

Aquapas™ N2020 Dispersible Polymer Powders
™ Trademark, Ashland or its subsidiaries,
registered in various countries
414963

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| | | |
|-------------------------|---|--------------------------------|
| Ashland | Regulatory Information Number | 1-800-325-3751 |
| P.O. Box 2219 | Telephone | 614-790-3333 |
| Columbus, OH 43216 | Emergency telephone number | 1-800-ASHLAND (1-800-274-5263) |
| Product name | Aquapas™ N2020 Dispersible Polymer Powders ™ Trademark, Ashland or its subsidiaries, registered in various countries | |
| Product code | 414963 | |
| Product Use Description | No data | |

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: solid, white

WARNING! MAY FORM COMBUSTIBLE DUST-AIR MIXTURES.

Potential Health Effects

Exposure routes

Inhalation, Skin contact, Eye Contact, Ingestion

Eye contact

Dust can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

May cause skin irritation. Symptoms may include redness, burning, and swelling of skin.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

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This material is a dust or may produce dust. Prolonged or repeated breathing of this material may result in chronic bronchitis (inflammation of the airways of the lungs). Symptoms include coughing and shortness of breath. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)

Target Organs

No data

Carcinogenicity

Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Components | CAS-No. | Concentration |
|-----------------------------|----------------|----------------------|
| CALCIUM COMPOUND | 254504001-5987 | >=5-<10% |
| SILICA VITREOUS | 60676-86-0 | >=1-<1.5% |

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4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Ingestion of large amounts or other significant exposure to this material (or a component) may cause alkalosis. Excessive calcium intake may cause gastrointestinal symptoms, hypertension, hypercalcemia, kidney stones, and may inhibit absorption of iron, zinc, and possibly other trace elements.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide, calcium oxide

Precautions for fire-fighting

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Organic dusts at sufficient concentration can form explosive mixtures in air. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Avoid breathing dust. Material can create slippery conditions.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods for cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Pick up and arrange disposal without creating dust.

Other information

Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Avoid dust formation. This material is slippery when wet. Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards. For further guidance on prevention of dust explosions, refer to National Fire Protection Association (NFPA) 654: "Standard for the Prevention of Fire and Dust Explosions, from the Manufacturing, Processing and Handling of Combustible Particulate Solids". The material can accumulate static charge and can therefore cause electrical ignition of flammable atmospheres. Ensure all equipment is electrically grounded and bonded before beginning transfer operations.

Storage

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Store in a cool, dry, ventilated area. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| CALCIUM COMPOUND | | 254504001-5987 | |
|-------------------------|-----------------------------------|-----------------------|----------------------|
| NIOSH | Recommended exposure limit (REL): | 10 mg/m3 | Total |
| NIOSH | Recommended exposure limit (REL): | 5 mg/m3 | Respirable. |
| OSHA Z1 | Permissible exposure limit | 5 mg/m3 | Respirable fraction. |
| OSHA Z1 | Permissible exposure limit | 15 mg/m3 | Total dust. |
| SILICA VITREOUS | | 60676-86-0 | |
| NIOSH | Recommended exposure limit (REL): | 6 mg/m3 | |
| Z3 | time weighted average | 0.8 mg/m3 | |

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Avoid breathing dust.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects. Provide appropriate exhaust ventilation at places where dust is formed.

Eye protection

Wear safety glasses or chemical splash goggles when dust exposure is possible.

Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

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Wear resistant gloves (consult your safety equipment supplier).

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|---------------------|
| Physical state | solid |
| Form | powder |
| Colour | white |
| Odour | no data available |
| Boiling point/boiling range | no data available |
| Melting point/range | no data available |
| Sublimation point | no data available |
| pH | 7 |
| Flash point | not applicable |
| Ignition temperature | no data available |
| Evaporation rate | no data available |
| Lower explosion limit/Upper explosion limit | 10 mg/m3 / |
| Particle size | no data available |
| Vapour pressure | no data available |
| Relative vapour density | no data available |
| Density | No data |
| Bulk density | 500 kg/m3 |
| Water solubility | no data available |
| Solubility(ies) | no data available |
| Partition coefficient: n-octanol/water | no data available |
| log Pow | no data available |
| Autoignition temperature | no data available |
| Viscosity, dynamic | 2,000 mPa.s @ 25 °C |
| Viscosity, kinematic | no data available |
| Solids in Solution | no data available |

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| | |
|----------------------------------|-------------------|
| Decomposition temperature | no data available |
| Burning number | no data available |
| Dust explosion constant | no data available |
| Minimum ignition energy | no data available |

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Keep away from heat, flame, sparks and other ignition sources.

Incompatible products

ammonium salts, aluminum salts, fluorides, strong mineral acids

Hazardous decomposition products

carbon dioxide and carbon monoxide, calcium oxide

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

CALCIUM COMPOUND : LD 50 Rat: 6,450 mg/kg

SILICA VITREOUS : no data available

Acute inhalation toxicity

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

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Acute dermal toxicity

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

12. ECOLOGICAL INFORMATION

Biodegradability

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

Bioaccumulation

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

Ecotoxicity effects

Toxicity to fish

CALCIUM COMPOUND : 96 h LC 50 Gambusia affinis (Mosquito fish): > 56,000.00 mg/l Method: Static; Mortality

SILICA VITREOUS : no data available

Toxicity to daphnia and other aquatic invertebrates.

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

Toxicity to algae

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

Toxicity to bacteria

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CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

Biochemical Oxygen Demand (BOD)

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

Chemical Oxygen Demand (COD)

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

Additional ecological information

CALCIUM COMPOUND : no data available

SILICA VITREOUS : no data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

REGULATION

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT /LTD. QTY. |
|-----------|----------------------|---------------|--------------------|---------------|-----------------------------|
|-----------|----------------------|---------------|--------------------|---------------|-----------------------------|

U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

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U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive

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| | |
|-------|--|
| harm. | |
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SARA Hazard Classification

Fire Hazard

New Jersey RTK Label Information

| | |
|------------------|----------------|
| COPOLYMER | 800986-5040P |
| POLYMER | 800986-5246P |
| CALCIUM COMPOUND | 254504001-5987 |
| SILICA VITREOUS | 60676-86-0 |

Pennsylvania RTK Label Information

| | |
|------------------|----------------|
| COPOLYMER | 800986-5040P |
| POLYMER | 800986-5246P |
| CALCIUM COMPOUND | 254504001-5987 |
| SILICA VITREOUS | 60676-86-0 |

Notification status

| | |
|--|----------------------|
| US. Toxic Substances Control Act | y (positive listing) |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133) | y (positive listing) |
| Australia. Industrial Chemical (Notification and Assessment) Act | y (positive listing) |
| New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand | y (positive listing) |
| Japan. Kashin-Hou Law List | y (positive listing) |
| Korea. Toxic Chemical Control Law (TCCL) List | y (positive listing) |
| Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act | y (positive listing) |
| China. Inventory of Existing Chemical Substances | y (positive listing) |

| | HMIS | NFPA |
|------------------|------|------|
| Health | 1 | 1 |
| Flammability | 1 | 1 |
| Physical hazards | 0 | |
| Instability | | 0 |
| Specific Hazard | -- | -- |

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16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).