



Product information

WellREADY™ 319 (Kemira A-4451)

Use of the Substance/Mixture

Stimulation / Cementing Additive

Company Identification

Zinkan Enterprises Inc.
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Twinsburg, OH 44236
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Kemira Chemicals, Inc.
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Emergency telephone number

1-800-424-9300/1-703-527-3887 (CHEMTREC), 1-613-996-6666 (CANUTEC), For Product Information
1-800-347-1542 CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview: Solutions extremely slippery when spilled.

Skin: Causes skin irritation.

Eyes: May cause eye irritation.

Inhalation: Avoid breathing vapors or mist.

Ingestion: May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Anionic polyacrylamide in water-in-oil emulsion.

Hazardous or Regulated Components

CAS-number	Chemical name of the substance	Concentration
64742-47-8	Distillates (petroleum), hydrotreated light	22 - 30 %
68439-50-9	Alkyl-(C12-C14) alcohol, ethoxylated >2 – 10 EO	0 - 3.6 %
68551-12-2	Alcohols, C12-16, ethoxylated	0 - 3.6 %
68002-97-1	Alcohols, C10-16, ethoxylated	0 - 3.6 %
631-61-8	Ammonium acetate	2 - 10 %

Components listed above that have a zero minimum and a common maximum range are interchangeably used components based on availability. Only one of these components is contained in the product up to the maximum amount noted.

4. FIRST AID MEASURES

Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Skin contact

Wash off with plenty of water. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician immediately.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Water spray
Water mist
Carbon dioxide (CO₂)
Dry chemical

Specific hazards during firefighting

Burning may produce toxic and irritant gases.

Special protective equipment for firefighters.

Wear full protective clothing, self-contained breathing apparatus. For personal protection see section 8. Use NIOSH / MSHA approved respiratory protection.

Specific methods

Cool containers / tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Where the exposure level is not known, wear approved, positive pressure, self-contained respirator. Where the exposure level is known, wear approved respirator suitable for the level of exposure. Use rubber boots. For personal protection see section 8.

Environmental precautions

Try to prevent the material from entering drains or water courses.

Methods for cleaning up

Soak up with inert absorbent material. Shovel into suitable container for disposal. Flush away traces with water. Hazard of slipping on spilt product.

7. HANDLING AND STORAGE

Handling

Avoid exceeding of the given occupational exposure limits (see section 8). For personal protection see section 8. Avoid contact with skin, eyes and clothing. Keep absorbent material as a precaution against spills.



Storage

Flashpoint determination was performed using a Pensky Martens type closed cup method. The method indicates a flash point greater than 93,3° C (200° F). Although there was no flashpoint detected below 93,3° C (200° F) some flammable vapors were evolved during the test as evidenced by the enlargement of the flame. Therefore caution should be exercised during storage and handling.

Materials for packaging:

Unsuitable material: To avoid product degradation and equipment corrosion, do not use iron, copper or aluminum containers or equipment.

Materials to avoid:

None known.

Storage stability:

Storage temperature < 89.6 °F

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit Values

Distillates (petroleum), hydrotreated light

TWA = 200 mg/m³, As total hydrocarbon vapor, Skin: Contributes significantly to the overall exposure by the skin route., Jet fuels

TWA = 197 ppm = 1,200 mg/m³, recommendations of the manufacturer

Limit values in other countries

North America:

Distillates (petroleum), hydrotreated light

TWA = 200 mg/m³, As total hydrocarbon vapor, Skin: Contributes significantly to the overall exposure by the skin route. Jet fuels

Exposure controls Occupational

exposure controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and immediately after handling the product. Ensure that eyewash stations and safety showers are close to the workstation location. Avoid contact with skin and eyes.

Keep away from tobacco products. Keep away from food and drink. Wash hands before breaks and immediately after handling the product.

Respiratory protection

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. Use NIOSH approved respiratory protection.

Hand protection

Glove material: Nitrile rubber, Permeability tests are not available for this product.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection

Face-shield or Safety glasses with side-shields

Skin and body protection

Chemical resistant protective clothing. Chemical resistant boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information (appearance, odor)

Physical state	liquid,
Color	colorless, to, light straw
Odor	Petroleum distillates

Important health safety and environmental information

pH	6 - 8
Boiling point/boiling range	similar to water
Flash point	> 215.6 °F (closed cup) (Pensky-Martens)

Explosive properties:

Lower explosion limit

no data available

Upper explosion limit

no data available

Density

1.03 - 1.06 g/cm³

Water solubility

Limited by viscosity.

Relative vapor density

similar to water

Other data

Thermal decomposition

no data available

10. STABILITY AND REACTIVITY

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

None known.

Hazardous reactions:

Hazardous polymerization does not occur.

Hazardous decomposition products

Ammonia, Carbon dioxide (CO₂), Carbon monoxide, nitrogen oxides (NO_x), Sulphur oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

The acute toxicological results displayed may not be the results of actual testing of this material but based on a similar tested material.

LD50/Oral/rat: > 5,000 mg/kg
Remarks: estimated

LC50/Inhalation/4 h/rat: > 20 mg/l
Remarks: estimated

LD50/Dermal/rabbit: > 2,000 mg/kg
Remarks: estimated

Distillates (petroleum), hydrotreated light:

LD50/Oral/rat: > 5,000 mg/kg
LC50/Inhalation/4 h/rat: > 5.2 mg/l
LD50/Dermal/rabbit: > 2,000 mg/kg

Irritation and corrosion

Skin: irritating

Eyes: May cause eye irritation.
Not classified as irritating for eyes.

Sensitization

Not sensitizing.

Distillates (petroleum), hydrotreated light:

This substance is not classified as a sensitizer.

Long term toxicity

Distillates (petroleum), hydrotreated light:

Carcinogenicity

Not classified by IARC or NTP.

Mutagenicity

No known effect.

Not mutagenic

Reproductive toxicity

Did not show teratogenic effects in animal experiments.

12. ECOLOGICAL INFORMATION

Eco toxicity effects

Aquatic toxicity

LC50/96 h/Branchydanio rerio (zebra fish)/acute toxicity/OECD Test Guideline 203: > 100 mg/l

Remarks: fresh water

EC50/48 h/Daphnia magna (Water flea)/Immobilization/OECD Test Guideline 202: > 100 mg/l

IC50/72 h/Green algae (Selenastrum capricornutum)/Growth inhibition/OECD Test Guideline 201: > 100 mg/l

Toxicity to other organisms

No data available

Mobility

Water solubility: Limited by viscosity.

Surface tension: not determined

Persistence and degradability

Biological degradability:

CO2 Evolution Test/OECD Test Guideline 301B:

Because of the high molecular weight of the polymer diffusion through biological membranes is very small. The polymeric ingredient is not readily biodegradable.

Bio accumulative potential

Bioaccumulation is unlikely.

Other adverse effects

No data available

Additional ecological information: Eco toxicological information provided is based on a structurally or compositionally similar product. This material is not classified as dangerous for the environment.

13. DISPOSAL CONSIDERATIONS

Product

Recycling, recovery and reuse of materials is recommended if permitted by regulations. If recycling is not practicable, dispose of in compliance with local regulations. Incineration is recommended.



EPA Hazardous Waste - NO

14. TRANSPORT INFORMATION

Land transport

Not classified as dangerous in the meaning of transport regulations.

Sea transport

Not classified as dangerous in the meaning of transport regulations.

Air transport

Not classified as dangerous in the meaning of transport regulations.

Special precautions for user

None known.

15. REGULATORY INFORMATION

SARA Title III Section 311 Categories

Immediate (Acute) Health Effects: Yes;
Delayed (Chronic) Health Effects: No;
Fire Hazard: No;
Sudden Release of Pressure Hazard: No;
Reactivity Hazard: No;

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

None Present ()

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

None Present ()

Canadian Ingredient Disclosure List

California Proposition 65

Acrylamide (79-06-1) % (< 0.01)

Remarks: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproduction harm.

Notification status

- : All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.
- :
- : All components of this product are included in the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.
- : All components of this product are included in the Canada Domestic Substance List (DSL) or are not required to be listed on the Canada Domestic Substance List (DSL).
- : All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on the Australian Inventory of Chemical Substances (AICS).
- : All components of this product are NOT included on the Japanese (ENCS) inventory.
- : All components of this product are NOT included on the Korean (ECL) inventory.
- : All components of this product are NOT included on the Philippine (PICCS) inventory.
- : All components of this product are NOT included on the Chinese inventory.
- : All components of this product are included in the New Zealand inventory (NZIoC) or are not required to be listed on the New Zealand inventory (NZIoC).
- : All components of this product are NOT included on the Taiwan Toxic Chemical Substances Control Act Inventory.

Miscellaneous Information

16. OTHER INFORMATION

HMIS Rating

Health: 2
Flammability: 1
Reactivity: 0

NFPA Rating

Health: 2
Fire: 1
Reactivity: 0
Special:

MSDS preparatory statement

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

Sources of key data used to compile the Safety Data Sheet

Regulations, databases, literature, own tests.

Additions, Deletions, Revisions

Relevant changes have been marked with vertical lines.