SAFETY DATA SHEET



1. Product and Company Identification

Product identifier pH-Treat Condensate Neutralization Media (4720-10, 4720-11, 4720-12, 4720-13)

Other means of identification

Not available

None known.

Recommended use

For use in Condensate Neutralizers

Recommended restrictions Manufacturer information

Nu-Calgon

2611 Schuetz Road

St. Louis, MO 63043 US

Phone: 314-469-7000 / 800-554-5499

Serious eye damage/eye irritation

Emergency Phone: 1-800-424-9300 (CHEMTREC)

Supplier See above.

2. Hazards Identification

Physical hazards

Not classified.

Skin corrosion/irritation Health hazards

Category 2 Category 2

Not classified. **Environmental hazards**

WHMIS 2015 defined hazards

Label elements

Not classified



Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Wear protective gloves. Wear eye protection.

IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). If skin Response

irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Store away from incompatible materials. Storage

Dispose of container in accordance with local, regional, national and international regulations. Disposal

WHMIS 2015: Health Hazard(s) not otherwise classified

(HHNOC)

Mixture

None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)

Hazard(s) not otherwise

classified (HNOC)

None known

None known.

Supplemental information None.

3. Composition/Information on Ingredients

Chemical name	Common name and synonyms	CAS number	%
Aluminum oxide		1344-28-1	1-5*
Calcium oxide		1305-78-8	1-5*
Ferric oxide		1309-37-1	1-5*
Magnesium oxide		1309-48-4	80-100*
Silica		7631-86-9	5-10*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

Inhalation

If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Skin contact

IF ON SKIN: Wash with plenty of soap and water. Specific treatment (see information on this label). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it

before reuse

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Ingestion

media

Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention.

Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Do not use water jet as an extinguisher, as this will spread the fire.

Suitable extinguishing media

Unsuitable extinguishing

During fire, gases hazardous to health may be formed.

Water fog. Foam. Dry chemical powder. Carbon dioxide.

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions

Specific methods General fire hazards

Hazardous combustion products

Use water spray to cool unopened containers.

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

May include and are not limited to: Oxides of carbon. Oxides of magnesium.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.

1309-37-1)

Store in original tightly closed container. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Store between 10°C - 30°C. Keep out of reach of children.

	8. Exposure Controls/Pe	rsonal Protection				
upational exposure limits						
Canada. Alberta OELs (Occupati	onal Health & Safety Code, Sch	nedule 1, Table 2)				
Components	Туре	Value	Form			
Aluminum oxide (CAS 1344-28-1)	TWA	10 mg/m3				
Calcium oxide (CAS 1305-78-8)	TWA	2 mg/m3				
Ferric oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable.			
Magnesium oxide (CAS 1309-48-4)	TWA	10 mg/m3	Fume.			
Canada. British Columbia OELs. Safety Regulation 296/97, as amo		s for Chemical Substances, O	ccupational Health and			
Components	Туре	Value	Form			
Calcium oxide (CAS 1305-78-8)	TWA	2 mg/m3				
Ferric oxide (CAS 1309-37-1)	STEL	10 mg/m3	Fume.			
·	TWA	5 mg/m3	Dust.			
		5 mg/m3	Fume.			
		3 mg/m3	Respirable fraction.			
		10 mg/m3	Total dust.			
Magnesium oxide (CAS 1309-48-4)	STEL	10 mg/m3	Respirable dust and/ofume.			
,	TWA	3 mg/m3	Respirable dust and/ofume.			
		10 mg/m3	Inhalable fume.			
Silica (CAS 7631-86-9)	TWA	4 mg/m3 1.5 mg/m3	Total Respirable.			
Canada Manitaka OFLa (Ban Of	17/0000 The Westerless Cafety	-	. 100p			
Canada. Manitoba OELs (Reg. 21 Components	Type	Value	Form			
Aluminum oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.			
Calcium oxide (CAS 1305-78-8)	TWA	2 mg/m3				
Ferric oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.			
Magnesium oxide (CAS 1309-48-4)	TWA	10 mg/m3	Inhalable fraction.			
Canada. Ontario OELs. (Control	of Exposure to Biological or Cl	nemical Agents)				
Components	Type	Value	Form			
Calcium oxide (CAS 1305-78-8)	TWA	2 mg/m3				
Ferric oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.			
Magnesium oxide (CAS 1309-48-4)	TWA	10 mg/m3	Inhalable fraction.			
Canada. Quebec OELs. (Ministry Components	of Labor - Regulation Respect Type	ing the Quality of the Work Er Value	nvironment) Form			
Aluminum oxide (CAS 1344-28-1)	TWA	10 mg/m3	Total dust.			
Calcium oxide (CAS 1305-78-8)	TWA	2 mg/m3				
Ferric oxide (CAS	TWA	5 mg/m3	Dust and fume.			

Total dust.

10 mg/m3

Components	linistry of Labor - Regulation Respecting the Q Type	Value	Form
Magnesium oxide (CAS 1309-48-4)	TWA	10 mg/m3	Fume.
Silica (CAS 7631-86-9)	TWA	6 mg/m3	Respirable dust.
US. OSHA Table Z-1 Limit Components	s for Air Contaminants (29 CFR 1910.1000) Type	Value	Form
Aluminum oxide (CAS	PEL	5 mg/m3	Respirable fraction.
1344-28-1)		15 mg/m3	Total dust.
Calcium oxide (CAS 1305-78-8)	PEL	5 mg/m3	
Ferric oxide (CAS 1309-37-1)	PEL	10 mg/m3	Fume.
Magnesium oxide (CAS 1309-48-4)	PEL	15 mg/m3	Total particulate.
US. OSHA Table Z-3 (29 C			_
Components	Type	Value	Form
Aluminum oxide (CAS 1344-28-1)	TWA	5 mg/m3	Respirable fraction.
,		15 mg/m3	Total dust.
		50 mppcf	Total dust.
Forrig avide (CAC	TIA/A	15 mppcf	Respirable fraction.
Ferric oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf 15 mppcf	Total dust. Respirable fraction.
Magnesium oxide (CAS 1309-48-4)	TWA	5 mg/m3	Respirable fraction.
1000 40 4)		15 mg/m3	Total dust.
		50 mppcf	Total dust.
Silica (CAS 7631-86-9)	TWA	15 mppcf	Respirable fraction.
Silica (CAS 7031-00-9)	IWA	0.8 mg/m3 20 mppcf	
US. ACGIH Threshold Lim	it Values		
Components	Туре	Value	Form
Aluminum oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
Calcium oxide (CAS 1305-78-8)	TWA	2 mg/m3	
Ferric oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
Magnesium oxide (CAS 1309-48-4)	TWA	10 mg/m3	Inhalable fraction.
US. NIOSH: Pocket Guide Components	to Chemical Hazards Type	Value	Form
Calcium oxide (CAS 1305-78-8)	TWA	2 mg/m3	
Ferric oxide (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.
Silica (CAS 7631-86-9)	TWA	6 mg/m3	
ogical limit values	No biological exposure limits noted for the ing	redient(s).	
ropriate engineering trols	Good general ventilation (typically 10 air chan should be matched to conditions. If applicable or other engineering controls to maintain airbo exposure limits have not been established, materials.	e, use process enclosu orne levels below reco	ıres, local exhaust ventila ımmended exposure limit

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Impervious gloves. Confirm with reputable supplier first. Hand protection

Other Wear appropriate chemical resistant clothing. As required by employer code.

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respiratory protection

Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134),

CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards Not applicable.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance Spheres Solid. Physical state Solid. **Form** White Color Odor Odorless Not available. Odor threshold Not available. рH Melting point/freezing point Not available.

Initial boiling point and boiling

range

> 4046 °F (> 2230 °C)

Pour point Not available. Not available. Specific gravity **Partition coefficient** Not available.

(n-octanol/water)

Flash point None

Evaporation rate Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Not available. Vapor pressure Not available. Vapor density Relative density Not available. Solubility(ies) Insoluble

> 698 °F (> 370 °C) **Auto-ignition temperature** Not available. **Decomposition temperature Viscosity** Not applicable

Other information

Not explosive. **Explosive properties Oxidizing properties** Not oxidizing.

10. Stability and Reactivity

This product may react with strong oxidizing agents. Reactivity

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Material is stable under normal conditions. Chemical stability

Conditions to avoid Do not mix with other chemicals.

Incompatible materials Phosphorus pentachloride. Chlorine trifluoride. Bromine pentafluoride. Acids. Halogens. Hazardous decomposition

No hazardous decomposition products are known. May include and are not limited to:

#31139

11. Toxicological Information

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Information on likely routes of exposure

Ingestion May cause stomach distress, nausea or vomiting.

Inhalation Prolonged inhalation may be harmful.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Coughing. Skin irritation. May cause redness and pain.

toxicological characteristics

Information on toxicological effects

Acute toxicity

Components Species Test Results

Aluminum oxide (CAS 1344-28-1)

Acute Dermal

LD50 Not available

Inhalation

LC50 Rat > 10 mg/L, 4 Hours, ECHA

> 2.3 mg/L, 4 Hours, ECHA > 0.9 mg/L, 4 Hours, ECHA

7.6 mg/L, 1 Hours

Oral

LD50 Rat > 15900 mg/kg, ECHA

> 15900 mg/kg, 14 days, ECHA> 10000 mg/kg, Sigma Aldrich

> 2000 mg/kg, ECHA

5000 mg/kg, EMD Millipore

Calcium oxide (CAS 1305-78-8)

Acute

Dermal

LD50 Rabbit > 2500 mg/kg, 24 Hours, ECHA

Inhalation

LC50 Rat > 6 mg/m3, 4 hours, ECHA

Oral

LD50 Rat > 2000 mg/kg, ECHA

790 mg/kg

Ferric oxide (CAS 1309-37-1)

Acute

Dermal

LD50 Not available

Inhalation

LC50 Rat > 5 mg/l/4h, ECHA

Oral

LD50 Rat > 5000 mg/kg, ECHA

Magnesium oxide (CAS 1309-48-4)

Acute

Dermal

LD50 Not available

Inhalation

LC50 Not available

Components Species Test Results

Oral

LD50 Rat 3990 mg/kg, Canada Colors

Silica (CAS 7631-86-9)

Acute

Dermal

LD50 Rabbit > 5000 mg/kg, 24 Hours, ECHA

> 2000 mg/kg, 24 Hours, ECHA

Inhalation

LC50 Rat > 58.8 mg/L, 4 Hours, ECHA

> 2.1 mg/L, 4 Hours, ECHA

> 0.7 mg/L, 4 Hours

> 0.1 mg/L, 4 Hours, ECHA

Oral

LD50 Rat > 5000 mg/kg, ECHA

Skin corrosion/irritation Causes skin irritation.

Exposure minutes Not available.
Erythema value Not available.
Oedema value Not available.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Corneal opacity value Not available.

Iris lesion value Not available.

Conjunctival reddening Not available.

value

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

Calcium oxide (CAS 1305-78-8) Irritant

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity See below.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ferric oxide (CAS 1309-37-1) Volume 1, Supplement 7 - 3 Not classifiable as to carcinogenicity

to humans.

Silica (CAS 7631-86-9) Volume 68 - 3 Not classifiable as to carcinogenicity to humans.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (CAS 14808-60-7)

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Teratogenicity Not available.

Specific target organ toxicity - Not classified.

single exposure

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components **Species Test Results**

Silica (CAS 7631-86-9)

IC50 440 mg/L, 72 Hours Algae Algae EC50 Crustacea Daphnia 7600 mg/L, 48 Hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available. Mobility in soil No data available. Not available. Mobility in general

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification

Classification Method: Classified as per Part 2, Sections 2.1 - 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada CEPA Schedule I: Listed substance

Aluminum oxide (CAS 1344-28-1) Listed. Ferric oxide (CAS 1309-37-1) Listed. Magnesium oxide (CAS 1309-48-4) Listed. Canada Priority Substances List (Second List): Listed substance

Aluminum oxide (CAS 1344-28-1) Listed. Ferric oxide (CAS 1309-37-1) Listed. Magnesium oxide (CAS 1309-48-4) Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All chemicals used are on the TSCA inventory.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely

hazardous substance

No

No

SARA 311/312 Hazardous chemical

SARA 313 (TRI reporting)

Chemical name CAS number % by wt. Aluminum oxide 1344-28-1 1-5*

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations

See below

US - California Hazardous Substances (Director's): Listed substance

Aluminum oxide (CAS 1344-28-1) Listed. Calcium oxide (CAS 1305-78-8) Listed. Ferric oxide (CAS 1309-37-1) Listed. Magnesium oxide (CAS 1309-48-4) Listed. Silica (CAS 7631-86-9) Listed.

US - Minnesota Haz Subs: Listed substance

Listed. Aluminum oxide (CAS 1344-28-1) Calcium oxide (CAS 1305-78-8) Listed. Ferric oxide (CAS 1309-37-1) Listed. Magnesium oxide (CAS 1309-48-4) Listed. Silica (CAS 7631-86-9) Listed.

US - New Jersey RTK - Substances: Listed substance

Aluminum oxide (CAS 1344-28-1) Calcium oxide (CAS 1305-78-8) Ferric oxide (CAS 1309-37-1) Magnesium oxide (CAS 1309-48-4) Silica (CAS 7631-86-9)

US - Texas Effects Screening Levels: Listed substance

Aluminum oxide (CAS 1344-28-1) Listed. Calcium oxide (CAS 1305-78-8) Listed. Ferric oxide (CAS 1309-37-1) Listed. Magnesium oxide (CAS 1309-48-4) Listed. Silica (CAS 7631-86-9) Listed.

US. Massachusetts RTK - Substance List

Aluminum oxide (CAS 1344-28-1) Calcium oxide (CAS 1305-78-8) Ferric oxide (CAS 1309-37-1) Magnesium oxide (CAS 1309-48-4) Silica (CAS 7631-86-9)

US. New Jersey Worker and Community Right-to-Know Act

Aluminum oxide (CAS 1344-28-1)

US. Pennsylvania Worker and Community Right-to-Know Law

Aluminum oxide (CAS 1344-28-1) Calcium oxide (CAS 1305-78-8) Ferric oxide (CAS 1309-37-1) Magnesium oxide (CAS 1309-48-4) Silica (CAS 7631-86-9)

US. Rhode Island RTK

Aluminum oxide (CAS 1344-28-1)

Calcium oxide (CAS 1305-78-8) Ferric oxide (CAS 1309-37-1) Magnesium oxide (CAS 1309-48-4)

US. California Proposition 65



WARNING: This product can expose you to Silica, crystalline, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (CAS 14808-60-7) Listed: October 1, 1988

Inventory status

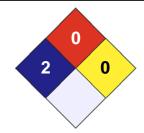
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Version #

Effective date 21-August-2019

Prepared by Nu-Calgon Technical Service Phone: (314) 469-7000

Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the

document.