

## Safety Data Sheet

**Section 1. Chemical Product and Company Identification** 

Product Name: Sodium Hydroxide / Caustic Soda Beads Version: 6

Effective Date: 25 January 2021

**Supplier:** Chemfax Products Ltd.

11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055

Material Uses Metal finishing, cleaning agent, chemical processing

Emergency Phone 1-855-887-2055 Monday - Friday 8:00am - 4:30pm MST

**WHMIS** 



This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

HMIS Ratings for this product are: Health 3, Flammability 0, Reactivity 0

Section 2. Composition and Information on Ingredients		
Name	CAS#	% by weight
Sodium hydroxide	1310-73-2	96 - 100
See Section 8 for information on permissible exposure limits and threshold limit values		

Section 3. Hazards Identification		
<b>Physical State and Appearance</b>	White, granular solid	
Hazard Summary	Corrosive	
Routes of Exposure	Skin, eyes, inhalation. ingestion	
<b>Potential Acute Health Effects</b>		
	<b>Skin:</b> Corrosive. Causes severe burns. Will cause burns with deep ulcerations, leading to scarring. Prolonged contact can destroy tissue. May cause dermatitis.	

	Eyes: Corrosive. Causes severe eye burns. Small quantities can result impermanent damage and /or loss of vision.  Inhalation: Corrosive. Inhalation of dusts or mists can cause damage to the upper respiratory tract and to the lung tissue depending on the degree of exposure. Effects can range from mild irritation to sever pneumonitis to complete destruction of the lung tissue.  Ingestion: Corrosive. Ingestion can cause damage/burns to the mucous membranes, mouth and digestive tract. Ingestion of the product may result in death.	
<b>Medical Conditions</b>	No data	
Aggravated by Exposure		
See Toxicological Information – Section 11		
Additional Hazard	None	
Identification Remarks		

Section 4. First Aid Measures		
Eye Contact	Flush eyes with water for 15 minutes. Seek medical attention.	
Skin Contact	Flush area with water. If irritation persists seek medical attention. Launder clothing before reuse.	
Inhalation	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.	
Ingestion	Give two glasses of water. Do not induce vomiting. Lay victim on left side to prevent aspiration of any vomit. Seek immediate medical attention.	
Notes to Physician	Treatment based on sound judgement of physician and individual reactions of the patient	
Additional First Aid Remarks	None	

Section 5. Fire Fighting Measures		
Flammability of	Non flammable	
the Product		
Flash Point	Not applicable	
<b>Explosive Limits</b>	Not applicable	
Auto Ignition	Not applicable	
Temperature		
Static Discharge	No	
Suitable Extinguishing	Use extinguishing media suitable for surrounding fire	
Media		
Hazardous	No data	
<b>Combustion Products</b>		

<b>Precautions for</b>	Fire fighters should wear self contained breathing apparatus and full
Fire Fighting	protective clothing. Use water spray to cool containers and structures
	exposed to fire.

Section 6. Accidental Rele	ease Measures
<b>Personal Precautions</b>	Gloves, coveralls, chemical resistant footwear, safety glasses
Environmental	Do not allow the product to enter surface drains and water courses
Precautions	
Methods for	Scoop up or vacuum up, place in an appropriate container for
Clean Up	disposal. Avoid raising dust. Isolate spill. If the material has been
	diluted with water or any other liquid, then dyke the area to contain
	the spill. Dilute the spill with large amounts of water and neutralise
	with a weak acid solution. Collect liquid for proper disposal. Flush
	area with water to remove residues.

Section 7. Handling	g and Storage
Handling	Handle with care, very corrosive material. Avoid raising dust when
	handling this material. Always add Caustic soda / sodium hydroxide
	to lukewarm water with constant agitation. Use of hot water or
	addition without agitation may cause localised heating which can
	result in boiling of the liquid and eruption of material from the mixing
	vessel.
Storage	Store in a cool dry place, keep container closed when not in use

Section 8. Exposure Controls and Personal Protection				
<b>Exposure Guidelines</b>	TWA: 8 Hr	STEL: 15 min	Ceiling	IDLH*
Sodium hydroxide	2 mg/m <sup>3</sup> Ceiling (ACGIH)			10 mg/m <sup>3</sup>
	*Immediately dangerous to life or health			
<b>Exposure Controls</b>	Local exhaust ven	tilation		
<b>Personal Protection</b>				
Respiratory	If exposure limits are exceeded an air purifying respirator fitted with the appropriate cartridges must be worn			
Skin	Gloves, chemical resistant coveralls and footwear			
Eyes	Safety glasses or full face shield			
Other	None			

Section 9. Physical and Chemical Properties		
Physical State and Appearance	White, granular solid	
Odour Threshold	Not applicable	
pH	12 (10 % solution)	
<b>Boiling Point</b>	1390 °C	
Melting Point / Freezing point	310 – 320 °C	
<b>Evaporation Rate</b>	No data	
Vapour Density	Not applicable	
Vapour Pressure	Not applicable	
<b>Specific Gravity / Relative Density</b>	2.13 @ 20 °C	
Solubility in Water	Very soluble	
% Volatile	Not applicable	
Other Data	None	

Section 10. Stability and Reactivity		
<b>Chemical Stability</b>	Stable	
<b>Hazardous Polymerisation</b>	Will not occur	
<b>Conditions to Avoid</b>	Addition of water directly to product	
Materials to Avoid	Tin, aluminum, zinc, leather, wool, acids. Organic halogen	
	compounds or organic nitro compounds. Magnesium metal, brass,	
	bronze. Carbon monoxide gas may be produced on contact with	
	reducing sugars. Water can cause violent and explosive reactions.	
<b>Hazardous Decomposition</b>	None anticipated	
Products		

Section 11. Toxicological Information		
<b>Principle Routes of Exposure</b>		
Skin:	Corrosive. Causes severe burns. Will cause burns with deep	
	ulcerations, leading to scarring. Prolonged contact can destroy	
	tissue. May cause dermatitis.	
Eyes:	Corrosive. Causes severe eye burns. Small quantities can result impermanent damage and /or loss of vision.	
Inhalation:	Corrosive. Inhalation of dusts or mists can cause damage to the upper respiratory tract and to the lung tissue depending on the degree of exposure. Effects can range from mild irritation to sever pneumonitis to complete destruction of the lung tissue.	
Ingestion:	Corrosive. Ingestion can cause damage/burns to the mucous membranes, mouth and digestive tract. Ingestion of the product may result in death.	
Additional Information		
Acute Toxicity		
Sodium hydroxide	LDLo: 500 mg / kg (Rabbit, oral)	

Chronic Toxic Effects - None	
Carcinogenicity – Not listed	
Reproductive Toxicity / Teratogenicity / Embryotoxicity / Mutagenicity – None known	

Section 12. Ecological Information		
Ecotoxicity	Sodium hydroxide: LC50: 1149 mg/l (Rainbow trout)	
-	LC50: 152 mg/l (Chinook salmon)	
BOD and COD	No data	
Biodegradability / OECD	No data	
<b>Toxicity of the Products</b>	No data	
of Biodegradation		
Special Remarks	Very toxic to aquatic organisms, may cause long-term adverse effects	
	in the aquatic environment	

Section 13. Disposal Considerations
Dispose of in accordance with local, provincial and federal regulations

Section 14. Transport Information		
TDG Classification	SODIUM HYDROXIDE, SOLID Class 8, UN 1823	
	Packing Group II	
<b>Emergency Response</b>	ERG # 154	
Guide#		
Marine Pollutant	No	
<b>Special Precautions</b>	None	

Section 15. Regulatory Information		
Canada – DSL Inventory	All components of this product are either on the Domestic Substances	
	List (DSL) or Non-Domestic Substances List (NDSL) or exempt	
TSCA	All components of this product are either on the Toxic Substances	
	Control Act (TSCA) Inventory List or exempt	
WHMIS Hazard Class	E	
Additional Information	None	

## **Section 16. Other Information**

Prepared by:

Chemfax Products Ltd., Technical Department

**Date Prepared:** July 7, 2011 **Revision Date:** 25 January 2021

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