SECTION 1- PRODUCT IDENTIFICATION

PRODUCT NAME SYNONYMS PRODUCT USE SUPPLIER SUPPLIER'S ADDRESS EMERGENCY RESPONSE PHONE	HOT TANK CLEANER Product is a mixture: No synonyms are available Highly Alkaline Material DYNACCO INC. PO BOX 27, MONROE, WA 98272 (360) 794-8974 PERS: 1-800-633-8253		
	SECTION	I 2 – HAZARD IDENTIFICATION	
GHS – US CLASSIFICATION	: H290 H302 : H314 : H318	Metal corrosion Category 1 Harmful if swallowed Skin Corrosion Category 1A Serious Eye Damage Category 1	
HAZARD PICTOGRAMS			
SIGNAL WORD	: DANGER		
GHS LABEL ELEMENTS	: The product (GHS).	ct is classified and labeled according to the Globally Harmonized System	
GHS PHYSICAL HAZARDS	: H290	May be corrosive to metals.	
GHS HEALTH HAZARDS	: H302	Harmful if swallowed	
	: H314	Causes severe skin burns and eye damage.	
	: H318	Causes serious eye damage.	
	: H370	Causes damage to respiratory system by inhalation.	
GHS PRECAUTIONARY HAZARDS	: P101	If medical advice is needed, have product container or label at hand.	
	: P102	Keep out of reach of children.	
	: P103	Read label before use.	
	: P260	Do not breathe dust/fume/gas/mist/vapors/spray.	
	: P264 : P270	Wash skin and contaminated clothing thoroughly after handling. Do not eat, drink or smoke when using this product.	
	: P270 : P280	Wear suitable protective gloves/protective clothing/eye	
	. 1200	protection/face protection.	
	: P301+P310) IF SWALLOWED: Immediately call a POISON CENTER or	
		doctor/physician.	
	: P303+P361		
	+P353	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.	
	: P305+P340		
	: P310	Immediately call a POISON CENTER or doctor/physician.	
	: P330	Rinse mouth if ingested.	
	: P405	Store locked up.	
	: P501	Dispose of contents/container in accordance with	
		local/regional/national/international regulations.	
CLASSIFICATION SYSTEM:	: NFPA/HMIS	S Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.	
NFPA ratings (scale 0-4):		Fire = 0, Reactivity = 1	
HMIS ratings (scale 0-5):	: Health = 3,	Fire = 0, Reactivity = 1	
		PAGE 1 of 7	

SECTION 3 – COMPOSITON/INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERIZATION DESCRIPTION	:	Mixtures Mixture of th	e substances l	isted below wit	th nonhazardous additions.	
COMPONENT		PERCENT	CAS #	EC #	GHS CLASS	
Sodium Hydroxide		25-45	1310-73-2	215-185-5	Metal Corr Cat 1, Skin Corr. Cat. 1A	
Sadium Clusanata		1 Г		200 407 7	Eye Dam. Cat. 1, Aquatic Acute Cat 3 Not Found	
Sodium Gluconate Sodium Glucoheptonate		1-5 1-5	527-07-1 31138-65-5	208-407-7 250-480-2	Not Found	
Alkylether Hydroxypropyl Sultaine		< 1	108797-84-8		Skin Irrit Cat 2, Eye Irrit Cat 2A	
		• -	108797-85-9			
Corr. = Corrosion, Dam. = Damage	e, Cat	= Category, To	x = Toxicity, Iri	rit = Irritant.		
		SECTION	I 4 – FIRST AID	MEASURES		
EYE CONTACT	:	Immediately	flush eyes wit	th water for a	t least 15 minutes. Hold eyelids open to	
			-		medical attention.	
SKIN CONTACT	:				s. Wash affected skin area with soap and	
			-		product is not completely washed off. Get	
			edical attentic		by drinking water. DO NOT INDUCE	
SWALLOWING (INGESTION)	:	-				
		VOMITING. Never give anything by mouth to an unconscious person. Get immediate medical attention.				
INHALATION	:	: Remove to fresh air. Get immediate medical attention.				
GENERAL MEASURES	:	Never give a	nything by mo	outh to an unc	conscious person. Rescue personnel must	
		wear appro	priate protec	tive equipme	ent during removal of victims from	
		contaminate	d areas. Treat s	symptomatical	ly and supportively.	
SECTION 5 – FIRE FIGHTING MEASURES						
			for orthogodi	avida faana du		
EXTINGUISHING MEDIA SPECIAL HAZARDS (FIRE)	:	 Water spray, fog, carbon dioxide, foam, dry chemical Not flammable. Contains sodium hypochlorite which may act as an oxidizer in some 				
SFECIAL HAZARDS (FIRE)	•	cases intensifying a fire.				
EXPLOSION HAZARDS	:	: Product is not explosive.				
REACTIVITY (FIRE)	:	· · · · · · · · · · · · · · · · · · ·				
		fire, it can re	elease explosiv	e hydrogen ga	s. When heated to decomposition, emits	
	toxic fumes. May be corrosive to metals.					
SPECIAL INSTRUCTIONS TO FIRE I	FIGH	-				
PRECAUTIONARY MEASURES	:		-	ing any chemic		
FIREFIGHTING INSTRUCTIONS	:			ooling exposed		
PROTECTION DURING FIREFIGHTING	•	protection.	ine area with	iout proper pr	otective equipment, including respiratory	
HAZARDOUS COMBUSTION		•	kides May lib	erate toxic ga	ses. Sodium oxides. Phosphorous oxides.	
PRODUCTS	•		-	-	Explosive Hydrogen gas.	
OTHER INFORMATION (FIRE)	:	-			enter drains or water courses.	
		SECTION 6 – A			RES	
PERSONAL PRECAUTIONS,		Restrict acc	ess to keen		rized or unprotected personnel. Wear	
	•				and diverse as a start	

protective equipment. Avoid inhalation and direct contact.

EMERGENCY PROCEDURES
 ENVIRONMENTAL PRECAUTIONS
 Keep spilled material away from sewage/drainage systems and waterways. This product contains a U.S. EPA Reportable Quantity (RQ) substance. If amounts exceeding the Reportable Quantity are released, notification of the National Response Center (800) 424-8802 is required. See section15 for more information.
 All clean-up personnel must be properly trained. Confine the spill and remove incompatible materials and ignition sources. Ensure adequate ventilation. Secure the source of the leak if conditions are safe. Neutralize spill and collect using an appropriate absorbent material such as clay or vermiculite. Place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

SECTION 7 – HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING CONDITIONS FOR SAFE STORAGE Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Store in a dry, cool and well ventilated place. Keep container closed when not in use. Keep/store away from extremely high or low temperatures, direct sunlight, heat and incompatible materials (Strong acid, Strong oxidizers).

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

TLV (THRESHOLD LIMIT VALUE) : The TLV in section in section III is the ACGIH/TLV-TWA (threshold limit value/time weighted average concentration for an eight hour work day). The STEL is the short term exposure limit and the (Ceil) is the ceiling limit.

COMPONENT Sodium Hydroxide Sodium Gluconate		OSHA PEL – TWA 2 mg/m ³ (Ceiling) Not Established	ACGIH TLV-Ceiling 2mg/m ³ Not Established	ACGIH – STEL 2mg/m ³ (Ceiling) Not Established
Sodium Heptonate		Not Established	Not Established	Not Established
Alkylether Hydroxypropyl Sultaine		Not Established	Not Established	Not Established
EYE PROTECTION SKIN PROTECTION	:	Wear chemical splash goggles or fa Minimize contact with product. A apron and/or suitable long-sleeved	Near chemical resistant c	overalls, boots, gloves,
RESPIRATORY PROTECTION	:	In case of brief exposure use resp exposure, use respiratory protectiv	iratory filter device. In cas	•
VENTILATION	:	Ensure adequate ventilation.		_
ADDITIONAL MEASURES	:	Emergency eyewash and safety immediate work area.	shower facilities should	d be available in the
REQUIRED WORK/HYGIENE	:	Wash hands thoroughly after han and feed. Do not eat, drink or smo	• • •	food stuffs, beverages

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

: Clear amber liquid with mild odor

ODOR	:	Mild odor
ODOR THRESHOLD	:	Not available
РН	:	> 13.5
MELTING POINT/FREEZING	:	Not available
POINT		
BOILING POINT	:	Not available
FLASHPOINT	:	Not applicable
EVAPORATION RATE	:	Not available
FLAMMABILITY	:	Non flammable, Non combustible
LOWER FLAMMABILITY LIMIT	:	Not applicable
UPPER FLAMMABILITY LIMIT	:	Not applicable
VAPOR PRESSURE	:	Not available
VAPOR DENSITY (AIR=1)	:	Not available
RELATIVE DENSITY	:	1.48
SOLUBILITY IN WATER	:	Soluble in water
PARTITION COEFFICIENT n-	:	Not available
OCTANOL/WATER		
AUTOIGNITION TEMPERATURE	:	Not available
DECOMPOSITION TEMPERATURE	:	Not available

SECTION 10 - STABILITY AND REACTIVITY

REACTIVITY	:	Thermal decomposition generates: Corrosive vapors. If the product is involved in a fire, it can release explosion hydrogen gas. When heated to decomposition, emits toxic fumes. May be corrosive to metals.
STABILITY	:	Stable under recommended storage conditions.
HAZARDOUS CONDITIONS TO AVOID	:	Direct sunlight. Extremely high or low temperatures. Heat. Combustible materials. Incompatible materials.
INCOMPATIBLE MATERIALS	:	Strong acids. Strong oxidizers. Soft metals. May be corrosive to metal.
HAZARDOUS DECOMPOSITION PRODUCTS	:	Carbon oxides (CO, CO ₂). Thermal decomposition generates: Corrosive vapors. Toxic gases. Hydrogen gas. Nitrogen oxides. Phosphorous oxides. Sodium oxides. Potassium oxides.

SECTION 11 – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION ACUTE TOXICITY EYE CONTACT SKIN CONTACT INHALATION INGESTION CARCINOGENICITY	 Sodium Hydroxide Draize test, rabbit, eye: 400 ug Mild; Draize test, rabbit, eye: 1% Severe; Draize test, rabbit, eye: 50 ug/24H Severe; Draize test, rabbit, eye: 1 mg/24H Severe; Draize test, rabbit, skin: 500 mg/24H Severe Causes severe eye damage. Causes skin burns. Onset of symptoms may be delayed following exposure. Corrosive to respiratory tract. Corrosive to respiratory tract. The components of this product are not classified as carcinogenic by OSHA, NTP IARC or CA Prop 65
TOXICOLOGICAL INFORMATION ACUTE TOXICITY CHRONIC EFFECTS ON HUMANS OTHER TOXIC EFFECTS ON HUMANS	 Sodium Gluconate LD50: Not available, LC50: Not available. Not available. Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

TOXICOLOGICAL INFORMATION ACUTE TOXICITY CARCINOGENICITY OTHER TOXIC EFFECTS ON HUMANS	::	Sodium Glucoheptonate LD50: Oral (Rat): 980mg/kg. Not listed with ACGIH, IARC, NIOSH, NTP, OSHA. Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
TOXICOLOGICAL INFORMATION ACUTE TOXICITY CARCINOGENICITY	: : :	Alkylether Hydroxypropyl Sultaine LD50 Oral (Rat): 13,800mg/kg, Skin (rabbit): Slightly irritating, Eyes (rabbit): Slightly irritating. Acute Inhalation Toxicity: No data found This product is not considered to be probable or suspected human carcinogens by IARC, ACGIH, NTP or OSHA.

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION ECOTOXICITY ENVIRONMENTAL PHYSICAL OTHER PERSISTENCE AND DEGRADABILITY BIOACCUMULATIVE POTENTIAL NOTES		Sodium Hydroxide Immobilization EC50/48h/Daphnia-40.38 mg/l. LC50 /96h/Mosquito fish-125 mg/l. No information found. No information found. No relevant information available. No relevant information available. No relevant information available. Water hazard class 1 (Self assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of this product to reach ground water, water course or sewage system. Must no reach bodies of water or drainage ditch undiluted or un-neutralized. Rinse off larger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms.
ECOLOGICAL INFORMATION ECOTOXICITY BOD5 AND COD PRODUCTS OF BIODEGRADATION TOXICITY OF PRODUCTS OF BIODEGRADATION	::	Sodium Gluconate Not available Not available Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The product and products of biodegradation are not toxic.
ECOLOGICAL INFORMATION ECOTOXICITY BOD5 AND COD PRODUCTS OF BIODEGRADATION TOXICITY OF PRODUCTS OF BIODEGRADATION		Sodium Glucoheptonate Not available Not available Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The product and products of biodegradation are not toxic.
ECOLOGICAL INFORMATION ECOTOXICITY PERSISTENCE AND DEGRADABILITY BIOACCUMULATIVE POTENTIAL	: : :	Alkylether Hydroxypropyl Sultaine Not available. No data available. No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL RECOMMENDATIONS	:	This product must be disposed of in accordance with Federal, state and local environmental regulations. Discarded materials may be considered hazardous waste due to pH/corrosivity. It is the responsibility of the product user to determine at the time of disposal whether a material containing, or derived from this product, should be classified as a hazardous waste.
ECOLOGY-WASTE MATERIALS	:	This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14 – TRANSPORTATION INFORMATION

DOT/IMDG/ IATA PROPER SHIPPING NAME	:	UN-1824, SODIUM HYDROXIDE, SOLUTION 8 PG-II	
HAZARD CLASS AND LABEL	:	8 (Corrosive)	With Miles
UN NUMBER	:	UN 1824	CORROSIVE
PACKAGING GROUP	:	PG-II	
EPA REPORTABLE QUANTITY (RQ)	:	1000 LBS. (454 KG) as Sodium Hydroxide 100%.	8
MARINE POLLUTANT	:	Marine Pollutant	
EMERGENCY RESPONSE GUIDE		ERG-154	

SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATORY INFORMATION:

U.S. FEDERAL REGULATORY IN	IFORMATION:
LISTED CARCINOGEN	: Not listed
TSC STATUS	: The ingredients of this product are listed on TSCA (Toxic Substances Control Act) inventory (40CFR 710.)
SARA SECTION 302	: None
SARA SECTION 311/312	: Immediate (acute) health hazard.
HAZARD CLASS	
SARA SECTION 313	: Not Listed
NFPA HEALTH	: 3
NFPA FLAMMABILITY	: 0
NFPA REACTIVITY	: 1
EUROPEAN UNION REGULATO	DRY INFORMATION:
EC CLASSIFICATION	: C: Corrosive, Xn: Harmful.
DSD/DPD RISK (R) PHRASES	: R34: Causes severe burns.
	R22: Harmful is swallowed.
DSD/DPD SAFETY (S)	: S1/2: Keep locked up and out of reach of children.
PHRASES	S18: Handle and open containers with care.
	S26: In case of contact with eyes, rinse immediately with plenty
	of water and seek medical advice.
	S36/S37/39: Wear suitable protective clothing, gloves and
	eye/face protection.
	S45: In case of accidents or if you feel unwell, seek medical
	advice immediately. Show label where possible.
	S61: Avoid release to the environment.
	S64: If swallowed, rinse mouth with water if victim is conscious.
DSD/DPD HAZARD SYMBOL	: C: Corrosive, Xn: Harmful

CANADIAN REGULATORY INFORMATION

WHMIS CATEGORY	:	Class E: Corrosive: Sodium Hydroxide, Potassium Hydroxide Class D2B: Materials causing other toxic effects (TOXIC): Sodium Carbonate	
DOMESTIC SUBSTANCES LIST (DSL)	:	Listed	
INGREDIENT DISCLOSURE LIST	:	Listed, This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the sds contains all of the information required by the CPR.	

SECTION 16 – OTHER INFORMATION

DISCLAIMER	:	The information contained herein has been compiled from sources believed to be realiable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Dynacco Inc. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and recommendations in the specific context of their intended use.
CERCLA	:	Comprehensive Environmental Response, Compensation, and Liability Act.
EINECS	:	European Inventory of Existing Commercial Chemical Substances
IMDG	:	International Maritime Code for Dangerous Goods
IARC	:	International Agency for Research on Cancer
ΙΑΤΑ	:	International Air Transportation Association
ACGIH	:	American Conference of Governmental Industrial Hygienists
NFPA	:	National Fire Protection Association (USA)
NTP	:	National Toxicology Program
SARA	:	Superfund Amendments and Reauthorization Act
TSCA	:	Toxic Substances Control Act
HMIS	:	Hazardous Materials Identification System (USA)
WHMIS	:	Workplace Hazardous Materials Information System
LC50	:	Lethal concentration, 50 percent
LD50	:	Lethal dose, 50 percent
STOT	:	Systemic Target Organ Toxicity
DATE PREPARED	:	JAN 12, 2011
DATE REVISED	:	JUN 12, 2014