

Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/14/2014

Reviewed on 01/27/2014

*** 1 Identification**

- **Product identifier**
- **Trade name: Supreme**
- **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**



GHS07

May cause respiratory irritation.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**
May cause respiratory irritation.
- **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 0
Reactivity = 0

(Contd. on page 2)

Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/14/2014

Reviewed on 01/27/2014

Trade name: Supreme

(Contd. of page 1)

· HMIS-ratings (scale 0 - 4)

HEALTH	1	Health = *1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

7439-89-6	iron	2-12%
-----------	------	-------

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

· Dangerous components:

12136-45-7	dipotassium oxide ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318	15-35%
1314-56-3	phosphorus pentoxide ⚠ Skin Corr. 1A, H314	15-35%
7440-66-6	Zinc ⚠ Water-react. 1, H260; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2B, H320	2-12%
7439-96-5	manganese	2-12%
7727-37-9	nitrogen ⚠ Press. Gas, H281; ⚠ STOT SE 2, H371	≤ 2.5%
7440-50-8	copper	≤ 2.5%

4 First-aid measures

· Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Give large amounts of water. If symptoms persist consult 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:

 CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture No further relevant information available.

· Advice for firefighters
· Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up: Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 3)

Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/14/2014

Reviewed on 01/27/2014

Trade name: **Supreme**

(Contd. of page 2)

See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **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:** 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 section 7.
- **Control parameters**

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

7439-96-5 manganese

PEL	Short-term value: C 5 mg/m ³ as Mn
REL	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³ fume, as Mn
TLV	Long-term value: 0.02* 0.1* mg/m ³ as Mn; *respirable **inhalable fraction

7727-37-9 nitrogen

TLV	Simple asphyxiant
-----	-------------------

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

- **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.
- **Breathing equipment:** Not required.
- **Protection of hands:**
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.
Select glove material based on penetration times, rates of diffusion and degradation.

(Contd. on page 4)

Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/14/2014

Reviewed on 01/27/2014

Trade name: **Supreme**

(Contd. of page 3)

· **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 determined and observed by the manufacturer of the protective gloves.

· **Eye protection:** Not required.

* 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Powder
Color:	Reddish brown
Odor:	Characteristic

· **pH-value @ 20 °C (68 °F):** 3.5-4.5

· **Change in condition**

Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	591 °C (1096 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not determined.

· **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 applicable.

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with**

Water:	Insoluble.
---------------	------------

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

· **Viscosity:**

Dynamic:	Not applicable.
Kinematic:	Not applicable.

· **Solvent content:**

Organic solvents:	0.0 %
--------------------------	-------

Solids content:	39.9 %
------------------------	--------

(Contd. on page 5)

Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/14/2014

Reviewed on 01/27/2014

Trade name: **Supreme**

(Contd. of page 4)

- **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:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is 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:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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.

(Contd. on page 6)

Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/14/2014

Reviewed on 01/27/2014

Trade name: Supreme

(Contd. of page 5)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

*** 14 Transport information**

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **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):		
1314-56-3	phosphorus pentoxide	
· Section 313 (Specific toxic chemical listings):		
7440-66-6	Zinc	
7439-96-5	manganese	
7440-50-8	copper	
· TSCA (Toxic Substances Control Act):		
All ingredients are listed.		
· Proposition 65		
· Chemicals known to cause cancer:		
None of the ingredients is listed.		
· Chemicals known to cause reproductive toxicity for females:		
None of the ingredients is listed.		
· Chemicals known to cause reproductive toxicity for males:		
None of the ingredients is listed.		
· Chemicals known to cause developmental toxicity:		
None of the ingredients is listed.		
· Carcinogenic categories		
· EPA (Environmental Protection Agency)		
7440-66-6	Zinc	II
7439-96-5	manganese	D

(Contd. on page 7)

Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/14/2014

Reviewed on 01/27/2014

Trade name: Supreme

(Contd. of page 6)

7440-50-8	copper	D
7440-42-8	boron	I

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

7439-98-7	molybdenum	A3
-----------	------------	----

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

None of the ingredients is listed.

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

Corrosive to eyes

· **GHS label elements**

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

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard statements**

May cause respiratory irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

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

· **National regulations:**

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

· **State Right to Know**

12136-45-7	dipotassium oxide ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318	15-35%
1314-56-3	phosphorus pentoxide ⚠ Skin Corr. 1A, H314	15-35%
7439-89-6	iron	2-12%
7440-66-6	Zinc ⚠ Water-react. 1, H260; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2B, H320	2-12%
7439-96-5	manganese	2-12%
7727-37-9	nitrogen ⚠ Press. Gas, H281; ⚠ STOT SE 2, H371	≤ 2.5%

None of the ingredients is listed.

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

(Contd. on page 8)

Safety Data Sheet (SDS)

OSHA Haz Com Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Printing date 02/14/2014

Reviewed on 01/27/2014

Trade name: Supreme

(Contd. of page 7)

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.

· **Date of preparation / last revision** 02/14/2014 / 1

· **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)

Press. Gas: Gases under pressure: Refrigerated liquefied gas

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

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

STOT SE 2: Specific target organ toxicity - Single exposure, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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

SDS / MSDS Created by MSDS Authoring Services (www.MSDSAuthoring.com)