

SAFETY DATA SHEET

	1. Product and Company I		
Product identifier	pH-Treat Condensate Neutralization N	Media (4720-10, 4720-11, 4720-12, 4720-13)	
Other means of identification	Not available		
Recommended use	For use in Condensate Neutralizers		
Recommended restrictions	None known.		
Manufacturer information	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CF	HEMTREC)	
Supplier	See above.		
	2. Hazards Identific	cation	
Physical hazards	Not classified.		
Health hazards	Skin corrosion/irritation	Category 2	
	Serious eye damage/eye irritation	Category 2	
Environmental hazards	Not classified.		
WHMIS 2015 defined hazards	Not classified		
Label elements			
Signal word	Warning		
Hazard statement	Causes skin irritation. Causes serious e	ye irritation.	
Precautionary statement			
Prevention	Wash thoroughly after handling. Wear p	rotective gloves. Wear eye protection.	
Response	irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water	Specific treatment (see information on this label). If skin Take off contaminated clothing and wash it before reuse. r for several minutes. Remove contact lenses, if present irritation persists: Get medical advice/attention.	
Storage	Store away from incompatible materials.		
Disposal	Dispose of container in accordance with	local, regional, national and international regulations.	
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known		
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	None.		
	3. Composition/Information	an Ingradianta	

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.

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 presen and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.	
Ingestion	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	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.	
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.	
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. s	
Fire-fighting equipment/instructions	Use water spray to cool unopened containers.	
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.	
General fire hazards	No unusual fire or explosion hazards noted.	
Hazardous combustion products	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	The product is immiscible with water and will spread on the water surface.	
containment and cleaning up	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.	

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/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 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. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

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/or fume.
	TWA	3 mg/m3	Respirable dust and/or fume.
		10 mg/m3	Inhalable fume.
Silica (CAS 7631-86-9)	TWA	4 mg/m3	Total
		1.5 mg/m3	Respirable.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

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.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Туре	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 of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Туре	Value	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 1309-37-1)	TWA	5 mg/m3	Dust and fume.	
		10 mg/m3	Total dust.	

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4720-10, 4720-11, 4720-12, 4720-13 (Canada/US GHS)

Components	linistry of Labor - Regulation Respectin 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	s for Air Contaminants (29 CFR 1910.1	000)	
Components	Туре	Value	Form
Aluminum oxide (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		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	Туре	Value	Form
Aluminum oxide (CAS 1344-28-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Ferric oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
1309-37-1)		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Magnesium oxide (CAS 1309-48-4)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
	T 14/4	15 mppcf	Respirable fraction.
Silica (CAS 7631-86-9)	TWA	0.8 mg/m3 20 mppcf	
US. ACGIH Threshold Lim			F
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	or the ingredient(s).	
ropriate engineering rols	Good general ventilation (typically 10 should be matched to conditions. If a or other engineering controls to main exposure limits have not been establ	air changes per hour) should pplicable, use process enclosu tain airborne levels below reco	rres, local exhaust ventilati mmended exposure limits.
	s, such as personal protective equipm		

Skin protection	
Hand protection	Impervious gloves. Confirm with reputable supplier first.
Other	Wear appropriate chemical resistant clothing. As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. 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
Physical state	Solid.
Form	Solid.
Color	White
Odor	Odorless
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 4046 °F (> 2230 °C)
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	None
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Insoluble
Auto-ignition temperature	> 698 °F (> 370 °C)
Decomposition temperature	Not available.
Viscosity	Not applicable
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and Reactivity

Reactivity Possibility of hazardous reactions	This product may react with strong oxidizing agents. No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Phosphorus pentachloride. Chlorine trifluoride. Bromine pentafluoride. Acids. Halogens.
Hazardous decomposition products	No hazardous decomposition products are known. May include and are not limited to:

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.		
Information on likely routes of ex	kposure		
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 toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. Skin irritation. May cause redness and pain.		
Information on toxicological effe	cts		
Acute toxicity			
Components	Species	Test Results	
Aluminum oxide (CAS 1344-28-1) Acute Dermal	Not available		
LD50	Not available		
Inhalation LC50	Rat	> 10 mg/L, 4 Hours, ECHA	
2030	Nat	-	
		> 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	
LDSU	Nat		
		> 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	Pot		
	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
<i>Oral</i> LD50	Rat		3990 mg/kg, Canada Colors
	Nat		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. Not available.		
Exposure minutes Erythema value	Not available.		
Oedema value	Not available.		
Serious eye damage/eye	Causes serious eye irritation.		
irritation	Causes serious eye imation.		
Corneal opacity value	Not available.		
Iris lesion value	Not available.		
Conjunctival reddening value	Not available.		
Conjunctival oedema value	Not available.		
Recover days	Not available.		
Respiratory or skin sensitization			
Canada - Alberta OELs: Irrita			
Calcium oxide (CAS 1305		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 E			
Ferric oxide (CAS 1309-3	7-1)	Volume 1, Suppleme to humans.	ent 7 - 3 Not classifiable as to carcinogenicity
Silica (CAS 7631-86-9) US - California Proposition 6	5 - CRT: Listed date/Carcinog	Volume 68 - 3 Not cla	assifiable as to carcinogenicity to humans.
Crystalline silica (CAS 14	308-60-7)		
Reproductive toxicity	This product is not expected to	o cause reproductive o	r developmental effects.
Teratogenicity	Not available.		
Specific target organ toxicity - single exposure	Not classified.		
Specific target organ toxicity - repeated exposure	Not classified.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	Prolonged inhalation may be h	narmful.	
	12. Ecologic	al Information	
Ecotoxicity	See below		

Ecotoxicity

See below

Ecotoxicological data Components		Species	Test Results
Silica (CAS 7631-86-9)	1050		440 mg/ 72 Hours
Algae	IC50	Algae	440 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7600 mg/L, 48 Hours
Persistence and degradability	No data is	available on the degradability	of this product.
Bioaccumulative potential	No data av	vailable.	
Mobility in soil	No data av	/ailable.	
Mobility in general	Not availal	ble.	
Other adverse effects			(e.g. ozone depletion, photochemical ozone creation arming potential) are expected from this component.
		13. Disposal Conside	erations
Disposal instructions	Dispose of	f contents/container in accord	ance with local/regional/national/international regulations.
Local disposal regulations	Dispose in	accordance with all applicab	le regulations.
Hazardous waste code	The waste disposal co		discussion between the user, the producer and the waste
Naste from residues / unused Dispose of in accordance with local regulations. Empty containers or liners may retain some products Disposal instructions).			
Contaminated packaging			oduct residue, follow label warnings even after container is ken to an approved waste handling site for recycling or
		14. Transport Inform	nation
Transport of Dangerous Goods (TDG) Proof of Classification	Dangerous		Part 2, Sections $2.1 - 2.8$ of the Transportation of cable, the technical name and the classification of the
U.S. Department of Transportati	ion (DOT)		
Not regulated as dangerous g	goods.		
Transportation of Dangerous G	oods (TDG -	Canada)	
Not regulated as dangerous g	goods.		
		15. Regulatory Infor	mation
Canadian federal regulations		ict has been classified in acco Il the information required by	rdance with the hazard criteria of the HPR and the SDS the HPR.
Canada CEPA Schedule I: L			
Aluminum oxide (CAS 13	344-28-1)	Listed.	
Ferric oxide (CAS 1309-37-1)		Listed.	
Magnesium oxide (CAS Canada Priority Substances		Listed.	
Aluminum oxide (CAS 13	•	Listed.	
Ferric oxide (CAS 1309-3		Listed.	
Magnesium oxide (CAS		Listed.	
Export Control List (CEPA 1	1999, Schedi	ule 3)	
Not listed. Greenhouse Gases			
Not listed. Precursor Control Regulation	ons		
Not regulated.			
WHMIS 2015 Exemptions	Not applica		
US federal regulations		ict is a "Hazardous Chemical" 29 CFR 1910.1200.	as defined by the OSHA Hazard Communication
	All chemic	als used are on the TSCA inv	entory.
TSCA Section 12(b) Export Not regulated.	Notification	(40 CFR 707, Subpt. D)	

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No		
SARA 302 Extremely	No		
hazardous substance			
SARA 311/312 Hazardous chemical	No		
SARA 313 (TRI reporting) Chemical name		CAS number	% by wt.
Aluminum oxide		1344-28-1	1-5*
her federal regulations			
Clean Air Act (CAA) Sectio	n 112 Hazardous Air Polluta	nts (HAPs) List	
Not regulated. Clean Air Act (CAA) Sectio	n 112(r) Accidental Release	Prevention (40 CFR	68.130)
Not regulated.			
S state regulations	See below		
	ous Substances (Director's):	Listed substance	
Aluminum oxide (C	/	Listed.	
Calcium oxide (CAS	,	Listed.	
Ferric oxide (CAS 1 Magnesium oxide (Listed. Listed.	
Silica (CAS 7631-8		Listed.	
US - Minnesota Haz Su	,	2.01001	
Aluminum oxide (C	AS 1344-28-1)	Listed.	
Calcium oxide (CAS	\$ 1305-78-8)	Listed.	
Ferric oxide (CAS 1		Listed.	
Magnesium oxide (,	Listed.	
Silica (CAS 7631-8	Substances: Listed substar	Listed.	
Aluminum oxide (C			
Calcium oxide (CAS			
Ferric oxide (CAS 1			
Magnesium oxide (
Silica (CAS 7631-8			
US - Texas Effects Scr	eening Levels: Listed substa	ance	
Aluminum oxide (C	,	Listed.	
Calcium oxide (CAS		Listed. Listed.	
Ferric oxide (CAS 1 Magnesium oxide (Listed.	
Silica (CAS 7631-8	,	Listed.	
US. Massachusetts RT			
Aluminum oxide (C	AS 1344-28-1)		
Calcium oxide (CAS			
Ferric oxide (CAS 1			
Magnesium oxide (Silica (CAS 7631-8			
,	r and Community Right-to-K	now Act	
Aluminum oxide (C			
	ker and Community Right-to	-Know Law	
Aluminum oxide (C			
Calcium oxide (CAS	,		
Ferric oxide (CAS 1			
Magnesium oxide (CAS 1309-48-4)		
Silica (CAS 7631-8 US. Rhode Island RTK	6-9)		

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)

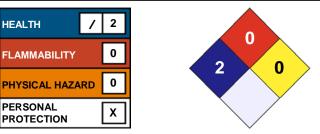
Listed: October 1, 1988

Inventory status

Country(s) or region	Inventory name On invento	ry (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 compor	nents of this product comply with the inventory requirements administered by the governing country(s	5)

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

16. Other Information



Disclaimer

Issue date

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.
04-September-2022

Version #	0
Effective date	04-September-2022
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.