing.
- Rinse your skin with water/Take a shower.
- If you feel unwell, seek medical attention from a doctor (medical institution).
- Clean contaminated clothing before reuse.
- Get emergency medical attention.
- For hot substances, immerse or rinse the affected body part with large amounts of cold water to remove heat.
- Remove contaminated clothing and shoes, and isolate the contaminated area.
- Prevent the spread of contaminated body part in case of minor skin contact.

C. When inhaled:

- Immediately seek medical attention from a doctor (medical institution).
- Don't induce vomiting.
- If exposed to excessive dust or fumes remove to fresh air and seek medical attention if experiencing coughing or other symptoms.
- If not breathing, give artificial respiration. Give oxygen if breathing is difficult.

D. When eaten:

- If swallowed, immediately seek medical attention from a doctor (medical institution).
- If swallowed, rinse mouth out. Don't induce vomiting.
- Don't induce vomiting.

E. Other doctor's notes

- Ensure that the medical personnel are aware of the substance and take protective measures.

SECTION 5 Countermeasures against Explosion and Fire

A. Appropriate (Inappropriate) fire extinguishing agents:

- Use alcohol foam, carbon dioxide or water spray for fire extinguishing involving this substance.
- In case of the extinguishment by smothering, use dry sand or soil.

B. Specific hazards arising from the chemical:

- During burning, irritating and very toxic gas may be generated by pyrolysis or combustion.
- When heated, the container may explode.
- Some can burn, but not easily ignite.
- Non-flammable; the substance itself does not burn, but it may decompose when heated and generate corrosive/toxic fume.

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 discoloured, step back
- In the event of a tank fire, step back from the tank surrounded by flame.

Portland Cement

- Rescuers should wear appropriate protective equipment.
- Get out of the area and extinguish at a safe distance.
- Be cautious as it may be transported in a molten state.
- To dispose of the extinguishing water, dig a trench to contain it and prevent the substance from scattering.
- Move the container from fire area if you can do it without risk.
- In case of tank fire, extinguish from maximum distance or use unmanned firefighting equipment.

- In case of tank fire, continue to cool the container with plenty of water even after fire is out.
- In case of tank fire, retreat immediately if there is a high-pitched sound from the pressure relief device or if the tank
- In case of tank fire, retreat from the tank engulfed in flames.
- In case of tank fire, if it is a large-scale fire, use unmanned firefighting equipment. If it is not possible, retreat and let it burn.

Re-dispersible Polymer Powder

- If it is safe to do so, move the containers away from the fire area.
- Some containers may be transported at high temperatures.
- The spillage may cause contamination.
- Contact may cause burns to the skin and eyes.
- To dispose of the extinguishing water, dig a trench to contain it and prevent the substance from scattering.
- Move the container from fire area if you can do it without risk.
- In case of tank fire, continue to cool the container with plenty of water even after fire is out.
- In case of tank fire, retreat immediately if there is a high-pitched sound from the pressure relief device or if the tank
- In case of tank fire, retreat from the tank engulfed in flames.
- Scattered water from a heated or exploded container can cause burns to the skin and eyes.

Methyl Cellulose

- If it is safe to do so, move the containers away from the fire area.
- Some containers may be transported at high temperatures.
- The spillage may cause contamination.
- Contact may cause burns to the skin and eyes.
- To dispose of the extinguishing water, dig a trench to contain it and prevent the substance from scattering.
- Move the container from fire area if you can do it without risk.
- In case of tank fire, continue to cool the container with plenty of water even after fire is out.
- In case of tank fire, retreat immediately if there is a high-pitched sound from the pressure relief device or if the tank
- In case of tank fire, retreat from the tank engulfed in flames.

SECTION 6 Measures against Accidental Release

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

- Avoid inhaling (dust, fume, gas, mist, vapor and spray).
- Wipe off spills immediately,follow the precautions in the section of protective equipment.
- Remove all the sources of ignition.
- If it is not dangerous, stop leaking.
- Do not touch damaged containers or leaks without wearing appropriate protective clothing.
- Cover with plastic sheet to prevent diffusion.
- Prevent dust formation.
- Pay attention to the substances and conditions to avoid.

B. Measures required to protect the environment:

- Prevent entry into waterways, sewers, basements and confined spaces.

C. Cleaning up or removing methods:

- Absorb the spill with inert substances (for instance, dry sand or soil), and put it in a chemical waste container.
- Absorb the liquid and wash the contaminated area with detergent and water.

SECTION 7 Handling and Storage

Safe handling method:

- Avoid inhaling (dust, fume, gas, mist, vapor and spray).
- Wash the handled area thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Follow all MSDS/label precautions as there may still be product residue remaining even after the container is
- Handle and store with caution before use. Carefully remove the cap before opening.
- Avoid prolonged or continuous skin contact.
- Pay attention to substances and conditions to be avoided.
- Perform the task referring to Engineering Management and Personal Protective Equipment.

Safe storage method:

- Store the container tightly sealed in a well-ventilated area.
- Completely drain and properly seal empty drums, then promptly return them to the drum handling equipment or arrange them appropriately.

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 calcium carbonate No data No data No data Portland Cement

TWA - 10 mg/m3 TWA 1 mg/m3, STEL 5 mg/m3 N/A Re-dispersible Polymer Powder

TWA - 6 mg/m3 Soapstone (total dust) TWA - 3 mg/ m3 Soapstone (respiratory dust)

TWA - 2 mg/m3 talcum (excluding asbestos) TWA 2 mg/m3 (respirable, excluding asbestos) No data Methyl Cellulose No data 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
- Ensure ventilation to maintain air pollution below the exposure limits when generating dust, fumes, or mists during
- Install face washing facilities and safety showers in facilities that store or use this substance.

C. Personal protective equipment:

Calcium carbonate

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

Portland Cement: No data.

Re-dispersible Polymer Powder
Wear a respirator that has been certified by the Australian Occupational Safety and Health Agency in accordance with physical and chemical characteristics of the particulates to be exposed.

Methyl Cellulose
Wear a respirator that has been certified by the Australian Occupational Safety and Health Agency in accordance with

S1 (Trade Secret)
Wear a respirator that has been certified by the Australian Occupational Safety and Health Agency in accordance with

Eye protection: No data.

Hand protection: No data.

Body protection: No data.

SECTION 9 Physical and Chemical Properties

A. Appearance: White powder.

B. Odor: N/A

C. Odor threshold: No data

D. PH : 12±2 in case of mixing with water

E. Melding point / Freezing point: N/A

F. Boiling point / Boiling point range: N/A

G. Flash point: No data

H. Evaporation rate: No data

I. Flammability (solid, gas): No data

J. Upper/Lower limit of flammability

K. Vapor pressure: No data

L. Solubility: No data

M. Vapor density: No data

N. Specific gravity: Approximately 1.8±0.2

O. N-octanol/water partition coefficient: No data

P. Autoignition temperature: No data

Q. Decomposition temperature: No data

R. Viscosity: No data

S. Molecular weight: No data.

SECTION 10 Stability and Reactivity

A. Chemical stability and potential for hazardous reactions

Calcium Carbonate

- Stable under normal temperature and pressure conditions.
- The container may explode when heated.
- Some can burn but don't ignite easily.
- In case of fire, irritating and toxic gases may be generated.
- Inhalation of the substance may be harmful.
- Some liquids may produce vapours that can cause dizziness and suffocation.

Portland Cement

- The container may explode when heated.
- Some can burn but don't ignite easily.
- Non-flammable, the substance itself does not burn, but it can decompose upon heating, releasing corrosive/toxic
- In case of fire, irritating, corrosive and toxic gases may be generated.

Re-dispersible Polymer Powder

- Stable under normal temperature and pressure conditions.
- The container may explode when heated.
- Some can burn but don't ignite easily.
- In case of fire, irritating and toxic gases may be generated.
- Inhalation of the substance may be harmful.
- Some liquids may produce vapours that can cause dizziness and suffocation.

Methyl Cellulose

- Stable under normal temperature and pressure conditions.
- The container may explode when heated.
- Some can burn but don't ignite easily.
- In case of fire, irritating and toxic gases may be generated.
- Inhalation of the substance may be harmful.
- Some liquids may produce vapours that can cause dizziness and suffocation.

S1 (Trade Secret)

Stable under normal temperature and pressure conditions.

- The container may explode when heated.
- Some can burn but don't ignite easily.
- Inhalation of the substance may be harmful.

B. Condition(s) to avoid

Calcium carbonate

- Heat, sparks, flames, or other sources of ignition

Portland Cement

- Heat, sparks, flames, or other sources of ignition

Re-dispersible Polymer Powder

- Heat, sparks, flames, or other sources of ignition

Methyl Cellulose

- Heat, sparks, flames, or other sources of ignition

S1 (Trade Secret)

- Heat, sparks, flames, or other sources of ignition

C. Substance(s) to avoid

Calcium carbonate

- Flammable substances, irritant and toxic gases

Portland Cement

- Flammable substances, reducing substances

Re-dispersible Polymer Powder

- Flammable substances, irritant and toxic gases, water-reactive substances

Methyl Cellulose

- Flammable substances, irritant and toxic gases

S1 (Trade Secret)

- Hazardous substance(s) produced during decomposition

Portland Cement

- During burning, highly toxic and irritant gases may be generated by thermal decomposition or combustion.
- Corrosive/toxic fumes

SECTION 11 Toxicological Information

A. Information about the highly possible exposure routes

Calcium Carbonate

- Lung abnormalities, kidney abnormalities

Portland Cement

- Irritant. Respiratory difficulties, irritation of the lung abnormalities, skin irritation (may be severe in some cases), eye irritation, visual impairment, eye damage

Re-dispersible Polymer Powder

- Short-term exposure may cause irritation and nausea.

B. Information on health hazard

Acute toxicity Oral No data Percutaneous No data

Inhalation No data Skin corrosion or irritation Re-dispersible Polymer Powder: 300 µg/3 days (in humans): Mild Source: RTECS Severe eye damage or irritation

Re-dispersible Polymer Powder: Rabbit: Non-irritating Source: IUCLID calcium carbonate: Has mild irritation. Source: EU IUCLID Respiratory oversensitivity No data Skin oversensitivity

Calcium carbonate: There were no hypersensitivity reactions observed in human dermal hypersensitivity tests. Source: IUCLID Carcinogenicity

Occupational Safety and Health Act No data.

IARC No data OSHA No data ACGIH No data NTP No data EU CLP No data Germ cell mutagenicity

Re-dispersible Polymer Powder: Negative for Salmonella Source: NLM Methyl Cellulose: Test System: Ames Salmonella Typhimurium

Result: Negative Source: National Library of Medicine/Chemical Carcinogenesis Research Information System

(NLM/CCRIS)

Reproductive toxicity No data Specific target organ toxicity (single exposure) Portland Cement: Respiratory system irritation Source: ICSC Specific target organ toxicity (repeated exposure) Portland Cement: Prolonged repeated exposure may cause dermatitis or dermal hypersensitivity. Source: ICSC

SECTION 12 Environmental Impact

Ecotoxicity Fishes Re-dispersible Polymer Powder: LC50 > 10000 mg/l 24 hr

Source: IUCLID Methyl Cellulose: LC50 > 1000 mg/l 48 hr

Source: The Ecotoxicology database (ECOTOX)(http://cfpub.epa.gov/ECOTOX/quick_query.htm)

Shellfishes No data Birds No data Persistence and Degradability Persistence Re-dispersible Polymer Powder: log Kow -1.50 (estimate)

Source: QSAR Degradability: No data.

Degradability No data Bioaccumulation Accumulation

Re-dispersible Polymer Powder: 112 ug/L 2.1hour BCF (residue)

duckweed 60ug/L

Biodegradability

Portland Cement: (Not applicable for microbial degradation and bioaccumulation) Source: IUCLID Soil mobility No data Other harmful impact

Portland Cement: After hardening with water or moisture, the cement did not exhibit ecotoxicity. Source: IUCLID

SECTION 13 Disposal Consideration

A. Regulatory status under Wastes Control Act

Designated (specified) waste under Article 4 of the Wastes Control Act, attached Table 1 of Article 3 of the Enforcement Decree of the same Act,

Article 12 of Wastes Control Act , Article 6 of the Enforcement Decree of the same Act

B. Disposal method

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

C. Precautions for Disposal

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

SECTION 14 Information Required for Transportation

A. Classification and regulations in accordance with the regulations for the maritime transportation and storage of dangerous substances under the Ship Safety Act:

Maritime and Air Transport Act

B. Transportation precautions:

Transport in a completely sealed state, but in case of leakage, prevent the inflow into drains/sewers/rivers/streams.

C. Classification and regulations based on transportation guidelines in other countries:

UN class: No data. USDOT: No data. RID/ADR: No data. IMO: No data. IATA/ICAO : No data.

SECTION 15 Legal Regulations Status

Regulation by Occupational Safety and Health Act

Calcium Carbonate: No data.

Portland Cement: Substances subject to special inspection (diagnostic cycle: 24 months) (mineral dust)

Substances subject to workplace environmental monitoring (monitoring cycle: 6 months) (mineral dust)

Substances with established exposure limits

Re-dispersible Polymer Powder: Substances

Methyl Cellulose: No data.

S1: No data. Regulation by Chemical Substances Management Act No data Regulation by Hazardous Goods Safety Management Act No data Regulation by Waste Management Act No data Regulation by Other Domestic and Foreign Laws

Domestic Regulation

Persistent Organic Pollutant Management Act No data - Overseas regulations

U.S. Management Information

(OSHA Regulation) No data U.S. Management Information

(CERCLA Regulation) No data U.S. Management Information

(EPCRA 302 Regulation) No data U.S. Management Information

(EPCRA 304 Regulation) No data U.S. Management Information

(EPCRA 313 Regulation) No data U.S. Management Information No data

A. Data sources

Calcium Carbonate

EU IUCLID (skin corrosion or irritation)

EU IUCLID (severe eye damage or irritation)

IUCLID (dermal hypersensitivity)

Portland Cement

ICSC (severe eye damage or irritation)

ICSC (specific target organ toxicity (single exposure))

ICSC (specific target organ toxicity (repeated exposure))

ICSC (skin corrosion or irritation)

IUCLID (other hazardous effects)

IUCLID (biodegradability)

Medical Management) (Aspiration hazardousness)

Re-dispersible Polymer

Powder ICSC (physical state)

HSDB (color) HSDB (b. Odor)

ICSC (e. Melting point/freezing point) ICSC (l. Solubility)

HSDB (n. Specific gravity)

National Library of Medicine/Hazardous Substances Data

Bank (NLM/HSDB)(http://toxnet.nlm.nih.gov/cgi- bin/sis/htmlgen HSDB) (physical state) (NLM; HSDB, NITE,TOMES; HSDB) (e. Melting point/freezing point)

National Institute of Technology and Evaluation (NITE)(http://www.safe.nite.go.jp/ghs/h18_bunrui.html) (h. Evaporation rate)

(http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?C HEM) (l. Solubility) National Library of Medicine/Chemical

Carcinogenesis Research Information System (NLM/CCRIS)

(http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?C CRIS) (reproductive cell mutagenicity) The ECOTOXicology database (ECOTOX) (http://cfpub.epa.gov/ECOTOX/quick_query.htm) (fish)

The Chemical Database, The Department of Chemistry at the University of kron (http://ull.chemistry.uakron.edu/erd)

S1: No data.

B. Date of the initial preparation: 2004-06-09

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

Number of revisions:

Date of the last revision:

Issue Date: 11/08/2024

Revision Date: 11/08/2029

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