



your partner in food safety

Issue Date: 12-Jul-2021

# Safety Data Sheet

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Pho-Free Acid CIP

### Other means of identification

**SDS #** BIR-SDSPFAC

**Product Code** I04087

**UN/ID No** UN1760

### Recommended use of the chemical and restrictions on use

**Recommended Use** Acid clean in place product.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Birko Corporation  
9152 Yosemite Street  
Henderson, CO 80640-8027  
[www.birkocorp.com](http://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

**Appearance** Colorless liquid

**Physical state** Liquid

**Odor** Sour 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
Methane Sulfonic Acid	75-75-2	<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 Precautions** Use 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 7697-37-2	STEL: 4 ppm TWA: 2 ppm	TWA: 2 ppm TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 2 ppm (vacated) TWA: 5 mg/m <sup>3</sup> (vacated) STEL: 4 ppm (vacated) STEL: 10 mg/m <sup>3</sup>	IDLH: 25 ppm TWA: 2 ppm TWA: 5 mg/m <sup>3</sup> STEL: 4 ppm STEL: 10 mg/m <sup>3</sup>

### 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

<b>Physical state</b>	Liquid	<b>Odor</b> <b>Odor Threshold</b>	Sour odor Not determined	
<b>Appearance</b>	Colorless liquid			
<b>Color</b>	Colorless			
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>		
pH	1.9			
<b>Melting Point/Freezing Point</b>	Not determined			
<b>Boiling Point/Boiling Range</b>	Not determined			
<b>Flash Point</b>	Not determined			
<b>Evaporation Rate</b>	Not determined			
<b>Flammability (Solid, Gas)</b>	Liquid-Not applicable			
<b>Flammability Limits in Air</b>				
<b>Upper Flammability Limits</b>	Not determined			
<b>Lower Flammability Limit</b>	Not determined			
<b>Vapor Pressure</b>	Not determined			
<b>Vapor Density</b>	Not determined			
<b>Specific Gravity</b>	1.09			
<b>Water Solubility</b>	Not determined			
<b>Solubility in other solvents</b>	Not determined			
<b>Partition Coefficient</b>	Not determined			
<b>Auto-ignition Temperature</b>	Not determined			
<b>Decomposition Temperature</b>	Not determined			
<b>Kinematic Viscosity</b>	Not determined			
<b>Dynamic Viscosity</b>	Not determined			
<b>Explosive Properties</b>	Not determined			
<b>Oxidizing Properties</b>	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**

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Harmful if inhaled.
<b>Ingestion</b>	Do not ingest.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric acid 7697-37-2	-	-	= 2500 ppm (Rat) 1 h = 130 mg/m <sup>3</sup> (Rat) 4 h

**Information on physical, chemical and toxicological effects**

<b>Symptoms</b>	Please see section 4 of this SDS for symptoms.
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Causes severe skin burns.
<b>Serious eye damage/eye irritation</b>	Causes severe eye damage.

<b>Carcinogenicity</b>	Nitrate or nitrite ingested under conditions that result in endogenous nitrosation are considered IARC group 2A carcinogens.
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Chemical Name	ACGIH	IARC	NTP	OSHA
Nitric acid		Group 2A		X

7697-37-2		Group 1	
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**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 7697-37-2		72: 96 h Gambusia affinis mg/L LC50	

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

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

**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 7697-37-2	Toxic Corrosive Ignitable
Methane Sulfonic Acid	Corrosive

75-75-2

**14. TRANSPORT INFORMATION****Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

<b>UN/ID No</b>	UN1760
<b>Proper Shipping Name</b>	Corrosive liquid, n.o.s. (Methane Sulfonic Acid, Nitric acid)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

**IATA**

<b>UN/ID No</b>	UN1760
<b>Proper Shipping Name</b>	Corrosive liquid, n.o.s. (Methane Sulfonic Acid, Nitric acid)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

**IMDG**

<b>UN/ID No</b>	UN1760
<b>Proper Shipping Name</b>	Corrosive liquid, n.o.s. (Methane Sulfonic Acid, Nitric acid)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

**15. REGULATORY INFORMATION****International Inventories**

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Nitric acid	X	X	X	Present	X	Present	X	X
Methane Sulfonic Acid	X	X	X	Present	X	Present	X	X

**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 7697-37-2	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 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			X
Methane Sulfonic Acid	5000 lb			X

**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
Methane Sulfonic Acid 75-75-2	X	X	X

**16. OTHER INFORMATION**

<u>NFPA</u>	<b>Health Hazards</b> 2	<b>Flammability</b> 0	<b>Instability</b> 1	<b>Special Hazards</b>
<u>HMIS</u>	<b>Health Hazards</b> 2	<b>Flammability</b> 0	<b>Physical hazards</b> 1	<b>Personal Protection</b> J

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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**