Safety Data Sheet

Quip Labs makes it safe. Simply and Sensibly.

Creation Date: 24-Jan-2013 Revision Date: 30-Jun-2023 Revision Number: Rev 3

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

1.1. Product identifier

Product Description: **PC-300**

Product ID:	PC300
Common Name:	Nitric Acid Mixture
Chemical Name:	Nitric Acid Mixture
Formula:	Acid Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use	Acid Cleaner/Scale Remover
Uses advised against	Not Available

1.3. Details of the supplier of the safety data sheet

Company	Quip Laboratories, Inc.
	1500 Eastlawn Avenue Wilmington, DE 19802
E-mail address	thidell@quiplabs.com

1.4. Emergency telephone number

For information US call: 001-302-761-2600
Emergency Number CHEMTREC Tel. No.US:001-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Signal Word **Danger**

Classification:

H314	**Skin Irritation/Corrosion**	**Category 1**
P290	**Corrosive to Metals**	**Category 1**

2.2. Label elements

Hazard Statements

H314 - Causes severe skin burns and eye damage

H290 - May be corrosive to metals

Precautionary Statements

S2 - Keep out of the reach of children.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S23A - Do not breathe gas/fumes/vapour/spray.

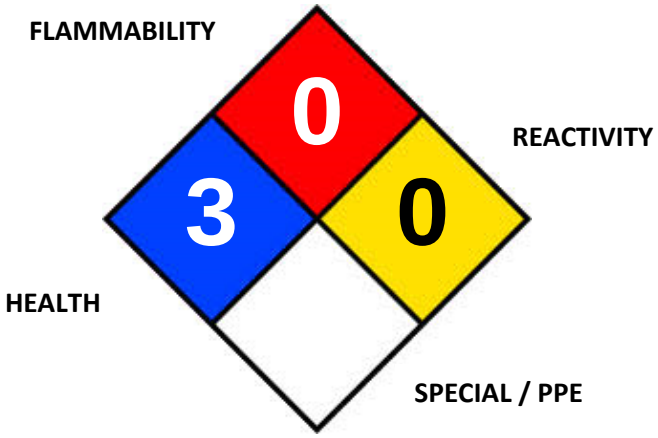
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical Advice.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label Where possible).

S50A - Do not mix with other chemicals especially chlorine releasing bleaches as toxic gas will Be evolved.

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS No.
Nitric Acid	2 - 7	7697-37-2
Water	To q.s.	7732-18-5

Reach Registration Number --

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Ingestion	Do not induce vomiting. Obtain medical attention.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination

4.2. Most important symptoms and effects, both acute and delayed

No information available

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons:
No information available.

5.2. Special hazards arising from the substance or mixture

No information available.

Hazardous Combustion Products:
Carbon monoxide (CO), Carbon dioxide (CO2).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2. Environmental precautions

Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Collect spillage and collect in suitable container for disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STOARGE

7.1. Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Use in industrial applications

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s):

Biological limit values:

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Component	STD	TWA		STEL		Notes
Nitric Acid	WEL		1 mg/m^3		2 mg/m^3	

WEL = Workplace Exposure Limit

Ingredient Comments
STEL = Short Term Exposure
TWA = Time Weighted Average

8.2. Exposure controls

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice
Engineering Measures: Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Eye Protection: Safety glasses with side-shields or face shield
Hand Protection: Protective gloves. Polyvinyl chloride (PVC)
Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure
Respiratory Protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls : No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERITES

9.1. Information on basic physical and chemical properties

Appearance	Clear
Physical State	Liquid
Odor	Acidic Odor
Odor Threshold	No data available
pH (10% soln.)	< 1
Melting Point/Range	No data available
Softening Point	No data available
Boiling Point/Range	Greater than 220°F
Flash Point	No data available
Evaporation Rate	No information available
Flammability (solid,gas)	No information available.
Explosion Limits	No data available.
Vapor Pressure	No data available
Vapor Density	Not applicable
Specific Gravity / Density	1.10 - 1.15
Bulk Density	No data available
Water Solubility	Soluble
Solubility in other solvents	No information available.
Partition Coefficient (n- octanol/water)	No data available
Autoignition Temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive Properties Oxidizing Properties	No data available

9.2. Other information

Molecular Formula	Not Available
Molecular Weight	Not Availabl

SECTION 10: STABILITY AND REACTIVITY

10.1. Chemical stability

Stable under normal conditions.

10.2. Possibility of hazardous reactions

Hazardous Polymerization: Hazardous polymerization does not occur.
Hazardous Reactions: None under normal processing.

10.3. Materials to avoid

Chlorine containing compounds

10.4. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.5. Hazardous decomposition products

None known

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

(a) acute toxicity;

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Nitric Acid	0.8 mg/L (Rat)		

(b) skin corrosion/irritation; Causes severe skin burns
(c) serious eye damage/irritation; Causes eye damage
(d) respiratory or skin sensitization;
Respiratory Based on available data, the classification criteria are not met
Skin Based on available data, the classification criteria are not met
(e) germ cell mutagenicity; Based on available data, the classification criteria are not met
(f) carcinogenicity; Based on available data, the classification criteria are not met
There are no known carcinogenic chemicals in this product
(g) reproductive toxicity; Based on available data, the classification criteria are not met
(h) STOT-single exposure; Based on available data, the classification criteria are not met
(i) STOT-repeated exposure; Based on available data, the classification criteria are not met
Target Organs Skin, Respiratory system, Eyes
(j) aspiration hazard; Not applicable

Other Adverse Effects See actual entry in RTECS for complete information The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed — No information available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Nitric Acid	Fish (Gambusia affinis): LC50 = 72 mg/L/96h			

12.2. Persistence and degradability — Product is biodegradable

Persistence: Soluble in water, Persistence is unlikely, based on information available.

12.3. Bioaccumulative potential — Bioaccumulation is unlikely

12.4. Mobility in soil — The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

12.5. Results of PBT and vPvB assessment — Substance is not considered persistent, bioaccumulative And toxic (PBT) / very persistent and very Bioaccumulative (vPvB).

12.6. Other adverse effects

Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors
Persistent Organic Pollutant	This product does not contain any known or suspected substance
Ozone Depletion Potential	This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Federal, state and local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation/treatment procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected. All waste materials should be reviewed to determine the applicable hazards (testing may be necessary).

SECTION 14: TRANSPORT INFORMATION

14.1. UN number:	NA1760
14.2. Proper shipping name:	COMPOUNDS, CLEANING LIQUID, (nitric acid solution)
14.3. Transport hazard class(es):	Class 8: Corrosive substances
14.4. Packing group:	II
14.5. Environmental hazards	Environmentally Hazardous Substance/Marine Pollutant
14.6. Special precautions for user	EMS: F-A, S-B Tunnel Restriction Code: (E)
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

US FEDERAL REGULATIONS:

TSCA: In TSCA (Toxic Substances Control Act)

SARA 311 and 312 HAZARD CATEGORIES:

Immediate (Acute): Yes Delayed (Chronic): No Fire: No
Reactivity: No Sudden Release of Pressure: No

SARA SECTION 313 NOTIFICATION:

This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CAA 602 OZONE DEPLETING SUBSTANCES (ODS):

This product neither contains nor is manufactured with an ozone depleting substance subject to the labeling requirements of the Clean Air Act Amendments 1990 and 40 CFR Part 82.

VOLATILE ORGANIC COMPOUNDS (VOC): Not Applicable.

US STATE REGULATIONS:

VOLATILE ORGANIC COMPOUNDS (CARB): Not Applicable.

CANADIAN REGULATIONS: N/A
DSL/NDSL: N/A
WHMIS CLASSIFICATION: N/A

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.
Take note of Dir 94/33/EC on the protection of young people at work.
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been completed.

SECTION 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3
R36 - Irritating to eyes

Full text of H-Statements referred to under sections 2 and 3
H319 - Causes serious eye irritation

Legend
CAS - Chemical Abstracts Service
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Existing and Evaluated Chemical Substances
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
WEL - Workplace Exposure Limit

ACGIH - American Conference of Industrial Hygiene
DNEL - Derived No Effect Level
TWA - Time Weighted Average
IARC - International Agency for Research on Cancer
PNEC - Predicted No Effect Concentration
RPE - Respiratory Protective Equipment
LD50 - Lethal Dose 50%
LC50 - Lethal Concentration 50%
NOEC - No Observed Effect Concentration
PBT - Persistent, Bioaccumulative, Toxic
EC50 - Effective Concentration 50%
POW - Partition coefficient Octanol:Water
vPvB - very Persistent, very Bioaccumulative
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road
IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code
ICAO/IATA - International Civil Aviation Organization/International Air Transport Association
MARPOL - International Convention for the Prevention of Pollution from Ships
OECD - Organisation for Economic Co-operation and Development ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
VOC - Volatile Organic Compounds

Key literature references and sources for data
Suppliers safety data sheet,
Chemadvisor - LOLI,
Merck index,
RTECS

Training Advice
Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.
Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.
First aid for chemical exposure, including the use of eye wash and safety showers.

The information in this Safety Data Sheet should be provided to all who use, handle, transport, or otherwise are exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and persons working with or handling this product. The information presented in this SDS is premised upon proper handling and anticipated uses, and is for the material without chemical additions/alterations. Additionally, if this Safety Data Sheet is more than

three years old, please contact this supplier at the phone number above Section 1 to make sure this sheet is current.

PREPARED BY: T. Hidell DATE: 6/30/2023

Supercedes: 2/16/2018

The information and recommendations contained herein are based upon data believed to be correct. No warranty, expressed or implied, is made.