

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/18/2017

Reviewed on 08/18/2017

1 Identification

- **Product identifier**
- **Product Name:** Custom Claritas Standard
- **Part Number:** ZPURDIN-50-100
- **Application of the substance / the mixture** Certified Reference Material
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SPEX CertiPrep, LLC.
203 Norcross Ave, Metuchen,
NJ 08840 USA
- **Information department:** product safety department
- **Emergency telephone number:**
Emergency Phone Number (24 hours)
CHEMTREC (800-424-9300)
Outside US: 703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 1A H350 May cause cancer.

Repr. 1 H360 May damage fertility or the unborn child.



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

nitric acid

Beryllium from Beryllium Acetate

Lead from Lead Oxide

arsenic

cobalt

nickel

- **Hazard statements**

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

- **Precautionary statements**

Do not breathe dusts or mists.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Immediately call a POISON CENTER/doctor.

Store locked up.

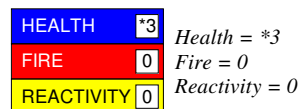
Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



· Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

7697-37-2	nitric acid	10.0%
7440-38-2	arsenic	0.1%
7440-41-7	Beryllium from Beryllium Acetate	0.1%
7440-43-9	cadmium (non-pyrophoric)	0.1%
7440-48-4	cobalt	0.1%
7440-02-0	nickel	0.1%
7439-92-1	Lead from Lead Oxide	0.1%

· Chemical identification of the substance/preparation

7440-39-3	Barium from Barium carbonate	0.1%
7440-69-9	bismuth	0.1%
7440-70-2	Calcium from Calcium carbonate	0.1%
7440-47-3	Chromium from Chromium(III) nitrate nonahydrate	0.1%
7440-50-8	copper	0.1%
7439-89-6	iron	0.1%
7440-09-7	Potassium from Potassium nitrate	0.1%
7439-91-0	Lanthanum from Lanthanum(III) nitrate hexahydrate	0.1%
7439-95-4	magnesium	0.1%
7439-96-5	manganese	0.1%
7439-98-7	molybdenum	0.1%
7440-23-5	Sodium from Sodium carbonate	0.1%
7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate	0.1%
7440-20-2	Scandium from Scandium oxide	0.1%
7440-24-6	Strontium from Strontium carbonate	0.1%
7440-62-2	Vanadium from Ammonium trioxovanadate	0.1%
7440-65-5	Yttrium from Yttrium oxide	0.1%
7440-66-6	zinc powder -zinc dust (stabilized)	0.1%
7429-90-5	aluminium	0.1%
7440-22-4	silver	0.1%
7732-18-5	water, distilled, conductivity or of similar purity	87.4%

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4 First-aid measures· **Description of first aid measures**· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.· **After swallowing:**

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

· **Information for Doctor:**· **Most important symptoms and effects, both acute and delayed** No further relevant information available.· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.**5 Fire-fighting measures**· **Extinguishing media**· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.· **Special hazards arising from the substance or mixture** No further relevant information available.· **Advice for firefighters**· **Protective equipment:** Mouth respiratory protective device.**6 Accidental release measures**· **Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.· **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**· **PAC-1:**

7697-37-2	nitric acid	0.16 ppm
7440-38-2	arsenic	1.5 mg/m ³
7440-39-3	Barium from Barium carbonate	1.5 mg/m ³
7440-41-7	Beryllium from Beryllium Acetate	0.0023 mg/m ³
7440-69-9	bismuth	15 mg/m ³
7440-43-9	cadmium (non-pyrophoric)	0.10 mg/m ³
7440-48-4	cobalt	0.18 mg/m ³
7440-47-3	Chromium from Chromium(III) nitrate nonahydrate	1.5 mg/m ³
7440-50-8	copper	3 mg/m ³
7439-89-6	iron	3.2 mg/m ³
7440-09-7	Potassium from Potassium nitrate	2.3 mg/m ³
7439-91-0	Lanthanum from Lanthanum(III) nitrate hexahydrate	30 mg/m ³
7439-95-4	magnesium	18 mg/m ³
7439-96-5	manganese	3 mg/m ³
7439-98-7	molybdenum	30 mg/m ³
7440-23-5	Sodium from Sodium carbonate	13 mg/m ³
7440-02-0	nickel	4.5 mg/m ³
7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate	0.27 mg/m ³

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7439-92-1	Lead from Lead Oxide	0.15 mg/m3
7440-20-2	Scandium from Scandium oxide	30 mg/m3
7440-24-6	Strontium from Strontium carbonate	30 mg/m3
7440-62-2	Vanadium from Ammonium trioxovanadate	3 mg/m3
7440-65-5	Yttrium from Yttrium oxide	3 mg/m3
7440-66-6	zinc powder -zinc dust (stabilized)	6 mg/m3
7440-22-4	silver	0.3 mg/m3

· PAC-2:

7697-37-2	nitric acid	24 ppm
7440-38-2	arsenic	17 mg/m3
7440-39-3	Barium from Barium carbonate	180 mg/m3
7440-41-7	Beryllium from Beryllium Acetate	0.025 mg/m3
7440-69-9	bismuth	170 mg/m3
7440-43-9	cadmium (non-pyrophoric)	0.76 mg/m3
7440-48-4	cobalt	2 mg/m3
7440-47-3	Chromium from Chromium(III) nitrate nonahydrate	17 mg/m3
7440-50-8	copper	33 mg/m3
7439-89-6	iron	35 mg/m3
7440-09-7	Potassium from Potassium nitrate	25 mg/m3
7439-91-0	Lanthanum from Lanthanum(III) nitrate hexahydrate	330 mg/m3
7439-95-4	magnesium	200 mg/m3
7439-96-5	manganese	5 mg/m3
7439-98-7	molybdenum	330 mg/m3
7440-23-5	Sodium from Sodium carbonate	140 mg/m3
7440-02-0	nickel	50 mg/m3
7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate	3 mg/m3
7439-92-1	Lead from Lead Oxide	120 mg/m3
7440-20-2	Scandium from Scandium oxide	330 mg/m3
7440-24-6	Strontium from Strontium carbonate	330 mg/m3
7440-62-2	Vanadium from Ammonium trioxovanadate	5.8 mg/m3
7440-65-5	Yttrium from Yttrium oxide	33 mg/m3
7440-66-6	zinc powder -zinc dust (stabilized)	21 mg/m3
7440-22-4	silver	170 mg/m3

· PAC-3:

7697-37-2	nitric acid	92 ppm
7440-38-2	arsenic	100 mg/m3
7440-39-3	Barium from Barium carbonate	1,100 mg/m3
7440-41-7	Beryllium from Beryllium Acetate	0.1 mg/m3
7440-69-9	bismuth	990 mg/m3
7440-43-9	cadmium (non-pyrophoric)	4.7 mg/m3
7440-48-4	cobalt	20 mg/m3
7440-47-3	Chromium from Chromium(III) nitrate nonahydrate	99 mg/m3
7440-50-8	copper	200 mg/m3
7439-89-6	iron	150 mg/m3
7440-09-7	Potassium from Potassium nitrate	150 mg/m3
7439-91-0	Lanthanum from Lanthanum(III) nitrate hexahydrate	2,000 mg/m3
7439-95-4	magnesium	1,200 mg/m3
7439-96-5	manganese	1,800 mg/m3
7439-98-7	molybdenum	2,000 mg/m3
7440-23-5	Sodium from Sodium carbonate	870 mg/m3
7440-02-0	nickel	99 mg/m3
7723-14-0	Phosphorus from Ammonium dihydrogenorthophosphate	18 mg/m3
7439-92-1	Lead from Lead Oxide	700 mg/m3
7440-20-2	Scandium from Scandium oxide	2,000 mg/m3
7440-24-6	Strontium from Strontium carbonate	2,000 mg/m3

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7440-62-2	Vanadium from Ammonium trioxovanadate	35 mg/m ³
7440-65-5	Yttrium from Yttrium oxide	200 mg/m ³
7440-66-6	zinc powder -zinc dust (stabilized)	120 mg/m ³
7440-22-4	silver	990 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

7697-37-2 nitric acid

PEL	Long-term value: 5 mg/m ³ , 2 ppm
REL	Short-term value: 10 mg/m ³ , 4 ppm Long-term value: 5 mg/m ³ , 2 ppm
TLV	Short-term value: 10 mg/m ³ , 4 ppm Long-term value: 5.2 mg/m ³ , 2 ppm

7440-38-2 arsenic

PEL	Long-term value: 0.5* 0.01** mg/m ³ as As; *organic**inorg. compds.; 29 CFR 1910.1018
REL	Ceiling limit value: 0.002 mg/m ³ as As; 15min; See Pocket Guide App. A
TLV	Long-term value: 0.01 mg/m ³ as As; BEI

7440-41-7 Beryllium from Beryllium Acetate

PEL	Long-term value: 0.002 mg/m ³ Ceiling limit value: 0.005; 0.025* mg/m ³ as Be; *30 min peak per 8-hr shift
REL	Ceiling limit value: 0.0005 mg/m ³ as Be; See Pocket Guide App. A
TLV	Long-term value: 0.00005 mg/m ³ as Be; inhalable; RSEN; soluble comp.: Skin, DSEN

7440-43-9 cadmium (non-pyrophoric)

PEL	Long-term value: 0.005 mg/m ³ as Cd; see 29 CFR 1910.1027
REL	See Pocket Guide App. A
TLV	Long-term value: 0.01 0.002* mg/m ³ as Cd; *respirable fraction; BEI

7440-48-4 cobalt

PEL	Long-term value: 0.1* mg/m ³ as Co; *for metal dust and fume
REL	Long-term value: 0.05 mg/m ³ as Co; metal dust & fume
TLV	Long-term value: (0.02) NIC-0.02* mg/m ³ *inh. fraction; NIC-Skin, DSEN, RSEN (BEI)

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7440-02-0 nickel

PEL Long-term value: 1 mg/m³
 REL Long-term value: 0.015 mg/m³
 as Ni; See Pocket Guide App. A
 TLV Long-term value: 1.5* mg/m³
 elemental, *inhalable fraction

7439-92-1 Lead from Lead Oxide

PEL Long-term value: 0.05* mg/m³
 *see 29 CFR 1910.1025
 REL Long-term value: 0.05* mg/m³
 *8-hr TWA ;See PocketGuide App.C
 TLV Long-term value: 0.05* mg/m³
 *and inorganic compounds, as Pb; BEI

· **Ingredients with biological limit values:****7440-38-2 arsenic**

BEI 35 µg As/L
 Medium: urine
 Time: end of workweek
 Parameter: Inorganic arsenic plus methylated metabolites (background)

7440-43-9 cadmium (non-pyrophoric)

BEI 5 µg/g creatinine
 Medium: urine
 Time: not critical
 Parameter: Cadmium (background)

5 µg/L
 Medium: blood
 Time: not critical
 Parameter: Cadmium (background)

7440-48-4 cobalt

BEI 15 µg/L
 Medium: urine
 Time: end of shift at end of workweek
 Parameter: Cobalt (background)

1 µg/L
 Medium: blood
 Time: end of shift at end of workweek
 Parameter: Cobalt (background, semi-quantitative)

7439-92-1 Lead from Lead Oxide

BEI 30 µg/100 ml
 Medium: blood
 Time: not critical
 Parameter: Lead

10 µg/100 ml
 Medium: blood
 Time: not critical
 Parameter: Lead (women of child bearing potential)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
 Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odour Threshold:	Not applicable.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	83 °C (181 °F)

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature:

Decomposition temperature: Not applicable.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower:	Not applicable.
Upper:	Not applicable.

· Vapor pressure at 20 °C (68 °F): 23 hPa (17 mm Hg)

· Density: Not applicable.

· Relative density: Not applicable.

· Vapor density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not applicable.

· Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.

· Solvent content:

Organic solvents:	0.0 %
Water:	87.4 %

Solids content: 2.5 %

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· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

7440-43-9 cadmium (non-pyrophoric)

Oral	LD50	225 mg/kg (rat)
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7440-62-2 Vanadium from Ammonium trioxovanadate

Oral	LD50	160 mg/kg (rat)
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· **Primary irritant effect:**

· **on the skin:** Caustic effect on skin and mucous membranes.

· **on the eye:** Strong caustic effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Carcinogenic.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

7440-38-2	arsenic	I
7440-41-7	Beryllium from Beryllium Acetate	I
7440-43-9	cadmium (non-pyrophoric)	I
7440-48-4	cobalt	2B
7440-47-3	Chromium from Chromium(III) nitrate nonahydrate	3
7440-02-0	nickel	2B
7439-92-1	Lead from Lead Oxide	2B

· **NTP (National Toxicology Program)**

7440-38-2	arsenic	K
7440-41-7	Beryllium from Beryllium Acetate	K
7440-43-9	cadmium (non-pyrophoric)	K
7440-48-4	cobalt	R
7440-02-0	nickel	R
7439-92-1	Lead from Lead Oxide	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

7440-38-2	arsenic
7440-43-9	cadmium (non-pyrophoric)

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

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- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Danger to drinking water if even extremely small quantities leak into the ground.
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number · DOT, ADR, IMDG, IATA	UN2031
· UN proper shipping name · DOT · ADR · IMDG, IATA	Nitric acid solution 2031 Nitric acid solution NITRIC ACID solution
· Transport hazard class(es) · DOT	
	
· Class · Label	8 Corrosive substances 8
· ADR, IMDG, IATA	
	
· Class · Label	8 Corrosive substances 8
· Packing group · DOT, ADR, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user · Danger code (Kemler): · EMS Number: · Segregation groups · Stowage Category	Warning: Corrosive substances 80 F-A,S-Q Acids D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

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· **Transport/Additional information:**· **ADR**· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **IMDG**· **Limited quantities (LQ)**· **Excepted quantities (EQ)**

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 2031 NITRIC ACID SOLUTION, 8, II

15 Regulatory information· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Sara**· **Section 355 (extremely hazardous substances):**

7697-37-2 nitric acid

7723-14-0 Phosphorus from Ammonium dihydrogenorthophosphate

· **Section 313 (Specific toxic chemical listings):**

7697-37-2 nitric acid

7440-38-2 arsenic

7440-39-3 Barium from Barium carbonate

7440-41-7 Beryllium from Beryllium Acetate

7440-43-9 cadmium (non-pyrophoric)

7440-48-4 cobalt

7440-47-3 Chromium from Chromium(III) nitrate nonahydrate

7440-50-8 copper

7439-96-5 manganese

7440-02-0 nickel

7723-14-0 Phosphorus from Ammonium dihydrogenorthophosphate

7439-92-1 Lead from Lead Oxide

7440-62-2 Vanadium from Ammonium trioxovanadate

7440-66-6 zinc powder -zinc dust (stabilized)

7429-90-5 aluminium

7440-22-4 silver

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**· **Chemicals known to cause cancer:**

7440-38-2 arsenic

7440-41-7 Beryllium from Beryllium Acetate

7440-43-9 cadmium (non-pyrophoric)

7440-48-4 cobalt

7440-02-0 nickel

7439-92-1 Lead from Lead Oxide

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

7440-43-9 cadmium (non-pyrophoric)

· **Chemicals known to cause developmental toxicity:**

7440-43-9 cadmium (non-pyrophoric)

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

7440-38-2 arsenic

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7440-39-3	Barium from Barium carbonate	D, CBD(inh), NL(oral)
7440-41-7	Beryllium from Beryllium Acetate	B1, K/L(inh), CBD(oral)
7440-43-9	cadmium (non-pyrophoric)	B1
7440-50-8	copper	D
7439-96-5	manganese	D
7439-92-1	Lead from Lead Oxide	B2
7440-66-6	zinc powder -zinc dust (stabilized)	D, I, II
7440-22-4	silver	D

· **TLV (Threshold Limit Value established by ACGIH)**

7440-38-2	arsenic	A1
7440-39-3	Barium from Barium carbonate	A4
7440-43-9	cadmium (non-pyrophoric)	A2
7440-48-4	cobalt	A3
7439-98-7	molybdenum	A3
7440-02-0	nickel	A5
7439-92-1	Lead from Lead Oxide	A3
7429-90-5	aluminium	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

7440-38-2	arsenic	
7440-43-9	cadmium (non-pyrophoric)	
7440-02-0	nickel	

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05

GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

nitric acid
Beryllium from Beryllium Acetate
Lead from Lead Oxide
arsenic
cobalt
nickel

· **Hazard statements**

H314 Causes severe skin burns and eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H350 May cause cancer.
H360 May damage fertility or the unborn child.

· **Precautionary statements**

Do not breathe dusts or mists.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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/doctor.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** product safety department

(Contd. on page 12)

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/18/2017

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Product Name: Custom Claritas Standard

(Contd. of page 11)

· Contact:

SPEX CertiPrep, LLC.
1-732-549-7144

· Date of preparation / last revision 08/18/2017 / -**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 1A: Carcinogenicity – Category 1A

Repr. 1: Reproductive toxicity – Category 1

US