SAFTEY DATA SHEET

Alkali Boost Solution

Revision Date 29th June 2023

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name	Alkali Boost Solution
Synonyms, Trade Name	Alkali Boost Solution
Application	**Laundry**

Supplier

Innovation Chemicals,
Unit 23, Widnes Business Park
Waterside Lane,
Widnes,WA8 8UD.
PHONE 0300 303 4323

sales@innovationchemicals.co.uk

Emergency Contact Number 0300 303 4323

SDS No. 1044

2. HAZARDS IDENTIFICATION

C; R35		
Classification	Physical: Not classified. Health: H314 Causes severe burns and eye damage. Environmental Not classified. .	
Labelling		
Signal Word	Danger	
Hazard Statements	H314 Causes severe skin and eye damage. H290 May be corrosive to metals.	
Precautionary Statements	P260 – Do not breathe dust / fume / gas / vapours / spray. P280 – Wear protective gloves / protective clothing / eye protection / face protection P303+P361+P353 – IF ON SKIN: (or hair): Remove / take off immediately all contaminated clothing. Rinse skin with water / shower. 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 CENTRE or doctor / physician	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance name: Sodium Hydroxide Solution		Concentration: 5-10%
CAS-No:1310-73-2	EC-No.: 215-185-5	Index-No: 011-002-00-6
REACH Registration Number: 01-2119457892-27		

Substance name	Hazard class	Hazard category	Route of exposure	H Phrase
Sodium Hydroxide	Skin corrosion	Category 1A		H314
	Corrosive to metals	Category 1		H290

Substance Name	Classification	Hazard category	R- Phrase
Sodium Hydroxide	C	Corrosive	R35

4. FIRST-AID MEASURES

Description of First aid measures	
If inhaled	Move to fresh air. Oxygen or artificial respiration if needed. Victim to lie down in the recovery position. Cover and keep warm. Call physician
In case of eye contact	Rinse immediately with plenty of water, also under the eye lids, for at least 15 minutes. In case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine). Call physician or poison control centre immediately. Take victim immediately to hospital.
In case of skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water. Keep warm and in a quiet place. Call physician or poison control centre immediately. Wash contaminated clothing before re-use.
If swallowed	Call physician or poison control centre immediately. Take victim immediately to hospital. If swallowed rinse mouth with water (only if the person is conscious). DO NOT induce vomiting. Artificial respiration and / or oxygen mat be necessary.
Most important symptoms and effects, both acute and delayed	
Inhalation	Corrosive to respiratory system. Symptoms: Breathing difficulties, cough, chemical pneumonitis, pulmonary edema. Repeated or prolonged exposure: Risk of sore throat, nose bleeds, chronic bronchitis.
Skin contact	Causes severe burns. Symptoms: Redness, swelling tissue, burn
Eye contact	Causes severe burns. Small amount of splashes into eyes can cause irreversible tissue damage and blindness. Symptoms: Redness, lachrymation, swelling of tissue, burn
Ingestion	If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Symptoms: Nausea, abdominal pain, bloody vomiting, diarrhea, suffocation, cough, severe shortness of breath
Indication of any immediate medical attention and special treatment needed	
No data available	

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	None
Special hazard arising from substance or mixture	The product is not flammable. Not combustible. Hazardous decomposition products formed under fire conditions. Gives off hydrogen by reaction with metals.
Advice to fire-fighters	In the event of fire, use self contained breathing apparatus and full protective clothing, wear chemical resistant over suit, cool containers / tanks with water spray

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, protective equipment and emergency procedures

Advice for non-emergency personnel	Prevent further leakage or spillage if safe to do so, keep away from incompatible products
Advice for emergency responders	Evacuate personal to safe area. Keep people away from and upwind of spill / leak. Ventilate the area
Environmental precautions	Should not be released into the environment. Do not flush into surface water or sanitary sewer system. If product contaminates rivers and lakes or drains inform respective authorities
Methods and materials for containment and clean up	Dam up. Soak up with inert absorbent material. Prevent product from entering drains. Keep properly labeled containers for disposal
Reference to other sections	Refer to protective measures listed in sections 7 and 8

7. HANDLING AND STORAGE

Precautions for safe handling	Used in closed system, use only in well ventilated areas, keep away from incompatible products.
Conditions for storage	Store in original containers, keep in a ventilated place, keep in properly labelled containers, keep containers closed, Keep in bunded area, keep away from incompatible products, regularly check the condition of containers, minimum storage temperature:25°C
Packaging material	Suitable material: stainless steel. Unsuitable material: no data

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Name	STD	TWA – 8 Hrs		STEL – 15 Min		Notes
Sodium Hydroxide	WEL				2mg/m3	EH40

WEL= Workplace Exposure Limit

Protective Equipment

Appropriate engineering controls	Ensure adequate ventilation; apply technical measures to comply with the occupational exposure limits.
Respiratory protection	In the case of dust or aerosol formation use respirator with an approved filter. Recommended filter type P2
Hand Protection	Protective gloves – impervious chemical resistant, suitable material: PVC, Neoprene, Natural Rubber, butyl-rubber. Unsuitable material: Leather. Take note of the information given by the producer concerning permeability and break through time, and of special workplace conditions (mechanical strain, duration of contact)
Eye Protection	Chemical resistant goggles must be worn. If splashes are likely to occur, wear: Tightly fitting safety goggles, face-shield.
Skin and body protection	Wear suitable protective clothing, if splashes are likely to occur, wear: Rubber or plastic boots, rubber apron
Hygiene Measures	Ensure that eyewash stations and safety showers are close to the work location. Take off contaminated clothing and shoes immediately. Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls	Dispose of rinse water in accordance with local and national regulations

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid		
Colour	Colourless		
Odour	Low odour		
Solubility	Soluble in water	**Relative density**	1.33 – 1.53
Melting / Freezing point	From 0 – 22 °C	**Boiling Point / Range**	117 – 147 °C
pH value	13.5-14	**Vapour pressure**	<13.3hPa, @ 20°C
Relative Density	1.05-1.55	**Viscosity**	12 – 120 mPa.s @ 20°C

10. STABILITY AND REACTIVITY

Reactivity	Potential for exothermic hazard, may be corrosive to metals
Chemical Stability	Stable under recommended storage conditions
Possibility of hazardous reactions	Reacts violently with water, when in its solid state. Gives off hydrogen by reaction with metals. Exothermic reaction with strong acids.
Conditions to avoid	Keep away from direct sunlight. To avoid thermo decomposition, do not overheat. Exposure to moisture. Freezing
Incompatible materials	Metals. Oxidizing agents. Acids. Aluminum. Other light metals and their alloys
Hazardous decomposition products	Hydrogen

11. TOXICOLOGICAL INFORMATION

Skin corrosion / irritation	Corrosive
Serious eye damage / eye irritation	Corrosive
Respiratory or skin sensitization	No observed effects
Mutagenicity	Animal testing did not show any mutagenic effects. In vitro tests did not show mutagenic effects
Carcinogenicity	No data available

12. ECOLOGICAL INFORMATION

Toxicity	Fishes, various species, LC50, 96h, 35 – 189 mg/l (sodium hydroxide) Crustaceans, Ceriodphnia sp., EC50, 48h, 40.4 mg/l (sodium hydroxide)
Persistence and degradability	**A biotic degradation** *Air* result: neutralization by natural alkalinity. *Water* Result: ionization / neutralization Conditions : pH soil Results ionization / neutralization
Bio accumulative potential	Not relevant
Mobility	Water, Soil / sediments. Considerable solubility and mobility. Soil / Sediments mobile, soluble, ionization / neutralization Air, Chemical degradation
PBT and vPvB assessment	This mixture contains no substance considered to be very persistent or very bio accumulating (vPvB). (Sodium Hydroxide) This mixture contains no substance considered to be persistent nor toxic (PBT). (Sodium Hydroxide)
Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods	Dilute with plenty of water. Solutions with a high pH – value must be neutralised before discharged. Neutralise with acid & in accordance with local and national regulations
Contaminated packaging	Where possible recycling is preferred to disposal or incineration. Clean containers with water. Dispose of as unused product in accordance with local and national regulations.

14. TRANSPORT INFORMATION

Proper Shipping name	Sodium Hydroxide Solution		
UN No. Road	1824	UN No. Sea	1824
ADR Class No.	8	IMDG Class	8
ADR Class	Class 8: Corrosive	IMDG Pack Group	II
ADR Pack Group	II	EMS	F-A, S-B
Tunnel Restriction	(E)	UN No. Air	1824

Hazard No. (ADR)	58	Air Class	8
ADR Label No.	8	Air Sub Class	8
Hazchem code	2P	Air Pack Group	II

15. REGULATORY INFORMATION

Contains	Sodium Hydroxide
Risk Phrases	R35 – Causes severe burns
Hazard Statements	H314 Causes severe skin and eye damage. H290 May be corrosive to metals.
Safety Phrases	S1/2 – Keep locked up and out of reach of children. S24/25 – Avoid contact with eyes and skin. S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 – Ware 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 whenever possible). S60 – This material and its container must be disposed of as hazardous waste.
Precautionary Statements	P264 – Wash..... thoroughly after handling. P280 – Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 – If on skin: wash with soap and water. P321 – Specific treatment (see P332+P313 – If irritation occurs: Get medical advice/ attention P362 – Take off contaminated clothing and wash before re-use P305+P351+P338 – If in eyes: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing P337+P313 – Get medical advice / attention
Applicable Laws or Regulations	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Regulation, Evaluation, Authorisation and Restriction of Chemicals (REACH), as amended. Directive 1999/45/EC of the European parliament and the council of 31st May 1999 concerning the approximation of the law, regulations and administrative provisions of the member states relating to the classification, packaging & labelling of dangerous preparations, as amended. Regulation (EC) No 1272/2008 of the European parliament and the council of 16th December 2008 on classification, packaging and labelling of substances and mixtures as amended. Council directive 98/24/EC of 7 April 1998 on the protection of the health & safety of workers from the risk related to chemical agents at work, as amended. Commission directive 2003-39-EC of the European parliament and of the council of 19th November 2008 on waste. The list of wastes (Wales) Regulation 2005. 2005 Welsh statutory Instrument (WSI), number w.148 (1820), 14th July 2005 The list of wastes (England) Regulation 2005. 2005 Statutory Instrument (SI), number 895, 6th April 2005, as amended. EH40/2005. Workplace Exposure Limits, as amended through 1, 10, 2007 (WELs) Published by the Health and safety Executive (HSE). Issued under the control of Substances Hazardous to Health regulations – as amended.
Chemical Safety Assessment	A chemical safety assessment has been carried out for this substance See Exposure scenario
Approved Code of Practice	Safety data sheets for substances and preparation. Classification and labeling of substances and Preparations Dangerous for supply

16. OTHER INFORMATION

REV. No. / REPL. SDS	
Generated	29th June 2023
SDS No.	1044
Safety Data Sheet Status	
Approved.	
Signature	
Full text of H-Statements referred to under section 2 and 3	
	H290 – May be corrosive to metals H314 – Causes severe skin burns and eye damage
Full text of R – Statements referred to under section 2 and 3	
	R35 – Causes severe burns

Notes	This information relates only to the specific material designed and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of the company's knowledge and belief, accurate and reliable as of date indicated. However, no warranty, guarantee or representation is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.