

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 08/27/2014

Reviewed on 08/27/2014

* 1 Identification

- **Product identifier**
- **Trade name: *Supra***
- **Product description** Liquid Fertilizer
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Redox Chemicals LLC
130 South 100 West
PO Box 129
Burley, ID 83318
Phone: 208-678-2610
Fax: 208-677-3609
- **Emergency telephone number:** 208-431-2314

* 2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms** Non-Regulated Material
- **Signal word** Non-Regulated Material
- **Hazard statements** Non-Regulated Material
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous Components:**

7440-66-6	Zinc ⚠ Water-react. 1, H260; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2B, H320	≤ 2.5%
7440-50-8	copper	≤ 2.5%
7439-96-5	manganese ⚠ Pyr. Sol. 1, H250; Water-react. 1, H260	≤ 2.5%
7664-41-7	ammonia, anhydrous ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 3, H331; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; Flam. Gas 2, H221; Press. Gas, H280	≤ 2.5%

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- **Additional information:**
Available Phosphate (P₂O₅) 4.00 %
Soluble Potash (K₂O) 6.00 %

* 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Remove contaminated clothing. Wash clothing before reuse.
Immediately wash skin with soap and plenty of water for at least 20 minutes.
If symptoms persist, consult a doctor.
- **After eye contact:**
Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes.
Seek immediate medical advice.
- **After swallowing:**
Never give anything by mouth to an unconscious person
Do not induce vomiting without medical advice.
- **Most important symptoms and effects, both acute and delayed**
Treat symptoms and reduce over-exposure.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Hazardous Combustion Products: Upon combustion, this product may release oxides of phosphorous and nitrogen, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Phosphines may be formed after all water has been removed.
- **Advice for firefighters**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the collected material according to regulations.
- **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.

* 7 Handling and storage

- **Precautions for safe handling**
Avoid prolonged or repeated exposure.
No special measures required.

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- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Keep container tightly closed.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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 section 7.
- **Control parameters**

· Components with occupational exposure limits:

7440-50-8 copper

PEL	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
REL	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
TLV	Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume; as Cu

7664-41-7 ammonia, anhydrous

PEL	Long-term value: 35 mg/m ³ , 50 ppm
REL	Short-term value: 27 mg/m ³ , 35 ppm Long-term value: 18 mg/m ³ , 25 ppm
TLV	Short-term value: 24 mg/m ³ , 35 ppm Long-term value: 17 mg/m ³ , 25 ppm

- **Additional information:**
The lists that were valid during the creation were used as basis.
Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves** Not required.
- **Penetration time of glove material** Not applicable.
- **Eye protection:** Not required.
- **Body protection:** Wear long-sleeved shirt and long pants. Wash contaminated clothing before reuse.

* 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - **Form:** Liquid
 - **Color:** Brown
 - **Odor:** Characteristic

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- **Odor threshold:** Not determined.
- **pH-value @ 20 °C (68 °F):** 6.6
- **Change in condition**
 - **Melting point/Melting range:** Not determined.
 - **Boiling point/Boiling range:** Not determined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:**
 - **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
- **Vapor pressure:** Not determined.
- **Density @ 20 °C (68 °F):** 1.2 g/cm³ (10.014 lbs/gal)
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - **Dynamic:** Not determined.
 - **Kinematic:** Not determined.
- **Solvent content:**
 - **Organic solvents:** 0.0 %
- **Other information** No further relevant information available.

* 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Product is stable under normal conditions.
- **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:** Alkali metals and alkaline earth metals may cause fires or explosions

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

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· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

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

None of the ingredients are listed.

· **NTP (National Toxicology Program)**

None of the ingredients are listed.

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

None of the ingredients are listed.

* **12 Ecological information**

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:** Not known to be hazardous to water.

· **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:** Smaller quantities can be disposed of with household waste.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

* **14 Transport information**

· **UN-Number**

· **DOT, ADN, IMDG, IATA**

Non-Regulated Material

· **ADR**

Non-Regulated Material

Not Regulated

· **UN proper shipping name**

· **DOT, ADR, ADN, IMDG, IATA**

Non-Regulated Material

· **Transport hazard class(es)**

· **DOT, ADR, ADN, IMDG, IATA**

Non-Regulated Material

· **Class**

· **Packing group**

· **DOT, ADR, IMDG, IATA**

Non-Regulated Material

· **Environmental hazards:**

· **Marine pollutant:**

No

· **Special precautions for user**

Not applicable.

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- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

***15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

7664-41-7	ammonia, anhydrous
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· **Section 313 (Specific toxic chemical listings):**

7440-66-6	Zinc
7440-50-8	copper
7439-96-5	manganese
7664-41-7	ammonia, anhydrous

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

7440-66-6	Zinc
7439-89-6	iron
7440-50-8	copper
7439-96-5	manganese
7727-37-9	nitrogen
7664-41-7	ammonia, anhydrous
7440-42-8	boron
7439-98-7	molybdenum

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

7440-66-6	Zinc		D, I, II
7440-50-8	copper		D
7439-96-5	manganese		D
7440-42-8	boron		I (oral)

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

7439-98-7	molybdenum		A3
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

- **GHS label elements** Non-Regulated Material

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- **Hazard pictograms** Non-Regulated Material
- **Signal word** Non-Regulated Material
- **Hazard statements** Non-Regulated Material

National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

State Right to Know

98059-61-1	Phosphate	≤ 2.5%
	Soluble Potash (K ₂ O)	≤ 2.5%
7440-66-6	Zinc	≤ 2.5%
	☠ Water-react. 1, H260; ☠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2B, H320	
7439-89-6	iron	≤ 2.5%
7440-50-8	copper	≤ 2.5%
7439-96-5	manganese	≤ 2.5%
	☠ Pyr. Sol. 1, H250; Water-react. 1, H260	
All ingredients are listed.		

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

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision** 08/27/2014 / -

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)
 Flam. Gas 2: Flammable gases, Hazard Category 2
 Press. Gas: Gases under pressure: Compressed gas
 Flam. Liq. 3: Flammable liquids, Hazard Category 3
 Pyr. Sol. 1: Pyrophoric Solids, Hazard Category 1
 Water-react. 1: Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Category 1

Acute Tox. 4: Acute toxicity, Hazard Category 4
 Acute Tox. 3: Acute toxicity, Hazard Category 3
 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

- *** Data compared to the previous version altered.**

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