SAFETY DATA SHEET



1. Product and Company Identification				
Product identifier	Alka-Brite 4x (4120-90)			
Other means of identification	Not available			
Recommended use	Coil Cleaner			
Recommended restrictions	None known.			
Manufacturer information	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CH	IEMTREC)		
Supplier	See above.			
	2. Hazards Identific	cation		
Physical hazards	Corrosive to metals	Category 1		
Health hazards	Skin corrosion/irritation	Category 1		
	Serious eye damage/eye irritation	Category 1		
Environmental hazards	Not classified.			
WHMIS 2015 defined hazards	Not classified			
Label elements				
Signal word	Danger			
Hazard statement	May be corrosive to metals. Causes sev	ore skip burns and ove damage		
Precautionary statement	May be conosive to metals. Causes sev	ere skir burns and eye damage.		
Prevention	Keep only in original packaging. Do not Wear protective gloves, protective clothi	breathe mist or vapor. Wash thoroughly after handling. ng, eye protection and face protection.		
Response	vomiting. IF ON SKIN (or hair): Take off water. Wash contaminated clothing befor keep comfortable for breathing. Immedia	age. IF SWALLOWED: Rinse mouth. Do NOT induce immediately all contaminated clothing. Rinse skin with ore reuse. IF INHALED: Remove person to fresh air and ately call a POISON CENTER or doctor. Specific . IF IN EYES: Rinse cautiously with water for several sent and easy to do. Continue rinsing.		
Storage	Store locked up. Store in a corrosion res	sistant container with a resistant inner liner.		
Disposal	Dispose of container in accordance with	local, regional, national and international regulations.		
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known			
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known			
Hazard(s) not otherwise classified (HNOC)	None known.			
Supplemental information	None.			
	3. Composition/Information	on Ingredients		

Mixture			
Chemical name	Common name and synonyms	CAS number	%
Alkyl polyglycoside		110615-47-9	1-5*
Glucopyranose, oligomeric, decyl octyl glycosides		68515-73-1	1-5*
Sodium hydroxide		1310-73-2	15-40*

Composition comments

US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. *CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

	4. First Aid Measures
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). Wash contaminated clothing before reuse.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER o doctor.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear rubber gloves and chemical splash goggles. Keep out of reach of children.
	5. Fire Fighting Measures
Suitable extinguishing media	Foam. Carbon dioxide. Dry chemical.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Firefighters should wear a self-contained breathing apparatus.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self-contained breathing apparatus.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.
	6. Accidental Release Measures
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop leak if you can do so without risk. Prevent entry into waterways, sewer, basements or confined areas.
	Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

	7. Handling and		
Precautions for safe handling	 clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Keep container tightly closed. When using do not eat or drink. safe storage, Store locked up. Store in a cool, dry place out of direct sunlight. Store in a corrosion resistant 		
Conditions for safe storage, ncluding any incompatibilities			
	8. Exposure Controls/Per	sonal Protection	
Occupational exposure limits			
	pational Health & Safety Code, Sch		
Components Sodium hydroxide (CAS 1310-73-2)	Type Ceiling	Value 2 mg/m3	
Canada. British Columbia Ol		for Chemical Substances, Occupational Health and	
Safety Regulation 296/97, as Components	amended) Type	Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Canada. Manitoba OELs (Re Components	g. 217/2006, The Workplace Safety A Type	And Health Act) Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Canada. Ontario OELs. (Con Components	trol of Exposure to Biological or Ch Type	emical Agents) Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Canada. Quebec OELs. (Min Components	istry of Labor - Regulation Respecti Type	ng the Quality of the Work Environment) Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Canada. Saskatchewan OEL Components	s (Occupational Health and Safety F Type	egulations, 1996, Table 21) Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
US. OSHA Table Z-1 Limits f	or Air Contaminants (29 CFR 1910.1		
Components	Туре	Value	
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3	
US. ACGIH Threshold Limit V Components	Values Type	Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
US. NIOSH: Pocket Guide to Components	Chemical Hazards Type	Value	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
Biological limit values	No biological exposure limits noted for	or the ingredient(s).	
Exposure guidelines	Chemicals listed in section 3 that are ACGIH.	not listed here do not have established limit values for	
Appropriate engineering controls	should be matched to conditions. If a or other engineering controls to main	air changes per hour) should be used. Ventilation rates pplicable, use process enclosures, local exhaust ventilation, tain airborne levels below recommended exposure limits. If ished, maintain airborne levels to an acceptable level.	
	such as personal protective equipm		

eneral hygiene onsiderations	When using do not eat or drink.
Thermal hazards	Not applicable.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).
Other	Wear appropriate chemical resistant clothing. As required by employer code.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin protection	

9. Physical and Chemical Properties

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Appearance	Liquid		
Physical state	Liquid.		
Form	Liquid		
Color	Brown		
Odor	Bland.		
Odor threshold	Not available.		
рН	12.7 (1% in water) 14 (Concentrate)		
Melting point/freezing point	Not available.		
Initial boiling point and boiling range	Not available.		
Pour point	Not available.		
Specific gravity	Not available.		
Partition coefficient (n-octanol/water)	Not available.		
Flash point	Not available.		
Evaporation rate	Not available.		
Flammability (solid, gas)	Not applicable.		
Upper/lower flammability or explosive limits			
Flammability limit - lower (%)	Not available.		
Flammability limit - upper (%)	Not available.		
Explosive limit - lower (%)	Not available.		
Explosive limit - upper (%)	Not available.		
Vapor pressure	Not available.		
Vapor density	Not available.		
Relative density	Not available.		
Solubility(ies)	Not available.		
Auto-ignition temperature	Not available.		
Decomposition temperature	Not available.		
Viscosity	Not available.		
Other information			
Explosive properties	Not explosive.		
Oxidizing properties	Not oxidizing.		

10. Stability and Reactivity

Reactivity	May be corrosive to metals. Reacts violently with acids. This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Acids. Strong oxidizing agents. Metals.

11. Toxicological Information

	11. Toxicological Information				
Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.				
Information on likely routes of ex	cposure				
Ingestion	Causes digestive tract burns. May cause stomach	distress, nausea or vomiting.			
Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.				
Skin contact	Causes severe skin burns.				
Eye contact	Causes serious eye damage.				
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.				
Information on toxicological effe	cts				
Acute toxicity					
Components	Species	Test Results			
Alkyl polyglycoside (CAS 110615-4	17-9)				
Acute					
Dermal					
LD50	Rabbit	> 2000 mg/kg, 24 Hours, ECHA			
Inhalation					
LC50	Not available				
Oral					
LD50	Rat	> 5000 mg/kg, ECHA			
		> 2000 mg/kg, ECHA			
Glucopyranose, oligomeric, decyl o Acute Dermal LD50	octyl glycosides (CAS 68515-73-1) Rabbit	> 2000 mg/kg, 24 Hours, ECHA			
Inhalation LC50	Not available	2 2000 mg/ng, 2 m louio, 20m/			
Oral					
LD50	Rat	> 5000 mg/kg, ECHA			
		> 2000 mg/kg, BASF			
Sodium hydroxide (CAS 1310-73-2 Acute <i>Dermal</i> LD50	e) Not available				
Inhalation LC50	Not available				
Oral LD50	Rabbit	325 mg/kg, ECHA			
Skin corrosion/irritation					
	Causes severe skin burns and eve damage.				
Exposure minutes	Causes severe skin burns and eye damage. Not available.				
Exposure minutes Ervthema value					
Erythema value	Not available. Not available.				
Erythema value Oedema value Serious eye damage/eye	Not available.				
Erythema value Oedema value Serious eye damage/eye	Not available. Not available. Not available.				
Erythema value Oedema value Serious eye damage/eye irritation	Not available. Not available. Not available. Causes serious eye damage.				
Erythema value Oedema value Serious eye damage/eye irritation Corneal opacity value	Not available. Not available. Not available. Causes serious eye damage. Not available.				
Erythema value Oedema value Serious eye damage/eye irritation Corneal opacity value Iris lesion value Conjunctival reddening	Not available. Not available. Not available. Causes serious eye damage. Not available. Not available.				

Canada - Alberta OELs: Irri				
Sodium hydroxide (CAS	,	Irritant		
Respiratory sensitization	Not a respiratory sensitizer.			
Skin sensitization	This product is not expected to cause skin sensitization.			
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.			
Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.			
US. OSHA Specifically Reg Not listed.	ulated Subs	stances (29 CFR 1910.1001-10	050)	
Reproductive toxicity	This prod	uct is not expected to cause rep	productive or developmental effects.	
Teratogenicity	-	ardous by WHMIS/OSHA criteria		
Specific target organ toxicity - single exposure	Not class	•		
Specific target organ toxicity - repeated exposure	Not class	ified.		
Aspiration hazard	Not an as	piration hazard.		
Chronic effects		d inhalation may be harmful.		
	0	12. Ecological Inform	mation	
Ecotoxicity	Compone below	ents of this product have been id	dentified as having potential environmental concerns. See	
Ecotoxicological data				
Components		Species	Test Results	
Sodium hydroxide (CAS 1310-73-	-2)			
Aquatic				
Crustacea	EC50	Water flea (Ceriodaphnia	a dubia) 34.59 - 47.13 mg/L, 48 hours	
Fish	LC50	Western mosquitofish (Ga	ambusia affinis) 125 mg/L, 96 hours	
Persistence and degradability	No data is	s available on the degradability	of this product.	
Bioaccumulative potential	No data a	available.		
Mobility in soil	No data a	available.		
Mobility in general	Not availa	able.		
Other adverse effects	No other potential,	adverse environmental effects (endocrine disruption, global wa	(e.g. ozone depletion, photochemical ozone creation arming potential) are expected from this component.	
		13. Disposal Conside	erations	
Disposal instructions			containers at licensed waste disposal site. Dispose of cal/regional/national/international regulations.	
Local disposal regulations	Dispose i	n accordance with all applicable	e regulations.	
Hazardous waste code		e code should be assigned in di	2 or =>12.5, or corrosive to steel] discussion between the user, the producer and the waste	
Waste from residues / unused products	Dispose of product re	of in accordance with local regul	ulations. Empty containers or liners may retain some ontainer must be disposed of in a safe manner (see:	
Contaminated packaging	Since em	ptied containers may retain proc	oduct residue, follow label warnings even after container is ken to an approved waste handling site for recycling or	
		14. Transport Inform	nation	
Transport of Dangerous Goods	Classifica	•	Part 2, Sections $2.1 - 2.8$ of the Transportation of	
(TDG) Proof of Classification	Dangerou		cable, the technical name and the classification of the	
U.S. Department of Transportat	ion (DOT)			
Basic shipping requiremen				
UN number	UN3266			
Proper shipping name Technical name	Corrosive Sodium h	e liquid, basic, inorganic, n.o.s.		
Hazard class	8	IYUIUKIUG		
Packing group	II			

Special provisions	386, B2, IB2, T11, TP2, TP27
Packaging exceptions	<0.3 gallons - Limited Quantity
Packaging non bulk	202
Packaging bulk	242
Transportation of Dangerous Ge	oods (TDG - Canada)
Basic shipping requirement	ts:
UN number	UN3266
Proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Technical name	SODIUM HYDROXIDE
Hazard class	8
Packing group	
Special provisions	16 -11 Limited Quentity
Packaging exceptions	<1L - Limited Quantity
IATA/ICAO (Air)	
Basic shipping requirement	
UN number Proper shipping name	UN3266 Corrosive liquid, basic, inorganic, n.o.s.
Technical name	Sodium hydroxide
Hazard class	8
Packing group	
<1L - Limited Quantity	
IMDG (Marine Transport)	
Basic shipping requirement	ts:
UN number	UN3266
Proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Technical name	Sodium hydroxide
Hazard class	8
Packing group	II
<1L - Limited Quantity	
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CONNUSIVE	
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IATA; IMDG; TDG	
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15. Regulatory Information

 Canadian federal regulations
 This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

 Export Control List (CEPA 1999, Schedule 3)
 Not listed.

 Not listed.
 Greenhouse Gases

 Not listed.
 Precursor Control Regulations

 Not regulated.
 Not applicable

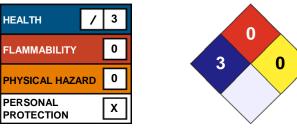
US federal regulations TSCA Section 12(b) Export Not regulated.	This product is a "Hazardous Standard, 29 CFR 1910.1200 All chemicals used are on the		rd Communication
	All chemicals used are on the	TSCA inventory.	
Not regulated.	Notification (40 CFR 707, Subj	ot. D)	
		· · · ·	
CERCLA Hazardous Substa	ance List (40 CFR 302.4)		
Sodium hydroxide (CAS US. OSHA Specifically Regu	1310-73-2) ulated Substances (29 CFR 19	Listed. 10.1001-1050)	
Not listed.			
Superfund Amendments and Re	eauthorization Act of 1986 (SA	RA)	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No		
SARA 302 Extremely hazardous substance	No		
SARA 311/312 Hazardous chemical	No		
SARA 313 (TRI reporting) Not regulated.			
Other federal regulations			
	n 112 Hazardous Air Pollutants	s (HAPs) List	
Not regulated.	a 112(r) Appidental Polosoa Dr	α_{1}	
Not regulated.	n 112(r) Accidental Release Pr	evention (40 CFR 68.130)	
U U			
US state regulations	Substances (Director's): Listed	l substance	
Sodium hydroxide (CAS		Listed.	
US - Illinois Chemical Safet	y Act: Listed substance	LISIEU.	
Sodium hydroxide (CAS US - Louisiana Spill Reporti			
Sodium hydroxide (CAS	-	Listed.	
US - Minnesota Haz Subs: L			
Sodium hydroxide (CAS US - New Jersey RTK - Sub		Listed.	
Sodium hydroxide (CAS	1310-73-2) ng Levels: Listed substance		
	ric, decyl octyl glycosides (CAS	Listed.	
68515-73-1) Sodium hydroxide (CAS	1310-73-2)	Listed.	
US. Massachusetts RTK - S			
Sodium hydroxide (CAS US. New Jersey Worker and	1310-73-2) <mark>J Community Right-to-Know A</mark>	ct	
Not regulated.	nd Community Pight to Know	Low	
Sodium hydroxide (CAS	nd Community Right-to-Know 1310-73-2)	Law	
US. Rhode Island RTK Sodium hydroxide (CAS	1310-73-2)		
US. California Proposition 6			
-		California Proposition 65 regulation.	
Inventory status			
Country(s) or region	Inventory name		On inventory (yes/no)*
Canada	Domestic Substances List (DS	SL)	Yes
Canada	Non-Domestic Substances Lis	st (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act	t (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Disclaimer



Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document. The information in the sheet was written based on the best knowledge and experience currently available.

	available.
Issue date	26-April-2019
Version #	02
Effective date	03-January-2019
Prepared by	Nu-Calgon Technical Service Phone: (314) 469-7000
Other information	For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.