



Material Safety Data Sheet

POTASSIUM HYDROXIDE

Section 1 Chemical Product and Company Identification

Product Potassium Hydroxide
Supplier Oren Hydrocarbons Middle East FZCO.
PO Box 18159 Jebel Ali Free Zone (South)
Dubai – U.A.E
Tel : +97148860497
Fax: +97148860498

Section 2 Composition/Information on Ingredients:

Ingredient Name:	CAS No.	Concentration
Potassium Hydroxide	1310-58-3	90 - 100%

Section 3 Hazards Identification

Not regarded as a health hazard under current legislation.

Section 4 First Aid Measures

Inhalation

Move the exposed person to fresh air at once, and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.

Ingestion

Do not induce vomiting in order to avoid formation of foam, which can reach the respiratory tract and, if vomiting is necessary, give an antifoam (dimeticone). If signs of irritation occur seek medical attention.

Skin Contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye Contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues

General Note

Persons seeking medical attention should carry a copy of this MSDS with them.

Section 5 Fire Fighting Measures

Extinguishing Media :

Water mist. Powder, foam or CO2

Special Fire Fighting Procedures

Do not enter fire area without proper personal protective equipment, including NIOSH/MSHA approved self-contained breathing apparatus. Use water to keep fire exposed containers cool and disperse vapors



Hazardous combustion of product
It may emit noxious fumes.

Section 6 Accidental Release Measures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet.

Spill clean-up methods

Evacuate surrounding area, if necessary. Contain spilled material ,absorb in vermiculite dry sand or earth.

Place into containers for disposal and flush area with water.

Section 7 Handling and Storage

Usage Precautions

Put on appropriate personal protective equipment. Avoid contact with skin and eyes

Avoid breathing vapors or spray mists. Use only in a well-ventilated area wash thoroughly after handling

Storage Precautions

Store in dry, well-ventilated area. Keep container closed. Store above freezing.

Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding shrink-wrapping and/or stacking.

Section 8 Exposure controls, personal protection

Engineering Measures

Exposure Limits Local exhaust ventilation as necessary to maintain exposures to within applicable limits.

Eye Protection : Wear chemical safety goggles.

Protective Equipment's:



Respiratory Equipment

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Section 9 Physical and Chemicals properties

Physical State : Pellets, Solid

Appearance : White

Density : 2.04

Odor: Odorless

Solubility in water : Soluble

pH : 13 (0.1M Solution)

Section 10 Stability and Reactivity

Stability

There are no known reactivity hazards associated with this product



Conditions to Avoid : Not Known

Hazardous Decomposition Products : It may emit noxious fumes

Products Hazardous Polymerization : will not occur

Section 11 Toxicological Information

Inhalation: No specific health warnings noted. Vapours may irritate respiratory systems or lungs.

Ingestion : May cause discomfort if swallowed.

Skin Contact : Prolonged and frequent contact may cause redness and irritation.

Eye Contact : Spray and vapour in the eyes may cause irritation and smarting.

Section 12 Ecological Information

Ecotoxicity

Contact Oren Hydrocarbons HSE Department for ecological information.

Section 13 Disposal Considerations

Disposal Methods

Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that the containers are empty by the RCRA criteria prior to disposal in a permitted industrial landfill.

Section 14 Transport Information

Material Safety Data Sheet

Potassium Formate Liquid

Section 1 Chemical Product and Company Identification

Product	Potassium Formate Liquid
Supplier	Oren Hydrocarbons Middle East Inc., P.O. Box 18159 Jebel Ali Free Zone Dubai – U.A.E. Tel : +971 4 8860 497 Fax: +971 4 8860 498

Section 2 Composition/Information on Ingredients:

Chemical Formula:	CAS NO	EINECS No.	Percent
Formic acid, potassium salt	590-29-4	209-677-9	74.0 % Min.

Section 3 Hazards Identification



Appearance: The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: None.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract.

Inhalation: May cause respiratory tract irritation.

Chronic: No information found.

Section 4 First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Antidote: None reported.

Section 5 Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower:N/A Upper: N/A

NFPA Rating: (estimated) Health: ; Flammability: ; Instability;;

Section 6 Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section.

Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry,



well-ventilated area away from incompatible substances.

Section 8 Exposure controls, personal protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Formic acid, potassium salt	none listed	none listed	none listed

OSHA Vacated PELs: Formic acid, potassium salt: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles and face protection regulations in 29 CFR 1910.133 .

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Use when necessary.

Section 9 Physical and Chemicals properties

Physical State: Liquid

Appearance: Colourless

Odor: Odourless.

pH: 7.2 (> 10 00g/l in water @ 20 °C (68 °F)

Flash point : > 212 °F (> 100 °C)

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 275 - 307 °F (135 - 153 °C) @ 1 atm (101 ,3 kPa)

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Soluble in 100 cc of water.

Specific Gravity/Density: 1.57 g/cm³

Molecular Formula: HCOOK

Molecular Weight: 84.12

Section 10 Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, dust generation, exposure to air, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic, fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 Toxicological Information

Toxicological Information: No toxicological data is available for this product.

Section 12 Ecological Information



Eco toxicity: No data available. No information available.

Environmental: No information found.

Physical: Formates may metabolize into formic acid.

Other: No information available.

Section 13 Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 Transport Information

UN number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packaging group

ADR/RID: - IMDG: - IATA: -

Environmental hazards

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

Section 15 Regulatory Information

Risk Phrases : Not classified

Safety Phrases : Not classified

EU Directives : Dangerous Substance Directive 67\548.

Approved Code of Practice : Classification and Labeling of Substances and Preparations

Dangerous for Supply.

Section 16 Disclaimer

The statements, information and data provided in this MSDS are believed reliable and accurate by Oren Hydrocarbons Middle East FZCO. and its responsible personnel, however no other guarantee, representation, warranty or responsibility is expressed or implied to any user, regardless of reliance on all or any part thereof. This includes warranty of merchantability or of fitness for a particular purpose, and Oren Hydrocarbons Middle East FZCO. assumes no responsibility whatsoever for advice or recommendations made. Nothing contained herein should be interpreted as permission inducement.