

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: November 2017

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier

Product Name: Mixed Nitrating Acid, Less Than 50% (HNO $_3$)

Intended Use of the Product Not available

Name, Address, and Telephone of the Responsible Party

Company

LSB Chemical L.L.C. 4500 North West Ave. P.O. Box 231 El Dorado, AR 71731 T (870) 863-1400 - F (870) 863-1126 Emergency Telephone Number

Emergency number : (870) 863-1400, (800) 424-9300 (CHEMTREC, 24 hours)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

 Classification
 (GHS-US)

 Ox. Liq. 3
 H272

 Met. Corr. 1
 H290

 Skin Corr. 1A
 H314

 Eye Dam. 1
 H318

 Carc. 1A
 H350

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)	: Danger
Hazard Statements (GHS-US)	 H272 - May intensify fire; oxidizer H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage H350 - May cause cancer
Precautionary Statements (GHS-US)	 P350 - May Cause Calleer P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, sparks, open flames, hot surfaces No smoking P220 - Keep/Store away from extremely high or low temperatures, ignition sources, combustible materials, incompatible materials. P221 - Take any precaution to avoid mixing with incompatible materials, ignition sources, combustible materials. P234 - Keep only in original container. P260 - Do not breathe vapors, mist, spray. P264 - Wash hands, forearms, and other exposed areas thoroughly after handling. P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection. P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment (see section 4).
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use appropriate media for extinction.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. May cause or intensify fire; oxidizer. When heated to decomposition, emits toxic fumes. Contact with metals may evolve flammable hydrogen gas.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Substances</u>

<u>Mixture</u>

Name	Product identifier	% (w/w)	Classification (GHS-US)
Nitric acid	(CAS No) 7697-37-2	30 – 50	Ox. Liq. 3, H272
			Met. Corr. 1, H290
			Skin Corr. 1A, H314
			Eye Dam. 1, H318
Sulfuric acid	(CAS No) 7664-93-9	50 - 70	Skin Corr. 1A, H314
			Eye Dam. 1, H318
			Carc. 1A, H350
			Met. Corr. 1, H290

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call for medical assistance.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Immediately call for medical assistance. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call for medical assistance.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call for medical assistance.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes severe skin burns and eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. May cause cancer.

Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns. May cause cancer by inhalation of mists.

Skin Contact: Causes severe irritation which will progress to chemical burns.

Eye Contact: Causes serious eye damage.

Ingestion: Contact may cause immediate severe irritation progressing quickly to chemical burns. Ingestion is likely to be harmful or have adverse effects.

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Chronic Symptoms: May cause erosion of the teeth, or chronic bronchitis.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide, dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire. Evolution of heat and spattering will result.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: May intensify fire; oxidizer. Will burn if exposed to heat, and in addition, will accelerate the burning of other combustibles, resulting in more rapid spread of fire.

Explosion Hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. In contact with metals, emits flammable/explosive gas. May cause fire or explosion; strong oxidizer.

Reactivity: Thermal decomposition generates : toxic/corrosive vapors. Can react explosively with reducing agents, metal powders, hydrogen sulfide, nitrate, and organic materials. Contact with metals may evolve flammable hydrogen gas.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. **Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Nitrogen oxides, acrid vapors, sulfur oxides, corrosive vapors.

Other information: Do not allow run-off from fire fighting to enter drains or water courses. Contact with metals may evolve flammable hydrogen gas. Use water spray to disperse vapors.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do NOT breathe (vapors, mist, spray). Avoid all contact with skin, eyes, or clothing. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Cautiously neutralize spilled liquid. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Cautiously neutralize spilled liquid. Contact competent authorities after a spill.

Reference to Other Sections

See section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals. When heated to decomposition, emits toxic fumes. Corrosive vapors are released. Contact with metals may evolve flammable hydrogen gas.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

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Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place. Keep/Store away from extremely high or low temperatures, direct sunlight, heat, ignition sources, combustible materials, incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Finely divided metals. Hydrogen sulfide. Reducing agents. Organic materials.

Specific End Use(s) Not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

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Nova ScotiaOEL STEL (ppm)4 ppmNova ScotiaOEL TWA (ppm)2 ppmNunavutOEL STEL (mg/m³)10 mg/m³NunavutOEL STEL (ppm)4 ppm	Newfoundland & Labrador	OEL STEL (ppm)	4 ppm
Nova ScotiaOEL TWA (ppm)2 ppmNunavutOEL STEL (mg/m³)10 mg/m³NunavutOEL STEL (ppm)4 ppm	Newfoundland & Labrador	OEL TWA (ppm)	2 ppm
Nunavut OEL STEL (mg/m³) 10 mg/m³ Nunavut OEL STEL (ppm) 4 ppm	Nova Scotia	OEL STEL (ppm)	4 ppm
Nunavut OEL STEL (ppm) 4 ppm	Nova Scotia	OEL TWA (ppm)	2 ppm
	Nunavut	OEL STEL (mg/m ³)	10 mg/m ³
Nunavut OFLTWA (mg/m ³) 5.2 mg/m ³	Nunavut	OEL STEL (ppm)	4 ppm
	Nunavut	OEL TWA (mg/m³)	5.2 mg/m ³
Nunavut OEL TWA (ppm) 2 ppm	Nunavut	OEL TWA (ppm)	2 ppm
Northwest Territories OEL STEL (mg/m ³) 10 mg/m ³	Northwest Territories	OEL STEL (mg/m³)	10 mg/m ³
Northwest TerritoriesOEL STEL (ppm)4 ppm	Northwest Territories	OEL STEL (ppm)	
Northwest TerritoriesOEL TWA (mg/m³)5.2 mg/m³	Northwest Territories		5.2 mg/m ³
Northwest Territories OEL TWA (ppm) 2 ppm	Northwest Territories		2 ppm
Ontario OEL STEL (ppm) 4 ppm	Ontario	OEL STEL (ppm)	4 ppm

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Ontario	OEL TWA (ppm)	2 ppm
Prince Edward Island	OEL STEL (ppm)	4 ppm
Prince Edward Island	OEL TWA (ppm)	2 ppm
Québec	VECD (mg/m ³)	10 mg/m ³
Québec	VECD (hig) in)	4 ppm
Québec	VEMP (mg/m ³)	5.2 mg/m ³
Québec	VEMP (ppm)	2 ppm
Saskatchewan	OEL STEL (ppm)	4 ppm
Saskatchewan	OEL TWA (ppm)	2 ppm
Yukon	OEL STEL (mg/m ³)	10 mg/m ³
Yukon	OEL STEL (ppm)	4 ppm
Yukon	OEL TWA (mg/m³)	5 mg/m ³
Yukon	OEL TWA (ppm)	2 ppm
Sulfuric acid (7664-93-9)		
Mexico	OEL TWA (mg/m³)	1 mg/m ³
USA ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³
USA IDLH	US IDLH (mg/m ³)	15 mg/m ³
Alberta	OEL STEL (mg/m ³)	3 mg/m ³
Alberta	OEL TWA (mg/m³)	1 mg/m ³
British Columbia	OEL TWA (mg/m³)	0.2 mg/m ³ (Thoracic, contained in strong inorganic acid
		mists)
Manitoba	OEL TWA (mg/m³)	0.2 mg/m ³
New Brunswick	OEL STEL (mg/m ³)	3 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	1 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.2 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	0.2 mg/m ³
Nunavut	OEL STEL (mg/m ³)	3 mg/m ³
Nunavut	OEL TWA (mg/m ³)	1 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	3 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	1 mg/m ³
Ontario	OEL TWA (mg/m ³)	0.2 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	0.2 mg/m ³
Québec	VECD (mg/m ³)	3 mg/m ³
Québec	VEMP (mg/m ³)	1 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	0.6 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	0.2 mg/m ³
Yukon	OEL STEL (mg/m ³)	1 mg/m ³
Yukon	OEL TWA (mg/m ³)	1 mg/m ³

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use explosion-proof equipment. Ensure all national/local regulations are observed. Alarm detectors should be used when toxic gases may be released. Gas detectors should be used when flammable gases/vapors may be released.

Personal Protective Equipment: Gloves. Respiratory protection of the dependent type. Protective goggles. Protective clothing.



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Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosion-proof clothing. Wear fire/flame

resistant/retardant clothing.

Hand Protection: Wear chemically resistant protective gloves. Acid-resistant protective gloves.

Eye Protection: Chemical goggles or face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Colorless,Light yellow
Odor	:	Acrid, choking
Odor Threshold	:	Not available
рН	:	<1
Relative Evaporation Rate (butylacetate=1)	:	~1
Melting Point	:	Not available
Freezing Point	:	-41.1°C (-42°F) (Nitric acid 98%), -1.11°C (30°F) (Sulfuric acid 98%)
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	51 mmHg @25°C (77°F) (Nitric Acid 98%), <0.3 mmHg @252°C (485.6°F) (Sulfuric Acid 98%)
Relative Vapor Density at 20 °C	:	<1 (Nitric Acid), 3.4 (Sulfuric Acid)
Relative Density	:	Not available
Specific Gravity	:	1.5 - 1.8
Solubility	:	Miscible.
Viscosity	:	1.0cp @20°C (68°F) (Nitric Acid 98%), 25.0cp @20°C (68°F) (Sulfuric acid 98%)
Volatility	:	100%
Explosion Data – Sensitivity to Mechanical Impact	:	Not available
Explosion Data – Sensitivity to Static Discharge	:	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Thermal decomposition generates : Toxic/Corrosive vapors. Can react explosively with reducing agents, metal powders, Hydrogen sulfide, nitrate, and organic materials. Contact with metals may evolve flammable hydrogen gas.

Chemical Stability: May intensify fire; oxidizer.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Overheating. Open flame. Incompatible materials. Adding water to acid should be avoided.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Metals. May be corrosive to metals. Reducing agents. Amines. Combustible materials.

Hazardous Decomposition Products: Thermal decomposition generates : Corrosive vapors. Nitrogen oxides. Sulfur oxides. Explosive hydrogen gas. Toxic vapors.

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SECTION 11: TOXICOLOGICAL INFORMATION **Information on Toxicological Effects - Product** Acute Toxicity: Not classified. LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Causes severe skin burns and eye damage.pH: < 1 Serious Eye Damage/Irritation: Causes serious eye damage. pH: < 1 Respiratory or Skin Sensitization: Not classified Germ Cell Mutagenicity: Not classified Teratogenicity: Not available Carcinogenicity: Inhalation of mists containing sulfuric acid may cause cancer. Specific Target Organ Toxicity (Repeated Exposure): Not classified Reproductive Toxicity: Not classified Specific Target Organ Toxicity (Single Exposure): Not classified Aspiration Hazard: Not classified Symptoms/Injuries After Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns. May cause cancer by inhalation of mists. Symptoms/Injuries After Skin Contact: Causes severe irritation which will progress to chemical burns. Symptoms/Injuries After Eye Contact: Causes serious eye damage. Symptoms/Injuries After Ingestion: Contact may cause immediate severe irritation progressing quickly to chemical burns. Ingestion is likely to be harmful or have adverse effects. Chronic Symptoms: May cause erosion of the teeth, or chronic bronchitis. Information on Toxicological Effects - Ingredient(s) LD50 and LC50 Data: Nitric acid (7697-37-2) LC50 Inhalation Rat (mg/l) 0.13 mg/l (Exposure time: 4 h) 67 ppm/4h LC50 Inhalation Rat (ppm) Sulfuric acid (7664-93-9) LD50 Oral Rat 2140 mg/kg

Sulfuric acid (7664-93-9)

LC50 Inhalation Rat (mg/l)

IARC Group

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified

Sulfuric acid (7664-93-9) LC50 Fish 1

500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])

510 mg/m³ (Exposure time: 2 h)

Persistence and Degradability

Mixed Nitrating Acid, Less Than 50% (HNO3)Persistence and DegradabilityNot established.

Bioaccumulative Potential

Mixed Nitrating Acid, Less Than 50% (HNO ₃)	
Bioaccumulative Potential	Not established.
Nitric acid (7697-37-2)	
Log Pow	-2.3 (at 25 °C)
Sulfuric acid (7664-93-9)	
BCF fish 1	(no bioaccumulation)

1

Mobility in Soil Not available

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Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT	-		
Proper Shipping Name	:	NITRATING ACID MIXTURES with not more than 50)% nitric acid
Hazard Class	:	8	
Identification Number	:	UN1796	
Label Codes	:	8	
Packing Group	:	II	
ERG Number	:	157	
14.2 In Accordance with IMD	G		
Proper Shipping Name	:	NITRATING ACID MIXTURE	
Hazard Class	:	8	
Identification Number	:	UN1796	
Packing Group	:	11	
Label Codes	:	8	
EmS-No. (Fire)	:	F-A	
EmS-No. (Spillage)	:	S-B	
14.3 In Accordance with IATA	4		
Proper Shipping Name	:	NITRATING ACID MIXTURE	
Packing Group	:	11	
Identification Number	:	UN1796	
Hazard Class	:	8	
Label Codes	:	8	
ERG Code (IATA)	-	8L	
14.4 In Accordance with TDG	ì		
Proper Shipping Name	:	NITRATING ACID MIXTURE	
Packing Group	:	11	
Hazard Class	:	8	
Identification Number	:	UN1796	
Label Codes	:	8	
SECTION 15: REGULATORY	4	NFORMATION	

US Federal Regulations

Mixed Nitrating Acid, Less Than 50% (HNO₃)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Reactive hazard
	Delayed (chronic) health hazard
Nitric acid (7697-37-2)	
Listed on the United States TSCA (Toxic Substances Control Ac	t) inventory
Listed on SARA Section 302 (Specific toxic chemical listings)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	1.0 %
Sulfuric acid (7664-93-9)	
Listed on the United States TSCA (Toxic Substances Control Ac	t) inventory

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Listed on SARA Section 302 (Specific toxic chemical listings)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other
	airborne forms of any particle size)
US State Regulations	
Sulfuric acid (7664-93-9)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.
Nitric acid (7697-37-2)	
U.S California - SCAQMD - Toxic Air Contaminants - Non-Cano	cer Acute
U.S California - SCAQMD - Toxic Air Contaminants With Prope	osed Risk Values
U.S California - Toxic Air Contaminant List (AB 1807, AB 2728	
U.S Connecticut - Hazardous Air Pollutants - HLVs (30 min)	
U.S Connecticut - Hazardous Air Pollutants - HLVs (8 hr)	
U.S Delaware - Accidental Release Prevention Regulations - S	ufficient Quantities
U.S Delaware - Accidental Release Prevention Regulations - T	
U.S Delaware - Accidental Release Prevention Regulations - T	
U.S Delaware - Pollutant Discharge Requirements - Reportab	
U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptabl	
U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission I	Levels (ELs)
U.S Idaho - Occupational Exposure Limits - TWAs	
U.S Illinois - Toxic Air Contaminants	
U.S Louisiana - Reportable Quantity List for Pollutants	
U.S Massachusetts - Oil & Hazardous Material List - Groundw	
U.S Massachusetts - Oil & Hazardous Material List - Groundw	
U.S Massachusetts - Oil & Hazardous Material List - Reportab	-
U.S Massachusetts - Oil & Hazardous Material List - Soil Repo	
U.S Massachusetts - Oil & Hazardous Material List - Soil Repo	rtable Concentration - Reporting Category 2
U.S Massachusetts - Right To Know List U.S Massachusetts - Toxics Use Reduction Act	
U.S Michigan - Occupational Exposure Limits - STELs	
U.S Michigan - Occupational Exposure Limits - STELS	
U.S Michigan - Polluting Materials List	
U.S Michigan - Process Safety Management Highly Hazardous	s Chemicals
U.S Minnesota - Chemicals of High Concern	
U.S Minnesota - Hazardous Substance List	
U.S Minnesota - Permissible Exposure Limits - STELs	
U.S Minnesota - Permissible Exposure Limits - TWAs	
U.S New Hampshire - Regulated Toxic Air Pollutants - Ambier	nt Air Levels (AALs) - 24-Hour
U.S New Hampshire - Regulated Toxic Air Pollutants - Ambier	
U.S New Jersey - Discharge Prevention - List of Hazardous Sul	
U.S New Jersey - Environmental Hazardous Substances List	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S New Jersey - Special Health Hazards Substances List	
U.S New Jersey - TCPA - Extraordinarily Hazardous Substance	s (EHS)
U.S New York - Occupational Exposure Limits - TWAs	
U.S New York - Reporting of Releases Part 597 - List of Hazard	dous Substances
U.S North Carolina - Control of Toxic Air Pollutants	
U.S North Dakota - Air Pollutants - Guideline Concentrations	
U.S North Dakota - Air Pollutants - Guideline Concentrations	
U.S Ohio - Accidental Release Prevention - Threshold Quantit	ies

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U.S Ohio - Extremely Hazardous Substances - Threshold Quantities
U.S Oregon - Permissible Exposure Limits - TWAs
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
U.S Rhode Island - Air Toxics - Acceptable Ambient Levels - 1-Hour
U.S South Carolina - Toxic Air Pollutants - Maximum Allowable Concentrations
U.S South Carolina - Toxic Air Pollutants - Pollutant Categories
U.S Tennessee - Occupational Exposure Limits - STELs
U.S Tennessee - Occupational Exposure Limits - TWAs
U.S Texas - Effects Screening Levels - Long Term
U.S Texas - Effects Screening Levels - Short Term
U.S Vermont - Permissible Exposure Limits - STELs
U.S Vermont - Permissible Exposure Limits - TWAs
U.S Washington - Permissible Exposure Limits - STELs
U.S Washington - Permissible Exposure Limits - TWAs
U.S Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet
U.S Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet
U.S Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater
U.S Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet
U.S Wyoming - Process Safety Management - Highly Hazardous Chemicals
Sulfuric acid (7664-93-9)
Strong inorganic acid mists containing sulfuric acid are present on the State of California list of Chemicals Known to the State to
Cause Cancer or Reproductive Toxicity (Cal Prop 65).
U.S California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute
U.S California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute U.S California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic
U.S California - Toxic Air Contaminant List (AB 1807, AB 2728)
U.S Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities
U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S Idaho - Occupational Exposure Limits - TWAs
U.S Illinois - Toxic Air Contaminant Carcinogens
U.S Illinois - Toxic Air Contaminants
U.S Louisiana - Reportable Quantity List for Pollutants
U.S Maine - Air Pollutants - Hazardous Air Pollutants
U.S Massachusetts - Allowable Ambient Limits (AALs)
U.S Massachusetts - Allowable Threshold Concentrations (ATCs)
U.S Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
U.S Massachusetts - Oil & Hazardous Material List - Reportable Quantity
U.S Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
U.S Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
U.S Massachusetts - Right To Know List
U.S Massachusetts - Threshold Effects Exposure Limits (TELs)
U.S Massachusetts - Toxics Use Reduction Act
U.S Michigan - Occupational Exposure Limits - TWAs
U.S Michigan - Polluting Materials List
U.S Minnesota - Chemicals of High Concern
U.S Minnesota - Hazardous Substance List
U.S Minnesota - Permissible Exposure Limits - TWAs
U.S New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour

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U.S New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
U.S New Jersey - Discharge Prevention - List of Hazardous Substances
U.S New Jersey - Environmental Hazardous Substances List
U.S New Jersey - Right to Know Hazardous Substance List
U.S New Jersey - Special Health Hazards Substances List
U.S New York - Occupational Exposure Limits - TWAs
U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances
U.S North Carolina - Control of Toxic Air Pollutants
U.S North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour
U.S Ohio - Extremely Hazardous Substances - Threshold Quantities
U.S Oregon - Permissible Exposure Limits - TWAs
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List
U.S Rhode Island - Air Toxics - Acceptable Ambient Levels - 1-Hour
U.S Rhode Island - Air Toxics - Acceptable Ambient Levels - Annual
U.S South Carolina - Toxic Air Pollutants - Maximum Allowable Concentrations
U.S South Carolina - Toxic Air Pollutants - Pollutant Categories
U.S Tennessee - Occupational Exposure Limits - TWAs
U.S Texas - Effects Screening Levels - Long Term
U.S Texas - Effects Screening Levels - Short Term
U.S Vermont - Permissible Exposure Limits - TWAs
U.S Washington - Permissible Exposure Limits - STELs
U.S Washington - Permissible Exposure Limits - TWAs
U.S Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet
U.S Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet
U.S Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater
U.S Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

Canadian Regulations

Mixed Nitrating Acid, Less	s Than 50% (HNO₃)
WHMIS Classification	Class E - Corrosive Material
	Class C - Oxidizing Material
	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Nitric acid (7697-37-2)	
Listed on the Canadian DS	L (Domestic Substances List) inventory.
Listed on the Canadian Inc	redient Disclosure List
Listed on the Canadian mg	
WHMIS Classification	Class C - Oxidizing Material
	Class C - Oxidizing Material
WHMIS Classification Sulfuric acid (7664-93-9)	Class C - Oxidizing Material Class E - Corrosive Material
WHMIS Classification Sulfuric acid (7664-93-9)	Class C - Oxidizing Material Class E - Corrosive Material L (Domestic Substances List) inventory.
WHMIS Classification Sulfuric acid (7664-93-9) Listed on the Canadian DS	Class C - Oxidizing Material Class E - Corrosive Material L (Domestic Substances List) inventory.
WHMIS Classification Sulfuric acid (7664-93-9) Listed on the Canadian DS Listed on the Canadian Ing	Class C - Oxidizing Material Class E - Corrosive Material L (Domestic Substances List) inventory. gredient Disclosure List

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: OTHER INF	ORMATION
Revision date	November 2017
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
GHS Full Text Phrases:	
Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1

	Met. Corr. 1	Corrosive to metals Category 1
	Ox. Liq. 3	Oxidizing liquids Category 3
-	Skin Corr. 1A	Skin corrosion/irritation Category 1A
-	H272	May intensify fire; oxidizer
	H290	May be corrosive to metals
	H314	Causes severe skin burns and eye damage
-	H318	Causes serious eye damage
-	H350	May cause cancer
NFPA I	Health Hazard :	3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
NFPA I	Fire Hazard :	0 - Materials that will not burn.
NFPA I	Reactivity	1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.
NFPA S	Specific Hazard :	OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.
Party F	Responsible for the Preparation	of This Document
LSB Ch	emical L.L.C.	
	721 vr	

P.O. Box 231 El Dorado, AR 71731 (870) 863-1400

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS