

Safety Data Sheet

Issue Date: 24-Nov-2017 Revision Date: 11-Oct-2018 Version 1

1. IDENTIFICATION

Product Identifier

Product Name Ultra Niter

Other means of identification

SDS # BIR-014

Product Code 100175 UN/ID No UN1760

Recommended use of the chemical and restrictions on use

Recommended Use

Acid clean in place cleaner.

Details of the supplier of the safety data sheet

Supplier Address Birko Corporation 9152 Yosemite Street Henderson, CO 80640-8027

www.birkocorp.com

Emergency Telephone Number

Company Phone Number Phone: 303-289-1090 or 1-800-525-0476

Fax: 303-289-1190

Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

AppearanceColorless liquidPhysical stateLiquidOdorSour odor

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Signal Word Danger

Hazard statements

Harmful if inhaled

Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Nitric acid	7697-37-2	10-20
Phosphoric Acid	7664-38-2	<5

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret. **

4. FIRST AID MEASURES

First Aid Measures

General Advice Immediately call a poison center or doctor/physician.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

Inhalation Remove person to fresh air and keep comfortable for breathing. Immediately call a poison

center or doctor/physician.

Ingestion Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects

Symptoms Harmful if inhaled. Causes severe skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal PrecautionsUse personal protective equipment as required.

Environmental precautions

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wear protective gloves/protective clothing and eye/face protection. Use only outdoors or in

a well-ventilated area. Do not breathe dusts or mists. Wash face, hands and any exposed

skin thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nitric acid	STEL: 4 ppm	TWA: 2 ppm	IDLH: 25 ppm
7697-37-2	TWA: 2 ppm	TWA: 5 mg/m ³	TWA: 2 ppm
		(vacated) TWA: 2 ppm	TWA: 5 mg/m ³
		(vacated) TWA: 5 mg/m ³	STEL: 4 ppm
		(vacated) STEL: 4 ppm	STEL: 10 mg/m ³
		(vacated) STEL: 10 mg/m ³	_
Phosphoric Acid	STEL: 3 mg/m ³	TWA: 1 mg/m ³	IDLH: 1000 mg/m ³
7664-38-2	TWA: 1 mg/m ³	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³
		(vacated) STEL: 3 mg/m ³	STEL: 3 mg/m ³

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

AppearanceColorless liquidOdorSour odorColorColorlessOdor ThresholdNot determined

Property Values Remarks • Method

pH values
1.9

Melting Point/Freezing Point

Boiling Point/Boiling Range
Flash Point

Evaporation Rate
Flammability (Solid, Gas)

Not determined
Not determined
Not determined
Liquid-Not applicable

Flammability Limits in Air

Upper Flammability Limits
Lower Flammability Limit
Vapor Pressure
Vapor Density
Specific Gravity

Not determined
Not determined
Not determined
Not determined
Not determined

1.09 Water Solubility Not determined Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Harmful if inhaled.

Ingestion Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric acid	-	-	$= 2500 \text{ ppm (Rat) } 1 \text{ h} = 130 \text{ mg/m}^3$
7697-37-2			(Rat) 4 h
Phosphoric Acid 7664-38-2	= 1530 mg/kg (Rat)	= 2740 mg/kg (Rabbit)	> 850 mg/m³ (Rat) 1 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/eye

irritation

Causes severe eye damage.

Carcinogenicity Nitrate or nitrite ingested under conditions that result in endogenous nitrosation are

considered IARC group 2A carcinogens.

Chemical Name	ACGIH	IARC	NTP	OSHA
Nitric acid		Group 2A		X
7697-37-2		Group 1		

Legend

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

 ATEmix (oral)
 30,742.00 mg/kg

 ATEmix (dermal)
 55,054.00 mg/kg

 ATEmix (inhalation-dust/mist)
 >1.0 mg/L

 ATEmix (inhalation-vapor)
 24.04 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Nitric acid		72: 96 h Gambusia affinis mg/L	
7697-37-2		LC50	
Phosphoric Acid		3 - 3.5: 96 h Gambusia affinis mg/L	4.6: 12 h Daphnia magna mg/L
7664-38-2		LC50	EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Nitric acid	-2.3
7697-37-2	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Nitric acid	Toxic
7697-37-2	Corrosive
	Ignitable
Phosphoric Acid	Corrosive
7664-38-2	

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

<u>DOT</u>

UN/ID No UN1760

Proper Shipping Name Corrosive liquid, n.o.s. (Phosphoric acid, Nitric acid)

Hazard Class 8
Packing Group ||

IATA

UN/ID No UN1760

Proper Shipping Name Corrosive liquid, n.o.s. (Phosphoric acid, Nitric acid)

Hazard Class 8
Packing Group II

IMDG

UN/ID No UN1760

Proper Shipping Name Corrosive liquid, n.o.s. (Phosphoric acid, Nitric acid)

Hazard Class 8
Packing Group ||

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E	ENCS	IECSC	KECL	PICCS	AICS
			LINCS					
Nitric acid	Х	Х	Х	Present	Х	Present	Х	Х
Phosphoric Acid	Х	Х	Х	Present	Х	Present	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Nitric acid	1000 lb	1000 lb	RQ 1000 lb final RQ
7697-37-2			RQ 454 kg final RQ
Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric Acid	5000 lb		RQ 5000 lb final RQ
7664-38-2			RQ 2270 kg final RQ

SARA 313

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Nitric acid - 7697-37-2	7697-37-2	10-20	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Nitric acid	1000 lb			Χ
Phosphoric Acid	5000 lb			Х

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Nitric acid 7697-37-2	X	X	X
Phosphoric Acid 7664-38-2	X	X	X

16. OTHER INFORMATION

NFPAHealth HazardsFlammabilityInstabilitySpecial Hazards201HMISHealth HazardsFlammabilityPhysical hazardsPersonal Protection202

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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.

End of Safety Data Sheet