

Five Star Chemicals & Supply, Inc. Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 04/29/2015

CECTION 4. Heavilitization of the owner	
	tance/mixture and of the company/undertaking
1.1. Product identifier Product form	: Mixture
	: HD Caustic #2
	ance or mixture and uses advised against : Caustic Cleaner
1.3. Details of the supplier of the safety da Five Star Chemicals & Supply Inc	ata sheet
4915 E 52nd Ave	
Commerce City, CO 80022	
(303) 287-0186	
1.4. Emergency telephone number	
Emergency number	: 800-535-5053
	INFOTRAC
SECTION 2: Hazards identification	
2.1. Classification of the substance or mix	ture
Classification (GHS-US)	
Acute Tox. 4 (Dermal) H312	
Skin Corr. 1A H314 Aquatic Acute 3 H402	
Full text of H-phrases: see section 16	
Funtext of Fr privates. See Section To	
2.2. Label elements	
GHS-US labeling Hazard pictograms (GHS-US)	
Hazard pictograms (Cho CC)	
	GHS05 GHS07
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H312 - Harmful in contact with skin
	H314 - Causes severe skin burns and eye damage H402 - Harmful to aquatic life
Precautionary statements (GHS-US)	: P260 - Do not breathe dust or vapors
	P264 - Wash hands, forearms and face thoroughly after handling
	P273 - Avoid release to the environment P280 - Wear protective gloves, eye protection
	P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
	P302+P352 - If on skin: Wash with plenty of water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
	P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing
	P312 - Call a POISON CENTER if you feel unwell P363 - Wash contaminated clothing before reuse
	P405 - Store locked up
	P501 - Dispose of contents/container to In accordance with local regulations
2.3. Other hazards	
No additional information available	
2.4. Unknown acute toxicity (GHS-US)	
Not applicable	

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SECT	SECTION 3: Composition/information on ingredients				
3.1.	Substance				
Not app	Not applicable				
3.2.	Mixture				
Name)	Product identifier	%	Classification (GHS-US)	
sodiun	n hydroxide	(CAS No) 1310-73-2	75 - 90	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Aquatic Acute 3, H402	

Full text of H-phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor if you feel unwell.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with soap and water/shower.
First-aid measures after eye contact	: 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/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.
4.2. Most important symptoms and effect	s, both acute and delayed
Symptoms/injuries	: Causes severe skin burns and eye damage.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard.
4.3. Indication of any immediate medical	attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	

5.1.	Extinguishing media	
Suitable	extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitat	le extinguishing media	: Do not use a heavy water stream.
5.2.	Special hazards arising from the sub	ostance or mixture
Reactivit	y	: Corrosive vapors.
5.3.	Advice for firefighters	
Firefight	ing instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protectio	on during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTI	ON 6: Accidental release meas	sures
SECTI 6.1.	ON 6: Accidental release meas Personal precautions, protective equ	
6.1. 6.1.1.	Personal precautions, protective equ	
6.1. 6.1.1.	Personal precautions, protective equiparts for non-emergency personnel	uipment and emergency procedures
6.1. 6.1.1. Emerger 6.1.2.	Personal precautions, protective equ For non-emergency personnel ncy procedures	uipment and emergency procedures
6.1. 6.1.1. Emerger 6.1.2. Protectiv	Personal precautions, protective equ For non-emergency personnel ncy procedures For emergency responders	: Evacuate unnecessary personnel.
6.1. 6.1.1. Emerger 6.1.2. Protectiv	Personal precautions, protective equ For non-emergency personnel ncy procedures For emergency responders re equipment	i Evacuate unnecessary personnel. Equip cleanup crew with proper protection.
6.1. 6.1.1. Emerger 6.1.2. Protectiv Emerger 6.2.	Personal precautions, protective equ For non-emergency personnel ncy procedures For emergency responders re equipment ncy procedures Environmental precautions	i Evacuate unnecessary personnel. Equip cleanup crew with proper protection.

Methods for cleaning up

: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe dust, vapors. Avoid contact during pregnancy/while nursing.	
Hygiene measures	: Wash hands and forearms thoroughly after handling.	
7.2. Conditions for safe storage, includin	g any incompatibilities	
Technical measures	: Comply with applicable regulations.	
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from: Heat sources. Keep container closed when not in use.	
Incompatible products	: Strong acids.	
Incompatible materials	: Sources of ignition. Direct sunlight.	

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters			
HD Caustic #2			
ACGIH	Not applicable		
OSHA Not applicable			
sodium hydroxide (1310-73-2)			
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m³	
ACGIH	Remark (ACGIH)	URT, eye, & skin irr	

2 mg/m³

8.2. Exposure controls

OSHA

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or face shield.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

OSHA PEL (TWA) (mg/m³)

SECTION 9: Physical and chemical properties

9.1.	Information on basic physical and	d che	mical properties
Physica	al state	:	Solid
Appear	ance	:	White powder or lumps.
Color		:	Colorless
Odor		:	Sweet
Odor th	reshold	:	No data available
pН		:	No data available
pH solu	tion	:	13 - 13.5
Relative	e evaporation rate (butyl acetate=1)	:	No data available
Melting	point	:	No data available
Freezin	g point	:	No data available
Boiling	point	:	No data available
Flash p	oint	:	No data available
Auto-igi	nition temperature	:	No data available
Decom	position temperature	:	No data available
Flamma	ability (solid, gas)	:	No data available
Vapor p	pressure	:	No data available

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Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: 42 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available
9.2. Other information	

No additional information available

SECT	ION 10: Stability and reactivity
10.1.	Reactivity
	ve vapors.
10.2.	Chemical stability
Not esta	ablished.
10.3.	Possibility of hazardous reactions
Not esta	ablished.
10.4.	Conditions to avoid
Direct s	unlight. Extremely high or low temperatures.
10.5.	Incompatible materials
Strong	acids.
10.6.	Hazardous decomposition products
Carbon	monoxide. Carbon dioxide. Thermal decomposition generates: Corrosive vapors. fume.

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

Acute toxicity	: Dermal: Harmful in contact with skin.
HD Caustic #2	
ATE US (dermal)	1500.000 mg/kg body weight
sodium hydroxide (1310-73-2)	
LD50 dermal rabbit	1350 mg/kg (Rabbit; Literature)
ATE US (dermal)	1350.000 mg/kg body weight
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful in contact with skin.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard.

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SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - water	: Harmful to aquatic life.	
sodium hydroxide (1310-73-2)		
LC50 fish 1	45.4 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Solution >=50%)	
EC50 Daphnia 1	40.4 mg/l (48 h; Ceriodaphnia sp.; Nominal concentration)	
LC50 fish 2	189 mg/l (48 h; Leuciscus idus)	
TLM fish 1	99 mg/l (48 h; Lepomis macrochirus)	
TLM fish 2	125 ppm (96 h; Gambusia affinis)	
12.2. Persistence and degradability		
HD Caustic #2		
Persistence and degradability	Not established.	
sodium hydroxide (1310-73-2)		
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available. Not established.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
12.3. Bioaccumulative potential		
HD Caustic #2		
Bioaccumulative potential	Not established.	
sodium hydroxide (1310-73-2)		
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.	
12.4. Mobility in soil		
No additional information available		
12.5. Other adverse effects		
Effect on ozone layer	:	
Effect on the global warming	: No known ecological damage caused by this product.	
Other information	: Avoid release to the environment.	
SECTION 13: Disposal consideration		
13.1. Waste treatment methods		
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.	
Ecology - waste materials	: Avoid release to the environment.	
SECTION 14: Transport information		
In accordance with DOT		
Transport document description	: UN1823 Sodium hydroxide, solid, 8, II	
UN-No.(DOT)	: UN1823	
Proper Shipping Name (DOT)	: Sodium hydroxide, solid	
Hazard Classes (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136	
Hazard labels (DOT)	: 8 - Corrosive	
	8	
Packing group (DOT)	· II. Modium Dongor	
Packing group (DOT)	: II - Medium Danger	

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ccording to Federal Register / Vol. 77, No. 58 / Monday, I	vlarch 26, 2012 / Rules and Regulations		
DOT Special Provisions (49 CFR 172.102)	 IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2). IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle. IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner. T3 - 2.65 178.274(d)(2) Normal		
	must be transported in accordance with the applicable requirements of this subchapter.		
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154		
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 212		
DOT Packaging Bulk (49 CFR 173.xxx)	: 240		
(49 CFR 173.27)	: 15 kg		
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)			
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.		
DOT Vessel Stowage Other	: 52 - Stow "separated from" acids		
Additional information			
Other information	: No supplementary information available.		
ADR No additional information available Transport by sea UN-No. (IMDG) Proper Shipping Name (IMDG)	: 1823 : SODIUM HYDROXIDE, SOLID		
Class (IMDG)	: 8 - Corrosive substances		
Packing group (IMDG)	: II - substances presenting medium danger		
Air transport			
UN-No.(IATA)	: 1823		
Proper Shipping Name (IATA)	: Sodium hydroxide, solid		
Class (IATA)	: 8 - Corrosives		
Packing group (IATA)	: II - Medium Danger		
SECTION 15: Regulatory information			
15.1. US Federal regulations			
HD Caustic #2			
Not listed on the United States TSCA (Toxic Sul	ostances Control Act) inventory		
This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.			
sodium hydroxide (1310-73-2)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not listed on the United States SARA Section 313			

RQ (Reportable quantity, section 304 of EPA's List of Lists) 1000 lb

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15.2. International regulations

CANADA

No additional information available

EU-Regulations No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

sodium hydroxide (1310-73-2)

U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information

: None.

Full text of H-phrases:

	Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
[Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
	Skin Corr. 1A	Skin corrosion/irritation Category 1A
[H312	Harmful in contact with skin
	H314	Causes severe skin burns and eye damage
	H402	Harmful to aquatic life

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product