SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Oxone

Catalog Numbers: O048

Synonyms: Potassium peroxymonosulfate

CAS-No. : 70693-62-8

Company Information:

LEONID CHEMICALS Pvt Ltd,
62/A2, 1st Stage,
Yeshwanthpur Industrial Suburb,
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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Oxidizing solids (Category 3), H272
Skin corrosion (Category 1A), H314
Respiratory sensitisation (Category 1), H334
Skin sensitisation (Category 1), H317
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
For the full text of the H-Statements mentioned in this Section, see Section 16.
Classification according to EU Directives 67/548/EEC or 1999/45/EC

O	Oxidising	R 8
C	Corrosive	R35
Xn	Harmful	R42/43
Xi	Irritant	R37

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008
Signal word Danger

Hazard statement(s)
H272 May intensify fire; oxidiser.
H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.

Precautionary statement(s)
P220 Keep/Store away from clothing/ combustible materials.
P261 Avoid breathing dust.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
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.

Supplemental Hazard Statements none

According to European Directive 67/548/EEC as amended.
Hazard symbol(s) O Oxidising
C Corrosive

R-phrase(s)
R 8 Contact with combustible material may cause fire.
R35 Causes severe burns.
R37 Irritating to respiratory system.
R42/43 May cause sensitisation by inhalation and skin contact.

S-phrase(s)
S22 Do not breathe dust.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards - none

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical characterization	: Natural product
Synonyms	: Potassium peroxymonosulfate
Formula	: $HKO_5S \cdot 0.5HKO_4S \cdot 0.5K_2O_4S$
Molecular Weight	: 307,38 g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Potassium hydrogensulphate		
CAS-No. 7646-93-7 EC-No. 231-594-1 Index-No. 016-056-00-4	Skin Corr. 1B; STOT SE 3; H314, H335	20 - 25 %
Potassium hydrogensulphate		
CAS-No. 7646-93-7 EC-No. 231-594-1 Index-No. 016-056-00-4	Ox. Sol. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Resp. Sens. 1; Skin Sens. 1; STOT SE 3; H272, H302, H315, H317, H319, H334, H335	1 - 10 %

Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
Potassium hydrogensulphate		
CAS-No. 7646-93-7 EC-No. 231-594-1 Index-No. 016-056-00-4	C, R34 - R37	20 - 25 %
Potassium hydrogensulphate		
CAS-No. 7646-93-7 EC-No. 231-594-1 Index-No. 016-056-00-4	O, Xn, R 8 - R22 - R36/37/38 - R42/43	1 - 10 %

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
no data available

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Sulphur oxides, Potassium oxides, Magnesium oxide

5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.Keep away from heat and sources of ignition.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. hygroscopic

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material	: Nitrile rubber
Minimum layer thickness	: 0,11 mm
Break through time	: 480 min
Material tested	:Dermatril

Splash contact

Material : Nitrile rubber
Minimum layer thickness : 0,11 mm
Break through time : 480 min
Material tested :Dermatril
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a)	Appearance Form Colour	: crystalline : white
b)	Odour	: no data available
c)	Odour Threshold	: no data available
d)	pH	: 2 at 30 g/l at 77 °C
e)	Melting point/freezing point	: no data available
f)	Initial boiling point and boiling range	: no data available

g)	Flash point	: not applicable
h)	Evapouration rate	: no data available
i)	Flammability (solid, gas)	: no data available
j)	Upper/lower flammability or explosive limits	: no data available
k)	Vapour pressure	: no data available
l)	Vapour density	: no data available
m)	Relative density	: 1,100 - 1,400 g/cm3
n)	Water solubility	: soluble
o)	Partition coefficient: n-octanol/water	: no data available
p)	Auto-ignition temperature	: no data available
q)	Decomposition temperature	: no data available
r)	Viscosity	: no data available
s)	Explosive properties	: no data available

t) Oxidizing properties The substance or mixture is classified as oxidizing with the category 3.

9.2 Other safety information
no data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
no data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
no data available

10.5 Incompatible materials
Strong bases, Acids, Bases, Powdered metals, Strong oxidizing agents, Organic materials, Alcohols, acids, phosphorous, Halogens, Anhydrides, Phosphorus, Strong reducing agents

10.6 Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Additional Information
RTECS: Not available
spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough,wheezing, laryngitis, Shortness of breath, Headache

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
no data available

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effec

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 3215 IMDG: 3215 IATA: 3215

14.2 UN proper shipping name
ADR/RID : PERSULPHATES, INORGANIC, N.O.S.
IMDG : PERSULPHATES, INORGANIC, N.O.S.

IATA : Persulphates, inorganic, n.o.s.

14.3 Transport hazard class(es)

ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

no data available

SECTION 15: REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
Ox. Sol.	Oxidizing solids
Resp. Sens.	Respiratory sensitisation
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitisation
STOT SE	Specific target organ toxicity - single exposure

Full text of R-phrases referred to under sections 2 and 3

C	Corrosive
R 8	Contact with combustible material may cause fire.
R22	Harmful if swallowed.
R34	Causes burns.
O	Oxidising
R35	Causes severe burns.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37	Irritating to respiratory system.
Xn	Harmful
R42/43	May cause sensitisation by inhalation and skin contact.

SECTION 16 – ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.