

# SAFETY DATA SHEET

Be Right<sup>™</sup>

Issue Date 16-Aug-2018 Revision Date 17-Aug-2018 Version 1.2 Page 1/16 **1. IDENTIFICATION** Product identifier **Product Name** Lead Standard Solution, 10 mg/l as Pb+2 Other means of identification 2374820 Product Code(s) Safety data sheet number M00620 UN/ID no UN3264 Recommended use of the chemical and restrictions on use Laboratory reagent. Standard solution. **Recommended Use** Uses advised against None. None. **Restrictions on use** Details of the supplier of the safety data sheet

# Manufacturer Address

Hach Company P.O.Box 389 Loveland, CO 80539 USA +1(970) 669-3050

#### Emergency telephone number

+1(303) 623-5716 - 24 Hour Service +1(515)232-2533 - 8am - 4pm CST

#### 2. HAZARDS IDENTIFICATION

#### Classification

#### **Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

#### Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

# Signal word - Danger

EN / AGHS	EN	1	AGHS
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#### Hazard statements

H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage

#### **Precautionary statements**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

- P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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

P310 - Immediately call a POISON CENTER or doctor/physician

P363 - Wash contaminated clothing before reuse

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

#### P234 - Keep only in original container P390 - Absorb spillage to prevent material damage

#### Other Hazards Known

Not applicable

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Substance

Not applicable

<u>Mixture</u>

Chemical Family

Mixture.

#### Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
Nitric acid	7697-37-2	1 - 5%	-
Lead nitrate	10099-74-8	<0.01%	-

# 4. FIRST AID MEASURES

#### **Description of first aid measures**

 General advice
 Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

 Inhalation
 Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.

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Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.				
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.				
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.				
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.				
Most important symptoms and effe	ects, both acute and delayed				
Symptoms	Burning sensation.				
Indication of any immediate medical attention and special treatment needed					
Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.				
	5. FIRE-FIGHTING MEASURES				
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.				
Unsuitable Extinguishing Media	Caution: Use of water spray when fighting fire may be inefficient.				
Specific hazards arising from the chemical	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.				
Hazardous combustion products	This material will not burn.				
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.				
	6. ACCIDENTAL RELEASE MEASURES				
U.S. Notice	Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.				

# Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Other Information	Refer to protective measures listed in Sections 7 and 8.

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#### Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains	
Methods and material for containm	ent and cleaning up	
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	
Reference to other sections	See section 8 for more information. See section 13 for more information.	

# 7. HANDLING AND STORAGE

Precautions for safe handling	
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.
Conditions for safe storage, includ	ing any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.
Flammability class	Not applicable

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Nitric acid	STEL: 4 ppm	TWA: 2 ppm	IDLH: 25 ppm
CAS#: 7697-37-2	TWA: 2 ppm	TWA: 5 mg/m <sup>3</sup>	TWA: 2 ppm
		(vacated) TWA: 2 ppm	TWA: 5 mg/m <sup>3</sup>
		(vacated) TWA: 5 mg/m <sup>3</sup>	STEL: 4 ppm
		(vacated) STEL: 4 ppm	STEL: 10 mg/m <sup>3</sup>
		(vacated) STEL: 10 mg/m <sup>3</sup>	-
Lead nitrate	TWA: 0.05 mg/m <sup>3</sup>	TWA: 50 µg/m <sup>3</sup>	IDLH: 100 mg/m <sup>3</sup> Pb
CAS#: 10099-74-8			TWA: 0.050 mg/m <sup>3</sup> Pb

#### Appropriate engineering controls

**Engineering Controls** 

Showers Eyewash stations Ventilation systems.

# Individual protection measures, such as personal protective equipment

 Respiratory protection
 No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

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Hand Protection	Wear suitable gloves. Impervious gloves.			
Eye/face protection	Face protection shield.			
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.			
General Hygiene Considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.			
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.			
Thermal hazards	None under normal processing.			

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# Information on basic physical and chemical properties

Physical state Appearance Odor	aqueous solution Irritating	Liquid		Color Odor threshold	Light yellow 0.29 ppm	<i>i</i> to colorless
Property_			<u>Values</u>			Remarks • Method
Molecular weight	:		No data availal	ble		
рН			0.6			
Melting point/free	ezing point		-5 °C / 23 °F			
Boiling point / bo	iling range		102 °C / 216	°F		
Evaporation rate		0.99 (water = 1)				
Vapor pressure		24.002 mm Hg / 3.2 kPa at 25 °C / 77 °F				
Vapor density (ai	r = 1)		0.64			
Specific gravity (	water = 1 / air = 1)		1.013			
Partition Coeffici	ent (n-octanol/wat	er)	Not applicable			
Soil Organic Carl Coefficient	bon-Water Partition	า	Not applicable			
Autoignition tem	perature		No data availal	ble		
Decomposition to	emperature		500 °C °C / 93	32 °F °F		
Dynamic viscosit	y		No data availal	ble		
Kinematic viscos	ity		No data availal	ble		
Solubility(ies)						
Water solubility						

Water solubility classification	Water solubility	Water Solubility Temperature
Completely soluble	486000 mg/L	20 °C / 68 °F

#### Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

#### **Other Information**

Metal Corrosivity

Classified as corrosive to metal according to GHS criteria Steel Corrosion Rate

**Aluminum Corrosion Rate** 

No data available No data available

Volatile Organic Compounds (VOC) Content

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Nitric acid	7697-37-2	Not applicable	-
Lead nitrate	10099-74-8	No data available	-

#### **Explosive properties**

Upper explosion limit Lower explosion limit		No data available No data available
Flammable properties		
Flash point		No data available
Flammability Limit in Air Upper flammability limit Lower flammability limit		No data available No data available
Oxidizing properties		No data available.
Bulk density		No data available
Particle Size	No information available	
Particle Size Distribution	No information available	

# **10. STABILITY AND REACTIVITY**

<b>Reactivity</b>
Not applicable

Chemical stability Stability

Stable under normal conditions.

#### Explosion data Sensitivity to Mechanical Impact None Sensitivity to Static Discharge None.

<u>Possibility of Hazardous Reactions</u> Possibility of Hazardous Reactions None under normal processing.

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<u>Hazardous polymerization</u> None under normal processing.

<u>Conditions to avoid</u> Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials Incompatible materials

Oxidizing agent. Acids. Bases.

#### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

# **11. TOXICOLOGICAL INFORMATION**

#### Information on Likely Routes of Exposure Product Information

Inhalation	Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.
Eye contact	Causes burns. Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	May cause irritation.
Ingestion	Causes burns. Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.
Symptoms	Redness. Burning. May cause blindness. Coughing and/ or wheezing.
Aggravated Medical Conditions Toxicologically synergistic products	Eye disorders. Skin disorders. Respiratory disorders. Preexisting eye disorders. Teeth. None known.
-	See ingredients information below.

Chemical name	Toxicokinetics, metabolism and distribution
Nitric acid	Acute mortality can be attributed to the nitric acids corrosive effects.
(1 - 5%)	
CAS#: 7697-37-2	

Product Acute Toxicity Data Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route

No data available No data available No data available No data available No data available

#### Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Ingredient Acute Toxicity Data

If available, see data below
If available, see data below

Product Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available
Inhalation (Gas) Exposure Route	No data available

#### Ingredient Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route	) )		-	If available, see data below		
Dermal Exposure Ro	oute			If available, see data below		
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and	
	type	dose	time	_	sources for data	
Nitric acid	Rat	226500	None	Blood	RTECS (Registry of Toxic	
(1 - 5%)	TDLo	mg/kg	reported	Methemoglobinemia-Carboxyhe	Effects of Chemical	
CAS#: 7697-37-2			-	moglobin	Substances)	
Inhalation (Dust/Mist	nalation (Dust/Mist) Exposure Route If available, see data below					
nhalation (Vapor) Ex	posure Route	)		If available, see data below		
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and	
	type	dose	time	_	sources for data	
Nitric acid	Rat	460 mg/L	1 hours	Nutritional and Gross	RTECS (Registry of Toxic	
(1 - 5%)	TCLo			Metabolic	Effects of Chemical	
CAS#: 7697-37-2				Weight loss or decreased	Substances)	
				weight gain		
				16 11 1 1 1 1 1		

Inhalation (Gas) Exposure Route

If available, see data below

#### Aspiration toxicity

No data available

#### Product Skin Corrosion/Irritation Data

No data available.

#### Ingredient Skin Corrosion/Irritation Data

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Nitric acid (1 - 5%) CAS#: 7697-37-2	Existing human experience	Human	None reported	None reported	Corrosive to skin	ERMA (New Zealands Environmental Risk Management Authority)
Lead nitrate (<0.01%) CAS#: 10099-74-8	Organization for Economic Co-operation and Development (OECD) - Test	Human	25 mg	1 hours	Skin irritant	ECHA (The European Chemicals Agency)

404: Acute Dermal			
Corrosion/Irritation			

#### Product Serious Eye Damage/Eye Irritation Data No data available.

# Ingredient Eye Damage/Eye Irritation Data

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Nitric acid (1 - 5%) CAS#: 7697-37-2	Existing human experience	Human	None reported	None reported	Corrosive to eyes	ERMA (New Zealands Environmental Risk Management Authority)
Lead nitrate (<0.01%) CAS#: 10099-74-8	Organization for Economic Co-operation and Development (OECD) - Test 405: Acute Eye Corrosion/Irritation	None reported	100 mg	None reported	Corrosive to eyes	ECHA (The European Chemicals Agency)

#### **Sensitization Information**

#### <u>Product Sensitization Data</u> Skin Sensitization Exposure Route Respiratory Sensitization Exposure Route

Ingredient Sensitization Data Skin Sensitization Exposure Route Respiratory Sensitization Exposure Route

#### **Chronic Toxicity Information**

#### Product Specific Target Organ Toxicity Repeat Dose Data Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route

No data available. No data available.

If available, see data below. If available, see data below.

No data available. No data available. No data available. No data available. No data available.

# Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Oral Exposure Route				If available, see data below	
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Lead nitrate	Rat	5.6 mg/kg	60 days	Liver	RTECS (Registry of Toxic
(<0.01%)	LDLo			Hepatitis (hepatocellular	Effects of Chemical
CAS#: 10099-74-8				necrosis), zonal	Substances)
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time	_	sources for data
Lead nitrate	Rat	17.6 mg/kg	60 days	Brain and Coverings	RTECS (Registry of Toxic
(<0.01%)	TDLo			Other degenerative changes	Effects of Chemical
CAS#: 10099-74-8				Kidney, Ureter, or Bladder	Substances)
				Changes in tubules (including	
				acute renal failure, acute tubular	
				necrosis)	
				Liver	
				Hepatitis (hepatocellular	
				necrosis), zonal	
Dermal Exposure Ro	ute			If available, see data below	

Inhalation (Dust/Mist) Exposure Route				If available, see data below		
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and	
	type	dose	time		sources for data	
Nitric acid	Rat	0.000050	3 days	Lungs, Thorax, or	RTECS (Registry of Toxic	
(1 - 5%)	TCLo	mg/L		Respiration	Effects of Chemical	
CAS#: 7697-37-2		-		Respiratory depression	Substances)	
Inhalation (Vapor) Ex	posure Route	)		If available, see data below		
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and	
	type	dose	time	_	sources for data	
Nitric acid	Rat	0.001071	84 days	Behavioral	RTECS (Registry of Toxic	
(1 - 5%)	TCLo	mg/L		Muscle contraction or spasticity	Effects of Chemical	
CAS#: 7697-37-2		-		Biochemical	Substances)	
				Enzyme inhibition, induction, or		
				change in blood or tissue levels		
				(true cholinesterase)		
				Kidney, Ureter, or Bladder		
				Other changes in urine		
				composition		
				If a callebra and shate balance		

Inhalation (Gas) Exposure Route

Product Carcinogenicity Data Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route If available, see data below

No data available No data available No data available No data available No data available

#### Ingredient Carcinogenicity Data

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Nitric acid	7697-37-2	-	Group 2A Group 1	-	Х
Lead nitrate	10099-74-8	A3	Group 2A	Reasonably Anticipated	X

#### Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 2A - Probably Carcinogenic to
	Humans
	Group 1 - Carcinogenic to Humans
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of	X - Present
Labor)	

Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route

Product Germ Cell Mutagenicity *invitro* Data No data available.

Ingredient Germ Cell Mutagenicity invitro Data No data available

Product Germ Cell Mutagenicity invivo Data Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route If available, see data below If available, see data below

No data available No data available No data available

Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route

Ingredient Germ Cell Mutagenicity invivo Data Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route

Product Reproductive Toxicity Data Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route

Ingredient Reproductive Toxicity Data

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No data available No data available

If available, see data below If available, see data below

No data available No data available No data available No data available No data available

Oral Exposure Route				If available, see data below	
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Nitric acid	Rat	21150 mg/kg	21 days	Effects on Embryo or Fetus	RTECS (Registry of Toxic
(1 - 5%)	TDLo			Fetotoxicity (except death e.g.	Effects of Chemical
CAS#: 7697-37-2				stunted fetus)	Substances)
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Nitric acid	Rat	2345 mg/kg	18 days	Effects on Newborn	RTECS (Registry of Toxic
(1 - 5%)	TDLo			Fetotoxicity (except death e.g.	Effects of Chemical
CAS#: 7697-37-2				stunted fetus)	Substances)
Dermal Exposure Ro	ute			If available, see data below	
Inhalation (Dust/Mist) Exposure Route				If available, see data below	
Inhalation (Vapor) Exposure Route				If available, see data below	
Inhalation (Gas) Expo	sure Route			If available, see data below	

# **12. ECOLOGICAL INFORMATION**

Ecotoxicity

Not considered to be harmful to aquatic life

Product Ecological Data

Aquatic toxicity

Fish Crustacea Algae No data available No data available No data available

# Ingredient Ecological Data

Aquatic toxicity

Fish If available, see ingredient data below If available, see ingredient data below Crustacea Key literature references and **Chemical name** Exposure Species Endpoint Reported time type dose sources for data GESTIS (Information System on Lead nitrate 48 Hours Ceriodaphnia dubia LC50 0.0264 mg/L (<0.01%) Hazardous Substances of the CAS#: 10099-74-8 German Social Accident Insurance)

Algae

No data available

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#### **Other Information**

Persistence and degradability

#### **Product Biodegradability Data** No data available.

#### Ingredient Biodegradability Data

ſ	Chemical name	Test method	Biodegradation	Exposure	Results
				time	
	(1 - 5%)	Estimation through BIOWIN v4.10 part of the Estimation Programs Interface (EPI) Suite™	None reported	None reported	Readily biodegradable
	CAS#: 7697-37-2				

#### Bioaccumulation

#### **Product Bioaccumulation Data** No data available.

#### Partition Coefficient (n-octanol/water)

#### Ingredient Bioaccumulation Data

Chemical name	Test method	Exposure time	Species	Bioconcentrat ion factor (BCF)	Results
Nitric acid (1 - 5%) CAS#: 7697-37-2	Estimation through BCFBAF v3.01 part of the Estimation Programs Interface (EPI) Suite™	None reported	None reported	BCF = 3.162	Does not have the potential to bioaccumula te

#### Mobility

#### Soil Organic Carbon-Water Partition Coefficient

Not applicable

Not applicable

#### Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Completely soluble	486000 mg/L	20 °C / 68 °F

#### Other adverse effects

Contains a substance with an endocrine-disrupting potential.

# **13. DISPOSAL CONSIDERATIONS**

#### Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
US EPA Waste Number	D002, D008

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Special instructions for disposal Dispose of material in an E.P.A. approved hazardous waste facility. **14. TRANSPORT INFORMATION** U.S. DOT UN3264 **UN/ID** no Proper shipping name Corrosive Liquid, Acidic, Inorganic, N.O.S. **DOT Technical Name** (Nitric Acid Solution < 5%) Hazard Class 8 **Packing Group** Ш **Emergency Response Guide** 154 Number TDG **UN/ID** no UN3264 Proper shipping name Corrosive Liquid, Acidic, Inorganic, N.O.S. **TDG Technical Name** (Nitric Acid Solution < 5%) **Hazard Class** 8 **Packing Group** Ш ΙΑΤΑ UN/ID no UN3264 Proper shipping name Corrosive Liquid, Acidic, Inorganic, N.O.S. IATA Technical Name (Nitric Acid Solution < 5%) Hazard Class 8 **Packing Group** Ш **ERG Code** 154 IMDG UN/ID no UN3264 Proper shipping name Corrosive Liquid, Acidic, Inorganic, N.O.S. **IMDG Technical Name** (Nitric Acid Solution < 5%) **Hazard Class** 8 Packing Group Ш No special precautions necessary. Note: Additional information There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies. If the item is part of a reagent set or kit the classification would change to the following: UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III. If the item is not regulated, the Chemical Kit classification does not apply. **15. REGULATORY INFORMATION National Inventories** Complies TSCA

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Complies

# International InventoriesEINECS/ELINCSCompliesENCSCompliesIECSCCompliesKECLCompliesPICCSCompliesTCSIComplies

DSL/NDSL

AICS NZIoC Complies Complies

**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

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

#### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Nitric acid (CAS #: 7697-37-2)	1.0
Lead nitrate (CAS #: 10099-74-8)	0.1 1.0

# SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Nitric acid 7697-37-2	1000 lb	-	-	Х
Lead nitrate 10099-74-8	10 lb	Х	-	Х

# **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

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
Lead nitrate	10 lb	-	RQ 10 lb final RQ
10099-74-8			RQ 4.54 kg final RQ

# U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues

Chemical name	U.S Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues	
Nitric acid (1 - 5%) CAS#: 7697-37-2	Release - Toxic; Theft - Explosives/Improvised Explosive Device Precursors	

# US State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Lead nitrate (CAS #: 10099-74-8)	Carcinogen

WARNING: This product can expose you to chemicals including Lead nitrate, which is known to the State of California to cause cancer.

For more information, go to http://www.P65Warnings.ca.gov

#### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Nitric acid	X	X	Х
7697-37-2			
Lead nitrate	X	X	Х
10099-74-8			

#### U.S. EPA Label Information

# 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

# Special Comments

None

#### Additional information

#### Global Automotive Declarable Substance List (GADSL)

Chemical name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thersholds
Lead nitrate	Declarable Substance (LR)	0.0 %
10099-74-8	Prohibited Substance (LR)	0.1 %

#### **NFPA and HMIS Classifications**

NFPA	Health hazards - 3	Flammability - 0	Instability - 0	Physical and Chemical Properties -
HMIS	Health hazards - 3	Flammability - 0	Physical Hazards - 0	Personal protection - X - See section 8 for more information

#### Key or legend to abbreviations and acronyms used in the safety data sheet

Immediately Dangerous to Life or Health ACGIH (American Conference of Governmental Industrial Hygienists) no data

#### Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
IVVA	TWA (lime-weighted average)	SIEL	

Product Code(s) 2374820 Issue Date 16-Aug-2018 Version 1.2		Product Name Lead Standard Solution, 10 mg/l as Pb <sup>+2</sup> Revision Date 17-Aug-2018 Page 16 / 16		
MAC	Maximum Allowab	le Concentration	Ceiling	Ceiling Limit Value
Х	Listed		Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN* RSP+ C M	Skin designation Respiratory sensit Carcinogen mutagen	ization	SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant
Prepared By		Hach Product Compliand	ce Department	
Issue Date		16-Aug-2018		
<b>Revision Date</b>		17-Aug-2018		
<b>Revision Note</b>		None		
<u>Disclaimer</u>				

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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End of Safety Data Sheet