

Safety Data Sheet

HDC Mk II

Date of Issue : 14 Apr 2017

Replaces : 20 Dec 2014

Valid no longer than : 14 Apr 2020

1. Chemical Product and Company Identification

Supplier : OCA Solutions Limited Craigshaw Road West Tullos Aberdeen, AB12 3AP, UK	Synonyms : HDC Mk II
Tel : +44 1224 248113 Fax : +44 1224 248289	Chemical / Technical Nature : Used for stimulation, BaSO ₃ , barite, CaCO ₃ , and cellulosic dissolving in oilfield drilling and production

2. Composition / Information on Ingredients

The product is a preparation, containing the following ingredients classified as dangerous under EU regulations and/or for which there are Community workplace exposure limits.

INGREDIENT

Potassium hydroxide

EINECS/ELINCS NO

215-181-3

% by Weight

10 – 15%

EC Symbols and Risk Phrases

Xn R22

C R35

(A substance for which Xi, R36 is proposed in a European Commission Communication but which is not classified in EC Annex 1 is also present, but not at a concentration where this could affect product classification or hazard).

3. Hazards Identification

Corrosive alkaline solution, causes burns. Avoid spray generation or other contact.

4. First Aid Measures

Inhalation	Remove to fresh air, obtain urgent medical attention.
Ingestion	If the chemical has been confined to the mouth give large quantities of water as a mouth wash. Ensure the mouth wash is not swallowed. If the chemical has been swallowed and the patient is conscious, give about 250 ml of water to dilute it in the stomach. Obtain medical attention.
Skin contact	Remove any contaminated clothing. Wash skin thoroughly with plenty of soap and with water. Obtain medical assistance if irritation persists.
Eye contact	Remove any contaminated clothing. Wash skin thoroughly with plenty of soap and with water. Obtain medical assistance.

5. Fire Fighting Measures

The product is not flammable.	
Extinguishing media	Foam, CO ₂ , Dry powder.
NOT TO BE USED	Water Jet.
Special hazards	None
Protective equipment	Protection as appropriate to fire conditions.

6. Accidental Release Measures

Personal precautions	Prevent skin or eye contact - see section 8.
Environmental precautions :	Contain or absorb in sand.
Clean-up and disposal	Contain or absorb in sand - see section 13.

7. Handling and Storage

Store in sealed containers away from direct sunlight. Avoid high temperatures; no special requirements for segregation from other products apply (but see Section 10).
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8. Exposure Controls / Personal Protection

Exposure limits : 15-minute Workplace Exposure Limit for potassium hydroxide (KOH):
2mg/cu.m (EH40).

CLOTHING/EQUIPMENT	REQUIRED ?	DETAILS
Protective clothing	Yes	Suitable for liquid splash protection (e.g. to EN 348)
Respiratory protection	Normally no	Avoid splash or mist generation
Hand protection	Yes	Impermeable gloves, PVC or similar (e.g. to EN 374-3).
Eye protection	Yes	Goggles face shield or safety glasses with sideshields (to EN 166).
Hand protection	Yes	Impermeable gloves, PVC or similar (e.g. to EN 374-3).
Eye protection	Yes	Goggles face shield or safety glasses with sideshields (to EN 166).

9. Physical & Chemical Properties

Appearance	Pale amber Liquid
Odour	Slight
pH	> 12.5
Boiling point	> 100° C
Melting point	< 0° C
Flash point	N/A
Decomposition temp.	N/A
Viscosity	4.37
Auto ignition temp.	N/A
Solubility (water)	Soluble
Density	1.31 ± 0.02

10. Stability & Reactivity

Stability	Stable
Avoid contact with	Strong oxidising agents.
Decomposition products	None known to be hazardous

11. Toxicological Information

The formulated product has not been tested. Toxicological properties are predictable and are determined principally by the corrosive action of the KOH ingredient.

Acute oral toxicity	Moderate (rat acute oral LD50 273 mg/kg or greater reported for KOH)
Repeat-dose toxicity	Not determined
Dermal toxicity	Local effects due to corrosive action are expected
Irritation/corrosion on the skin	10% KOH solution is reported corrosive (rabbit skin)
In the eye	5% KOH solution is reported corrosive (rabbit eye)
Skin sensitization	Not expected (KOH is non-sensitizing)
Mutagenicity	No ingredient is known to be mutagenic
Other available toxicity data	No ingredient is known to be carcinogenic

12. Ecological Information

Given the water solubility of the product, mobility in the aqueous environment is expected to be high.

Organic product components show limited biodegradability (not readily biodegradable). No significant bioaccumulation potential is predicted.

The formulated product has not been tested but moderate ecotoxicity is expected, based on known or predicted properties of the product ingredients.

Acute toxicity to fish	Expected to be moderate, mainly pH-related (KOH LC50 80 mg/l or greater)
Acute toxicity to invertebrates	Expected to be moderate, mainly pH-related
Acute toxicity to algae	Expected to be moderate (72h EC50 >20 mg/l)


13. Disposal Considerations

Pure material	May be incinerated. Consult licensed waste disposal contractor.
Contaminated sand, etc.	May be land filled subject to proper authorisation.
Packaging	May be recycled. Consult licensed drum recycler.
Disposers must comply with all relevant statutory requirements.	

14. Transport Information

CAS Number	1310-58-3
UN Number (SIN)	1719
Proper shipping name	CORROSIVE LIQUID, N.O.S. (contains potassium hydroxide)
Packing group	II
CTC (UK)	38119000
Class	8
IMDG code segregation group	8
ADR Tunnel Code	8
Packing code	1H2
EMS No	F-A, S-B

15. Regulatory Information

Danger indication and symbol	C (corrosive) 
Risk phrases	R35 Causes severe burns
Safety phrases	S23 – Do not breathe spray 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
Labelling requirements	As indicated above, plus “Contains potassium hydroxide”.
<p>The information contained in this safety data sheet does not constitute the user's own assessment of workplace risk as required by other health and safety legislation. The user is reminded of the requirement to comply with the provisions of the Health and Safety at Work. Act and the Control of Substances Hazardous to Health Regulations.</p>	

16. Other Information

Training advice	Users should ensure that personnel are trained in the correct use of this product.
Recommended uses	This product is supplied for the purposes notified to the customer on the data sheet. Its suitability or safety for use in any other circumstances cannot be warranted.
Technical advice	The user should contact the supplier if further advice is required.
Sources of data	This data sheet is compiled from laboratory analysis of the material, and from published sources considered reliable.

THIS SAFETY DATA SHEET IS VERSION 7

ISSUE DATE 14/04/2017

The Supplier identified in Section 2 provides this Safety Data Sheet as required by Directives 91/155/EEC, 93/112/EC and 2001/58/EC, but gives no warranty as to accuracy or completeness. As conditions of use of this product will vary and are outside the control of the Supplier, the obligation to ensure safety in use rests with the user.