SAFETY DATA SHEET

SECTION 1 ◆ IDENTIFICATION

CVR Partners, LP 2277 Plaza Drive, Suite #500 Sugar Land, TX 77479	**FOR EMERGENCY SOURCE INFORMATION CONTACT:** ✦ SDS Assistance: (620) 251-4000 ✦ Information (620) 252-4265 ✦ CHEMTREC: (800) 424-9300 (24-hour contact) ✦ CCN5198

GHS PRODUCT IDENTIFIER: 44-64% Nitric Acid	**CHEMICAL FAMILY:** Inorganic Acid Compound	**PRODUCT USES:** Feedstock for Urea Ammonium Nitrate

SECTION 2 ✷ HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS	
Oxidizing Liquids – Category 3	Corrosive to Metal
Skin Corrosion/Irritation – Category 1A	Acute Toxicity – Inhalation – Category 4
Hazardous to the Aquatic Environment (Acute Hazard) – Category 3	

GHS LABEL ELEMENTS

Nitric Acid

GHS PICTOGRAMS			SIGNAL WORD
			**DANGER**

HAZARD STATEMENTS	
May intensify fire, oxidizer	Harmful if inhaled
May be corrosive to metal	Harmful to aquatic life
Causes severe skin burns and eye damage	

PRECAUTIONARY STATEMENTS	
Prevention	
Do not breathe gas/mist/vapors/spray	Avoid release into the environment
Wear protective gloves/protective clothing/eye and face protection and respiratory protection if needed.	Keep only in original packaging
No smoking. Keep away from heat/sparks/open flames/hot surfaces	Wash hands thoroughly after handling
Response	
Eliminate all ignition sources if safe to do so	Wash thoroughly after handling
Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.	Absorb spillage to prevent material damage.
IF ON SKIN: Take off immediately all contaminated clothing. flush skin with water	INHALED: remove person to fresh air and keep comfortable for breathing
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	IF exposed or concerned: Call a POISON CENTER or doctor/physician

Storage		
Store in a well-ventilated place, keep locked up	Store in a corrosion resistant container with a resistant inner liner	Control access to chemical using proper security protocols
Disposal		
Dispose of contents/container in accordance with local/regional/national/international regulations.		

SUPPLIER INFORMATION		
CVR Partners, LP	2277 Plaza Drive, Suite #500	Sugar Land, TX 77479

SECTION 3 ▼ COMPOSITION/INFORMATION OF INGREDIENTS

INGREDIENT	CAS NUMBER	PERCENTAGE (%)
Nitric Acid	7697-37-2	44-64
Water	7732-18-5	36-56

SECTION 4 ✚ FIRST AID MEASURES

EYES: Immediately move victim away from exposure and into fresh air. For direct contact, remove contact lenses if present and easy to do. Immediately hold eyelids apart and flush the affected eye(s) with clean water for at least 30 minutes. Seek immediate medical attention.

SKIN: Immediately flush affected area(s) with large amounts of water while removing contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops, seek medical attention. Wash contaminated clothing before reuse. .

INGESTION: ***Do NOT induce vomiting. Corrosive Material. Acid Burns.*** If victim has any breathing difficulties, call for emergency help immediately. If victim is conscious and alert, immediately rinse mouth with water and dilute the ingested material by giving one glass of milk or water to drink; ½ glass to children under 5. Never give anything by mouth to an unconscious person. Call a physician or POISON CENTER. If possible, do not leave victim unattended.

INHALATION: Immediately move victim away from exposure and into fresh air If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If symptoms persist, seek immediate medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

NOTE TO PHYSICIAN: TREAT SYMPTOMATICALLY AND SUPPORTIVELY

SECTION 5 ⌘ FIRE-FIGHTING MEASURES

Nitric Acid is not combustible, but it is a STRONG OXIDIZER that enhances the combustion of other substances.

SUITABLE EXTINGUISHING MEDIA: Stop flow of material first if it can be done safely. Use extinguishing agent suitable for type of surrounding fire.

UNUSUAL FIRE & EXPLOSION HAZARDS: Oxidizer. May increase the flammability of any combustible substance. It is the nature of oxidizers to provide their own oxygen source, smothering a fire may be ineffective. This product can cause spontaneous ignition of some materials and can react explosively with metallic powders, alcohol, charcoal, organic acids, hydrogen sulfide and turpentine. Contact with common metals can generate hydrogen, which can form a flammable mixture. Use caution and wear protective clothing, including respiratory protection.

HAZARDOUS REACTIONS/DECOMPOSITION: Combustion may yield smoke, nitrogen oxides and other products of incomplete combustion.

SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS: For fires involving this material, do not enter any enclosed or confined space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. If firefighters cannot work upwind of the fire, respiratory protective equipment must be worn. Cool tanks and containers exposed to fire with water. Notify appropriate authorities if liquid enters sewer/waterways.

SEE SECTION 9 FOR FLAMMABILITY PROPERTIES

SECTION 6 ❖ ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Oxidizer. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion proof equipment is recommended. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down-wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stay upwind and away from spill/release. Wear appropriate protective equipment, including

	respiratory protection. Respond to emergencies only if you have been trained under OSHA's 29 CFR 1910.120 standard.
METHODS FOR CONTAINMENT AND CLEANING UP	For small spills, collect liquid and dilute with water. Neutralize with alkaline material such as soda ash, lime, slaked lime (calcium hydroxide), clam shells, other alkali, alkaline earth metals, carbonates or bicarbonates. Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g., skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.
OTHER INFORMATION	Water spray directly on nitric acid may create a violent reaction.

SECTION 7 ✂ HANDLING AND STORAGE

PRECAUTIONS FOR SAFETY HANDLING	✦ Avoid contact with skin and eyes. ✦ Keep away from heat, sparks, and open flame! ✦ Ensure adequate ventilation. ✦ Wear appropriate protective clothing and respiratory protection. ✦ Wash thoroughly after handling. ✦ Do not breathe vapors or mists.
STORAGE PROCEDURES	✦ Keep container(s) tightly closed and properly labeled. ✦ Use and store this material in cool, dry, well- ventilated areas away from heat and all sources of ignition. Post area "No Smoking or Open Flame". ✦ Store only in approved containers. ✦ Store to avoid contact with incompatible materials such as ordinary combustibles, flammable liquids, greases and those materials, including other oxidizers that could react with the oxidizer or catalyze its decomposition. ✦ Protect container(s) against physical damage. ✦ Electrical fixtures in storage and use areas should be intrinsically safe, and all wiring and electrical equipment should be corrosion-proof. ✦ Nitric acid will attack some forms of plastic, rubber and coatings. Post signs warning of the hazards of liquid and vapor.
INCOMPATIBILITIES	✦ Avoid exposure to direct sunlight and heat, which will increase corrosion rates and evolution of nitrogen oxides. ✦ Nitric acid is corrosive to or incompatible with many common materials these incompatibilities require handling systems that are specifically engineered for nitric acid service. ✦ Storage containers should be closed to contain vapor/mist, but vented to a scrubbing system to avoid pressure buildup. ✦ Store in stainless steel or glass containers. ✦ Tanks and piping should be thoroughly flushed before welding or cutting to avoid generation of oxides of nitrogen.

SECTION 8 ⌗ EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Chemical Name	ACGIH TLV (2026)	OSHA PEL	NIOSH IDLH
Nitric Acid	TWA: 2 ppm STEL: 4 ppm	TWA: 2 ppm	300 ppm

ENGINEERING CONTROLS: Use adequate ventilation to keep gas concentrations of this product below occupational exposure limits, particularly in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

- Eyes: ANSI Z87.1 approved eye protection (e.g., goggles, faceshield) should be worn whenever there is a likelihood of any type of exposure. Suitable eyewash station should be available. Contact lenses must not be worn when handling nitric acid.
- Skin/Body: Chemical protective clothing is recommended based on a thorough PPE hazard assessment. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for specific information for permeation and degradation ratings.
- Hand Protection: Gloves constructed of nitrile, PVC or equivalent is recommended. Consult manufacturer specifications for specific information for permeation and degradation ratings.
- Respiratory protection: A NIOSH approved full face air purifying respirator (APR) with properly selected cartridges may be permissible under certain circumstances where airborne concentrations may exceed exposure limits. Protection provided by APRs is limited, calculate the maximum use concentration for the exposure situation. Use a positive pressure air supplied (Grade D) respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where APRs may not provide adequate protection.
- Other Hygienic and Work Practices: In case of skin contact, flush thoroughly with water and be aware of cold burns/frostbite. Wash with mild soap and water or a waterless hand cleaner

SECTION 9 ⚡ PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 245 °F / 118.2 °C	**PERCENT VOLATILE BY VOLUME:** No Data
SPECIFIC GRAVITY (H_2O = 1): 1.35	**VISCOSITY UNITS, TEMP:** Not Applicable
PH: <1	**MELTING/FREEZING POINT:** No Data
EVAPORATION RATE (BuAc = 1): Unavailable	**VAPOR DENSITY (AIR =1):** 2-3
VAPOR PRESSURE AT 25°C**:** 9.8 mm Hg	**SOLUBILITY IN WATER:** Soluble
APPEARANCE AND ODOR: Colorless to light yellow liquid with an acrid pungent odor.	

FLASH POINT: (Method Used): Not Applicable	**FLAMMABLE LIMITS:**	LEL: Not Applicable UEL: Not Applicable
AUTOIGNITION TEMPERATURE: Not Applicable	**VOC CONTENT:** Not Applicable	

SECTION 10 ⌑ STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal ambient and anticipated conditions of use. Reacts explosively with common metals with generating hydrogen gas. Avoid exposure to direct sunlight.

HAZARDOUS REACTION POTENTIAL: Hazardous reactions not anticipated.

CONDITIONS TO AVOID: Exposure to direct sunlight.

INCOMPATIBLE PRODUCTS: Keep away from strong oxidizers.

MATERIALS TO AVOID: Reacts explosively with metallic powders, wood, carbides, hydrogen sulfide, alcohol, charcoal and turpentine. Increases the flammability of combustible, organic and readily oxidizable materials and can ignite some of them. Attacks most metals liberating flammable hydrogen. Reacts with organic compounds to form explosive materials. Adding small quantities of water to concentrated nitric acid may cause vigorous reaction.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen

HAZARDOUS POLYMERIZATION: Has not been reported

SECTION 11 ☣ TOXICOLOGICAL INFORMATION

Very hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (irritant, corrosive), of ingestion, . Slightly hazardous in case of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Prolonged exposure may result in skin burns and ulcerations. Overexposure by inhalation may cause respiratory irritation. Severe overexposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Toxicity

Type Of Dose	Specie	Result	Type Of Dose	Specie	Result	Type Of Dose	Specie	Result
$LD_{50(oral)}$	Rat	Not Available	$LC_{50(inh)}$	Rat (30 minute)	260 mg/M^3	$LC_{50(inh)}$	Rat (4 hours)	130 mg/M^3

Specific organ toxicity, single exposure: No data available	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY

IARC	Not Listed
NTP	Not Listed

California (Prop 65): Not Listed	**NIOSH:** Not Listed	**ACGIH:** Not Listed	**OSHA:** Not Listed

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS

Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: No data available
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: Vapor/mist/liquid is highly irritating and damaging to the skin, with significant burns.	Serious eye damage: Gas is highly irritating and damaging to the eyes, including blindness.
Synergistic effects: No data available	Aspiration hazard: No data available
RTECS #: QU5775000	

SECTION 12 ❋ ECOLOGICAL INFORMATION

TOXICITY

Type Of Dose	Specie	Result	Type Of Dose	Specie	Result
LC_{50}	*Daphnia magna*	No data	LC_{50}	Fathead Minnow	No data

PERSISTENCE AND DEGRADABILITY/MOBILITY IN SOIL

No data available

BIOACCUMULATIVE POTENTIAL:	Log P_{ow}	-2.3

SECTION 13 ✱ DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

Waste Disposal Method: Should not be released into the environment.

Contaminated Packaging: Dispose of in accordance with local regulations.

SECTION 14 ▣ TRANSPORTATION INFORMATION

Not Meant To Be All Inclusive - Check Local, State, And Federal Laws And Regulations

Element	U.S. DOT	IMDG	IATA
UN Number	UN 2031	UN 2031	UN 2031
UN Proper Shipping Name	Nitric Acid	Nitric Acid	Nitric Acid
Hazard Class	8	8	8
Placard/Label			
Environmental Hazard	No	No	No
Packing Group	II	II	II
2024 Emergency Response Guidebook	Guidebook Number: 157		

SECTION 15 ☽ REGULATORY INFORMATION

Agency	Listing Guidance only, consult specific regulations	
OSHA	Ingredient is listed as hazardous under 29 CFR 1910.1200	
40 CFR Part 355 (EPCRA)	1000 pounds RQ /1000 pounds TPQ	
40 CFR Part 302 (CERCLA) Reportable Quantity	Listed 1000 Pounds	
40 CFR Part 370 (Hazardous Chemical Reporting: Community Right to Know SARA 304/311/312: Extremely hazardous substance	Listed	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	Reactive hazard
40 CFR Part 372 (Toxic Chemical Release Reporting: Community Right to Know) SARA 313	Listed	
TSCA 8(b)	Listed	
State Regulations: Massachusetts, Pennsylvania and New Jersey	Listed	
Clean Water Act	Listed RQ 1000 Pounds	
Clean Air Act 112 (r)	Not Listed for concentration <80%	

SECTION 16 ⌘ OTHER INFORMATION

NFPA LABEL

HMIS III LABEL

Personal Protection Index

NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.

Acronym List

°F=degrees Fahrenheit	°C=degrees Celsius	ACGIH= American Conference of Industrial Hygienists
APR=Air Purifying Respirator	BCF= Bioconcentration Factor	BuAc=Butyl Acetate
CAS=Chemical Abstract Service	CERCLA= Comprehensive Environmental Response, Compensation, and Liability Act	
CHEMTREC= Chemical Transportation Emergency Center	CNS=Central Nervous System	CWA=Clean Water Act
DOT=Department of Transportation	EC50= Effective Concentration Fifty	EPA=Environmental Protection Agency
g/Kg=Grams per Kilogram	g/M^3=Grams per Cubic Meter	GHS=Global Harmonization System
H_2O=Water	HAP=Hazardous Air Pollutants	HMIS= Hazardous Materials Identification System
IARC= International Agency for Research on Cancer	IATA= International Air Transport Association	IMDG= International Maritime Dangerous Goods
LC_{50}=Lethal Concentration Fifty	LD_{50}=Lethal Dose Fifty	LEL=Lower Explosive Limit
Log P_{ow} =Octanol/water partition coefficient	mg/Kg=Milligrams per Kilogram	mg/L=Milligrams per Liter
mL/Kg=Milliliters per Kilogram	mm HG=millimeters of mercury	NFPA=National Fire Protection Association
NIOSH= National Institute for Occupational Safety and Health	NTP=National Toxicology Program	OSHA=Occupational Safety and Health Administration

PEL=Permissible Exposure Limit	ppm=Parts per Million	RCRA=Resource Conservation and Recovery Act
RQ=Reportable Quantities	RTECS=Registry of Toxic Effects of Chemical Substances	SARA= Superfund Amendments and Reauthorization Act
SDS=Safety Data Sheet	STEL=Short Term Exposure Limit	
TLV=Threshold Limit Value	TPQ=Threshold Planning Quantity	TSCA=Toxic Substance and Control Act
TWA=Time Weighted Average	UEL=Upper Explosive Limit	VOC=Volatile Organic Compounds

SDS REVISIONS: Information update of SDS

SDS CREATION DATE:	11/01/13	**REVISION #2:**	02/25/26

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