SAFETY DATA SHEET
CAUSTIC SODA SOLID

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME	CAUSTIC SODA SOLID
SYNONYMS, TRADE NAMES	SODIUM HYDROXIDE SOLID
APPLICATION	pH modifier.
SUPPLIER	M-I Drilling Fluids UK Ltd, Pocra Quay, Footdee, Aberdeen. AB11 5DQ T -44 (0)1224-584336 F -44 (0)1224-576119
EMERGENCY TELEPHONE	+44(0)208 762 8322

2 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
SODIUM HYDROXIDE SOLID	215-185-5	1310-73-2	60-100%	C;R35

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

The Data Shown is in accordance with the latest EC Directives.

3 HAZARDS IDENTIFICATION

Causes severe burns.

CLASSIFICATION C;R35.

4 FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION

DO NOT INDUCE VOMITING! Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention immediately!

SKIN CONTACT

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

EYE CONTACT

Important! Immediately rinse with water for at least 15 minutes. Hold eyelids apart. Get medical attention immediately. Continue to rinse.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

DO NOT use water if avoidable. Use fire-extinguishing media appropriate for surrounding materials.

UNUSUAL FIRE & EXPLOSION HAZARDS

May develop highly toxic or corrosive fumes if heated.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

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

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses.

SPILL CLEAN UP METHODS

Shovel into dry containers. Cover and move the containers. Flush the area with water.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Do not use contact lenses. Provide good ventilation. Avoid spilling, skin and eye contact. Avoid spread of dust.

STORAGE PRECAUTIONS

Store in tightly closed original container in a cool, dry well-ventilated place. Empty containers retain residues. All labeled precautions must be observed.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
SODIUM HYDROXIDE SOLID	WEL				2 mg/m3

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Workplace Exposure Limit. Dust filter P2 (for fine dust).

HAND PROTECTION

Use protective gloves made of: Impermeable material. such as, Rubber, neoprene or PVC.

EYE PROTECTION

Contact lenses should not be worn when working with this chemical! Wear dust resistant safety goggles where there is danger of eye contact. Face shield for protection of facial skin is also recommended.

OTHER PROTECTION

Chemical resistant clothing or aprons must be worn to prevent any risk of skin contact Provide eyewash station.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Pellets or Solid.		
COLOUR	White		
ODOUR	Odourless		
MOL. WEIGHT	40.01	BOILING POINT (°C)	~1390 760 mm Hg
MELTING POINT (°C)	~317	RELATIVE DENSITY	2.13 @ 25°C
pH-VALUE, DILUTED SOLUTION	14 @ 1%	SOLUBILITY VALUE (g/100g H2O@ 20°C)	50.0

10 STABILITY AND REACTIVITY

STABILITY

Unstable. Hygroscopic. May generate heat and boil over when in contact with water.

CONDITIONS TO AVOID

Long storage & large quantities. and Water, moisture.

MATERIALS TO AVOID

Strong acids. Hydrocarbons - halogenated. and Flammable/combustible material. Aluminium, brass, tin and zinc are readily attacked by caustic soda. Can also react violently or explosively with many organic chemicals, particularly chlorinated hydrocarbons.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 500 mg/kg (oral-rbt)

INHALATION

Severely irritating to the respiratory tract if inhaled. Higher exposures may cause pulmonary oedema.

INGESTION

May cause burns in mucous membranes, throat, oesophagus and stomach. Lethal dose for a man is approx. 5g.

SKIN CONTACT

Contact with concentrated chemical may cause severe skin damage.

EYE CONTACT

May cause chemical eye burns. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Contact M-I Swaco's QHSE Department for ecological information.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Recover and reclaim or recycle, if practical. Dispose of waste and residues in accordance with local authority requirements. This material and its container must be disposed of as hazardous waste.

14 TRANSPORT INFORMATION

UK ROAD CLASS	8		
PROPER SHIPPING NAME	SODIUM HYDROXIDE, SOLID		
UN NO. ROAD	1823	UK ROAD PACK GR.	II
ADR CLASS NO.	8	ADR CLASS	Class 8: Corrosive substances.
ADR PACK GROUP	II	HAZARD No. (ADR)	80
HAZCHEM CODE	2W	CEFIC TEC(R) NO.	80GC6-II+III
RID CLASS NO.	8	RID PACK GROUP	II
UN NO. SEA	1823	IMDG CLASS	8
EMS	F-A, S-B	MARINE POLLUTANT	No.
UN NO. AIR	1823	ICAO CLASS	8
AIR PACK GR.	II		

15 REGULATORY INFORMATION

LABELLING

Corrosive

CONTAINS

SODIUM HYDROXIDE SOLID

RISK PHRASES

R35	Causes severe burns.

SAFETY PHRASES

S24/25	Avoid contact with skin and eyes.
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 label where possible).
S60	This material and its container must be disposed of as hazardous waste.

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations. The Control of Substances Hazardous to Health Regulations

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EEC.

GUIDANCE NOTES

Workplace Exposure Limits EH40.

16 OTHER INFORMATION

GENERAL INFORMATION

HMIS Health - 3 HMIS Flammability - 0 HMIS Physical Hazard - 1

INFORMATION SOURCES

Sax's Dangerous Properties of Industrial Materials, 10th ed., Lewis, R.J. Sr., (ed.). Material Safety Data Sheet, Misc. manufacturers.

CAUSTIC SODA SOLID

REVISION COMMENTS

The following sections have been revised: 4, 5, 6, 7, 8, 10, 11, 12, 13 14, 15 and 16. Revised by Bill Cameron

ISSUED BY

Sam Hoskin

REVISION DATE	13-10-05
REV. NO./REPL. SDS GENERATED	2
SDS NO.	10927

RISK PHRASES IN FULL

R35	Causes severe burns.

DISCLAIMER

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