According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and According to The Hazardous Products Regulation (February 11, 2015) and their amendments.

Section 1: IDENTIFICATION

Product Name:	Mixed Nitrating Acid, Greater Than 50% (HNO3)
Synonym(s):	Not available.
Product Use:	Industrial.
Restrictions on Use:	None.
Manufacturer/Supplier:	LSB Chemical, LLC 3503 NW 63rd Street Suite 500 Oklahoma City, OK 73116
Website:	www.lsbindustries.com
Email:	lsbproductsupport@lsbindustries.com
Phone Number:	(405) 235-4546
Emergency Phone:	24 Hour Emergency Telephone Number: 1-800-424-9300 (CHEMTREC)
Date of Preparation of SDS:	January 15, 2026

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification:
Oxidizing Liquids, Category 2
Corrosive to Metals, Category 1
Acute Toxicity - Inhalation, Category 3
Skin Corrosion, Category 1A
Eye Damage, Category 1
Carcinogenicity, Category 1A
Health Hazards Not Otherwise Classified, Category 1

LABEL ELEMENTS

Hazard Pictogram(s):

Signal Word: Danger

Hazard Statements:
H272: May intensify fire; oxidizer.
H290: May be corrosive to metals.
H331: Toxic if inhaled.
H318: Causes severe skin burns and eye damage.
H350: May cause cancer.
Causes burns to the respiratory tract.

Precautionary Statements

Prevention:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220: Keep away from clothing and other combustible materials.
P234: Keep only in original packaging.
P260: Do not breathe mist, vapours, or spray.
P264: Wash hands thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves, protective clothing, eye protection and face protection.

Response: P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 attention.
P310: Immediately call a POISON CENTER or doctor.
P363: Wash contaminated clothing before reuse.
P370 + P378: In case of fire: Use CO2, dry chemical, dry sand, alcohol-resistant foam to extinguish.
P390: Absorb spillage to prevent material damage.

Storage: P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P406: Store in corrosive resistant container with a resistant inner liner.

Disposal: P501: Dispose of contents and container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Nitric acid	Not available.	7697-37-2	> 50
Sulfuric acid	Oleum 25%	7664-93-9	< 50

Section 4: FIRST-AID MEASURES

Inhalation:

If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor.

Acute and delayed symptoms and effects: Toxic if inhaled. Causes burns to the respiratory tract. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.

Eye Contact:

If in eyes: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

Acute and delayed symptoms and effects: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin Contact:

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or use water-based safety shower for extended periods of time (>15 min). Seek immediate medical attention. Wash contaminated clothing before reuse.

Acute and delayed symptoms and effects: Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Ingestion:

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.

Acute and delayed symptoms and effects: Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

General Advice:

In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Note to Physicians:

Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION

May intensify fire; oxidizer. These substances will accelerate burning when involved in a fire. May explode from heat or contamination. May ignite combustibles (wood, paper, oil, clothing, etc.). Substance may react with water (some violently), releasing corrosive and/or toxic gases and runoff. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated or if contaminated with water.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is not sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Water. CO2 or Halon® may provide limited control.

Large Fire: Flood fire area with water from a distance. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do it without risk. Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material.

Unsuitable Extinguishing Media: Do not use dry chemicals or foams.

Products of Combustion: Oxides of nitrogen. Oxides of sulphur. Oxygen.

Protection of Firefighters: TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns or death. Reaction with water or moist air may release toxic, corrosive or flammable gases. Reaction with water may generate much heat that will increase the concentration of fumes in the air. Fire will produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures: As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate enclosed areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded.

Personal Precautions:	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protection recommended in Section 8.
Environmental Precautions:	Prevent entry into waterways, sewers, basements or confined areas.
Methods for Containment:	Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
Methods for Clean-Up:	Absorb spillage to prevent material damage. DO NOT GET WATER INSIDE CONTAINERS. Cautiously neutralize spilled liquid. Neutralize carefully with lime or carbonates. Do not take up in combustible material such as: saw dust or cellulosic material. Absorb spillage to prevent material damage. Absorb and/or contain spill with inert material, then place in suitable container.
Other Information:	See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:
Do not swallow. Do not breathe mist, vapours, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Keep only in original packaging. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

Storage:
Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines
Component

Nitric acid [CAS No. 7697-37-2]

ACGIH: 2 ppm (TWA); 4 ppm (STEL); (1997)
OSHA: 2 ppm (TWA), 5 mg/m³ (TWA);
4 ppm (STEL) [Vacated];

Sulfuric acid [CAS No. 7664-93-9]

ACGIH: 0.2 mg/m³ (TWA); A2; Thoracic particulate matter; Classification refers to sulfuric acid contained in strong inorganic acid mists (2004)

OSHA: 1 mg/m³ (TWA);

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and According to The Hazardous Products Regulation (February 11, 2015) and their amendments.

TWA: Time-Weighted Average
STEL: Short-Term Exposure Limit

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection: Wear chemical safety goggles, and full face shield. Ensure that eyewash stations and safety showers are close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3:20 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Consult manufacturer specifications for further information.

Skin and Body Protection: Wear protective clothing. Chemical resistant materials and fabrics that pass ASTM 5903 liquid penetration and ASTM F730 permeation testing based on potential exposure. Clothing with full length sleeves and pants should be worn.

Respiratory Protection: If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-18, with organic vapor/acid gas cartridge and particulate filter, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless to light yellow liquid.
Color:	Colorless to light yellow.
Odor:	Acrid, choking.
Odor Threshold:	Not available.
Physical State:	Liquid.
pH:	< 1
Melting Point / Freezing Point:	-41.1 °C (-42 °F) (Nitric acid 98%) 9 °C (48.2 °F) (Oleum 25%)
Initial Boiling Point:	Not available.
Boiling Range:	120.5 °C (248.9°F) (68.0%)
Flash Point:	Not available.
Evaporation Rate:	Not available.
Flammability:	May intensify fire; oxidizer. These substances will accelerate burning when involved in a fire. See Section 5.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	51 mmHg at 25 °C (77 °F) (Nitric acid 98%) 6 mmHg at 40 °C (104 °F) (Oleum 25%)
Relative Vapor Density:	> 1 (Air = 1) at 20 °C (68 °F) (Nitric acid)
Relative Density:	1.5 to 1.8 (Water = 1)
Solubility:	Miscible in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Kinematic Viscosity:	Not available.
Dynamic Viscosity:	1 cP at 20 °C (68 °F) (Nitric acid 98%) 42 mPa.s at 20 °C (68 °F) (Oleum 25%)
Percent Volatile, wt. %:	100
VOC content, wt. %:	Not available.
Density:	Not available.

Coefficient of Water/Oil Distribution: Not available.

Particle Characteristics: Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity: May be corrosive to metals. Can react explosively with reducing agents, metal powders, Hydrogen sulfide, nitrate, and organic materials. Contact with metals may evolve flammable hydrogen gas.

Chemical Stability: Stable under normal storage conditions.

Possibility of Hazardous Reactions: Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Conditions to Avoid: Contact with incompatible materials. Sources of ignition. Exposure to heat.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Reducers. Combustible materials.

Hazardous Decomposition Products: Nitrogen oxides. Sulfur oxides. Corrosive vapors.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

Component	CAS No.	LD_{50} oral	LD_{50} dermal	LC_{50}
Nitric acid	7697-37-2	Not available.	Not available.	67 ppm (NO2) (rat); 4H
Sulfuric acid	7664-93-9	2140 mg/kg (rat)	Not available.	320 mg/m³ (mouse); 2H

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Teeth.

Symptoms (including delayed and immediate effects)

Inhalation: Toxic if inhaled. Causes burns to the respiratory tract. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.

Eye: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin: Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Ingestion: Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Aggravated By Exposure: Not available.

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Teeth.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Carcinogenicity: May cause cancer. Occupational exposure to strong inorganic acid mists containing sulfuric acid is associated with increased risks of laryngeal and lung cancers.

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Sulfuric acid	A2	Group 1	List 1	OSHA Carcinogen.	Listed.

Mutagenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: UN1796, NITRATING ACID MIXTURES, 8 (5.1), PG I

Class: 8 (5.1)

UN Number: UN1796

Packing Group: I

Placard(s):

ERG Guide: 157

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: UN1796, NITRATING ACID MIXTURES, 8 (5.1), PG I

Class: 8 (5.1)

UN Number: UN1796

Packing Group: I

Placard(s):

ERG Guide: 157

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and According to The Hazardous Products Regulation (February 11, 2015) and their amendments.

SARA Title III

Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112(r) TQ (lbs.)
Nitric acid	1000	1000	1000	313	Not listed.	15000
Sulfuric acid	1000	1000	1000	313	Not listed.	Not listed.

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Nitric acid	7697-37-2	E
Sulfuric acid	7664-93-9	E

Note: E = Extraordinarily Hazardous Substance

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Nitric acid	7697-37-2	SHHS
Sulfuric acid	7664-93-9	SHHS

Note: SHHS = Special Health Hazard Substance

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Nitric acid	7697-37-2	E
Sulfuric acid	7664-93-9	E

Note: E = Environmental Hazard

California

California Prop 65: This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16: OTHER INFORMATION

Disclaimer:

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. Any party handling, transferring, transporting, storing, applying or otherwise using this product should review thoroughly all applicable laws, rules, regulations, standards and good engineering practices. Such thorough review should occur before the party handles, transfers, transports, stores, applies or otherwise uses this product.

Date of Preparation of SDS:	January 15, 2026
Version:	1.1
GHS SDS Prepared by:	**Aegis Regulatory Inc.**
	Phone: 1 (519) 488-0351
	www.aegisreg.com