





# Safety Data Sheet

## Alkali - Kleen

1. IDENTIFICATION OF SUBSTANCE, PREPARATION AND COMPANY			
Product Name	Alkali – Kleen		
Address / Phone Number	Delf (UK) Ltd Unit 2 Hickmans Road Birkenhead Wirral CH41 1JH Tel: (00 44) 151 630 0405 Fax: (00 44) 151 630 0406 E-mail: <a href="mailto:info@delf-uk.com">info@delf-uk.com</a>		
Emergency Phone No.	IN AN EMERGENCY DIAL LOCAL EMERGENCY SERVICES		
2. COMPOSITION / INFORMATION			
Product Description	A chlorinated alkaline detergent cleaner / descaler for in-place circulation cleaning of dairy equipment.		
Alternative Names	Circulation Cleaner.		
Hazardous Ingredient(s)	Sodium Hydroxide CAS NO. 001310-73-2 Sodium Hypochlorite CAS No. 007681-52-9		
3. HAZARDS IDENTIFICATION			
Most Important Hazard(s)	Corrosive. Causes burns. Contact with acids liberates toxic Chlorine gas.		
4. FIRST AID MEASURES			
Inhalation	Fumes or vapour may cause irritation, nausea or drowsiness. If person is exposed to fumes move into fresh air, and if recovery is not rapid seek medical attention.		
Skin Contact	Remove contaminated clothing. Wash affected area with plenty of soap and water. If in doubt or symptoms persist obtain medical attention. Launder clothing before re-use.		
Eye Contact	IMMEDIATELY irrigate eye with plenty of water or eye-wash solution for 10 minutes. Obtain medical attention.		
Ingestion	Only if person is conscious, rinse mouth out with plenty of water and give 200-300ml water to drink. DO NOT INDUCE VOMITING. Keep patient at rest and obtain medical attention.		
5. FIRE FIGHTING MEASURES			
<i>Non-combustible</i>			
Extinguishing Media	Use extinguishing media suitable for surrounding fire or the cause of fire. Keep containers cool by spraying with water.		
Fire Fighting Protective Equipment.	Wear self-contained breathing apparatus, and suitable protective clothing.		
6. ACCIDENTAL RELEASE MEASURES			
Personal Precautions	Avoid direct contact with skin, eyes and clothing. See exposure controls / personal protection (section 8).		
Spillages	Small Spillages: Flush area to drain with plenty of water. Large Spillages: Where possible, transfer to a container for reuse or disposal (see Disposal Considerations – Section 13). Contain and absorb using earth, sand or other inert material. Flush area to drain with plenty of water. Treat as industrial waste.		
Environmental Precautions	Do not allow to contaminate vegetation, or enter drains or water courses. Spillages or uncontrolled contamination of soil or discharges into watercourses, drains or sewers must be reported immediately to the Environment Agency, local water company or other appropriate regulatory bodies.		
7. HANDLING AND STORAGE			
Handling	Use product in accordance with good industrial practices for handling and storing of hazardous chemicals. Avoid contact with skin and eyes. Do not mix with other chemicals.		
Storage	Keep in original packaging. Store in a cool dry well ventilated area. Protect from heat and direct sunlight. Keep away from incompatible materials. Careful storage reduces the rate of decomposition (releases oxygen).		
8. EXPOSURE CONTROL/PERSONAL PROTECTION			
Personal Protective Equipment	Wear protective clothing and closed footwear, impervious PVC or butyl rubber gloves, and approved chemical safety goggles or face protection.		
Occupational Exposure Limits	Product	Long Term Exposure Limit (8 hr TWA)	Short Term Exposure Limit (15 Min)
	Sodium Hydroxide	-	2mg/m <sup>3</sup>
	Chlorine	1.5 mg/m <sup>3</sup>	2.9mg/m <sup>3</sup>
9. CHEMICAL AND PHYSICAL PROPERTIES			
Appearance	Clear greenish/yellow liquid	Specific Gravity (20°C) (g/ml)	1.16 +/- 0.02
Odour	Characteristic Chlorine odour	pH	12 (1% w/w solution)
Solubility	Soluble in water	Freezing Point	< 0° C

10. STABILITY AND REACTIVITY			
Stability	Stable under normal conditions of use, and when correctly stored.		
Known Hazardous Reactions	Reacts violently with acids and liberates toxic chlorine gas. Reacts dangerously with strong oxidising agents. Aluminium, Zinc or their alloys will cause the formation of flammable hydrogen gas.		
Materials to avoid	Acids, Ammonia solutions and Amines, form explosive compounds. Can react violently in contact with Methanol. Aluminium, brass, copper, galvanised steel, generating hydrogen.		
Hazardous Decomposition Product(s)	Noxious, toxic or corrosive vapours may be released in a fire situation and Chlorine gas may be evolved.		
11. TOXICOLOGICAL INFORMATION			
Inhalation	May cause severe Irritation to respiratory system and mucous membranes.		
Skin contact	Causes burns and repeated or prolonged contact with dilute solutions may cause dermatitis. May cause skin sensitisation.		
Eye contact	Causes burns. If treated <u>rapidly</u> , permanent damage may be avoided		
Ingestion	May cause burns to mucous membranes and digestive tract. May cause nausea, and stomach pains.		
Long Term Exposure	Acute effects predominate.		
12. ECOLOGICAL INFORMATION			
Persistence and Degradation	Alkali - Kleen is not expected to bio-accumulate.		
Toxicity	Highly toxic in the aquatic environment. Very Toxic to Fish.		
Effect on Effluent Treatment	The product is substantially removed in biological treatment process. There is evidence of inhibition to the aerobic treatment process at a concentration of 0.05 mg/l.		
13. DISPOSAL CONSIDERATIONS			
Waste	Large quantities may only be disposed of in accordance with Waste Disposal Regulations.		
14. TRANSPORT INFORMATION			
UN Transport Name	Corrosive Liquid NOS	Transport Hazard Symbol	
UN Number	1760	Packaging	25 Litre and 200 Litre HDPE UN containers
UN Primary Class	8	Normal Carriage Temp.	Ambient.
UN Packaging Group	III		
15. REGULATORY INFORMATION			
Hazard Symbols			
Risk Phrases	R31:	Contact with acids liberates toxic Chlorine gas.	
	R34:	Causes burns.	
Safety Phrases	S1/2:	Keep locked up and out of the reach of children.	
	S26:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.	
	S28:	After contact with skin wash immediately with plenty of water.	
	S36/37/39:	Wear suitable protective clothing and, gloves, and eye/face protection.	
	S45:	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).	
16. OTHER INFORMATION			
2002	Control of Substances Hazardous to Health Regulations.		
2004	Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations.		
2002	Chemical (Hazard Information and Packaging for supply) Regulations.		
	EH40 Occupational Exposure Limits.		
Legal Disclaimer	The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith. For further details see Delf (UK) Ltd. conditions of sale (additional copies of this are available on request).		
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