HAVILAND PRODUCTS COMPANY SAFETY DATA SHEET



Section 1: Identification

Product Name: ND-68 G Product Code: H001580

Haviland Products Company 421 Ann Street NW Grand Rapids, MI 49504 (616) 361-6691

Emergency Phone CHEMTREC (800) 424-9300 CHEMTREC International (703) 527-3887

Product Use: Industrial

Not recommended for: No data available

Section 2: Hazard(s) Identification

GHS Ratings:

GHS Hazards

-			
	Corrosive to metals	1	Corrosive to metals
	Dermal Toxicity	Acute Tox. 4	Dermal>1000+<=2000mg/kg
	Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1 hour, visible necrosis in at least one animal
	Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
	Organ toxin single exposure	1	Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies, Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidan
	Aquatic toxicity	A3	Acute toxicity <= 10.0 but < 100 mg/l

<u> </u>	''_		
H290	May be corrosive to metals	P234	Keep
H312	Harmful in contact with skin	P260	Do not
H314	Causes severe skin burns and		dust/fu
	eye damage	P264	Wash
H318	Causes serious eye damage		skin th
H370	Causes damage to organs	P270	Do not
H402	Harmful to aquatic life		this pr
		P273	Avoid
		P280	Wear
			clothin
		P310	Immed
			doctor
		P312	Call a

GHS Precautions		
P234	Keep only in original container	
P260	Do not breathe	
P264	dust/fume/gas/mist/vapors/spray	
F204 	Wash face, hands, and any exposed skin thoroughly after handling	
P270	Do not eat, drink or smoke when using	
	this product	
P273	Avoid release to the environment	
P280	Wear protective gloves/protective	
	clothing/eye protection/face protection	
P310	Immediately call a POISON CENTER or	
D040	doctor/physician	
P312	Call a POISON CENTER or	
P321	doctor/physician if you feel unwell	
F321	Specific treatment (see first aid	
P322	treatment on SDS) Specific measures (see first aid	
	treatment on SDS)	
P363	Wash contaminated clothing before	
	reuse	

SDS for: 1.H001580.DF55L.Std.4 Page 1 of 6

P390 Absorb spillage to prevent material

damage

P301+P330+P33 IF SWALLOWED: Rinse mouth. Do

NOT induce vomiting

P302+P352 IF ON SKIN: Wash with soap and water P303+P361+P35 IF ON SKIN (or hair): Remove/Take off 3 immediately all contaminated clothing.

Rinse skin with water/shower

P304+P340 IF INHALED: Remove victim to fresh air

and keep at rest in a position

comfortable for breathing

P305+P351+P33 IF IN EYES: Rinse cautiously with 8 water for several minutes. Remove

contact lenses if present and easy to

do - continue rinsing

P307+P311 IF exposed: Call a POISON CENTER or

doctor/physician

P405 Store locked up

P406 Store in a corrosive resistant container

with a resistant inner liner

P501 Dispose of contents/container in

accordance with

local/regional/national/international

regulations

Danger



Section 3: Composition/Information on Ingredients

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Sodium hydroxide 1310-73-2 80 to 90%	2 mg/m3 TWA	2 mg/m3 Ceiling	NIOSH: 2 mg/m3 Ceiling
Trade Secret 1 to 5%			
Trade Secret 1 to 5%			
Sodium chloride 7647-14-5 1 to 5%			

Section 4: First-aid Measures

Inhalation

Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

Eye Contact

Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

Skin Contact

Flush with plenty of water for at least 15 minutes while removing contaminated clothing. Get medical attention.

SDS for: 1.H001580.DF55L.Std.4 Page 2 of 6

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Ingestion

If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section	5:	Fire-fight	ting Measures

LEL: UEL:

Extinguishing Media

Use media suitable for the surrounding fires.

Specific Hazards Arising from the Chemical

In water solution, sodium hydroxide can react with amphoteric metals, generating hydrogen, which is a flammable and/or explosive gas when ignited. Contact with acids or strong oxidizers will cause vigorous reaction, with generation of heat and can cause splattering of corrosive mist. Contact with acids will also release large amounts of CO2 gas.

Special Protective Equipment and Precautions for Firefighters

Special Information: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED:

Remove and reclaim as much as possible (shovel up). Neutralize remaining traces with dilute acid, flush with water.

Section 7: Handling and Storage

HANDLING: Use only in a well ventilated area. Avoid breathing dust. Do not get in eyes, on skin, or on clothing. Wear eye protection and protective clothing. Wash thoroughly after handling. Because of the strongly exothermic reaction of caustic materials with water, always add caustic to water, not water to caustic, and always agitate until dissolved. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues.

STORAGE: Store away from heat and out of direct sunlight. Store in a well ventilated, dry area away from incompatible materials.

Section 8: Exposure Control/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Sodium hydroxide 1310-73-2	2 mg/m3 TWA	2 mg/m3 Ceiling	NIOSH: 2 mg/m3 Ceiling
Trade Secret N/A			
Trade Secret N/A			
Sodium chloride 7647-14-5			

Engineering Controls

Provide ventilation sufficient to maintain exposure below the recommended limits .

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.

SKIN PROTECTION: Wear impervious protective gloves. Wear protective gear as needed - apron, suit, boots.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield .

OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

SDS for: 1.H001580.DF55L.Std.4 Page 3 of 6

HYGENIC PRACTICES: Do not eat, drink, or smoke in areas where this material is used. Avoid breathing dusts. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

Section 9: Physical and Chemical Properties

Appearance: White to yellow flakes

Vapor Pressure: Unknown
Vapor Density: Unknown

Density: Unknown

Freezing point: Unknown

Boiling range: Approx 139°C

Evaporation rate: Unknown
Explosive Limits: Unknown

Autoignition temperature: Unknown

Viscosity: Unknown

Odor: Odorless

Odor threshold: Unknown

pH: Unknown

Melting point: Approx 600°F

Solubility: Very soluble

Flash point: Unknown

Flammability: Unknown

Specific Gravity 2.13

Decomposition temperature: Unknown

Grams VOC less water: Unknown

Section 10: Stability and Reactivity

Chemical Stability:

STABLE

Incompatibile Materials

Oxidizers and reactive metals. Combustible materials. This product reacts with acids. Adding water to this product may cause localized overheating and splattering.

Conditions to Avoid

Avoid exposure to heat and direct sunlight. When in contact with water, may generate sufficient heat (with splattering) to ignite combustible materials. Reacts with some metals producing hydrogen, a flammable gas when moist.

Hazardous Decomposition Products

Oxides of sulfur. Oxides of sodium. Hydrogen sulfide.

Hazardous Polymerization

Hazardous polymerization will not occur.

Section 11: Toxicology Information

Mixture Toxicity

Dermal Toxicity LD50: 1,519mg/kg

Component Toxicity

1310-73-2 Sodium hydroxide

Dermal LD50: 1,350 mg/kg (Rabbit)

Routes of Entry:

Inhalation Ingestion Skin contact Eye contact

Eyes Skin Respiratory System

Effects of Overexposure

Health Effects

SDS for: 1.H001580.DF55L.Std.4 Page 4 of 6

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Ingestion will cause severe burns to mouth, esophagus, and stomach. Eye or skin contact can cause severe burns. Danger of permanent injury to eyes.

Carcinogenicity

None of the components present in this material are considered to be carcinogens by IARC, NTP or OSHA.

<u>CAS Number</u> <u>Description</u> <u>% Weight</u> <u>Carcinogen Rating</u>

Section 12: Ecological Information

Component Ecotoxicity

Sodium hydroxide 96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L [static]

Sodium chloride 96 Hr LC50 Lepomis macrochirus: 5560 - 6080 mg/L [flow-through]; 96 Hr LC50

Lepomis macrochirus: 12946 mg/L [static]; 96 Hr LC50 Pimephales promelas: 6020 - 7070 mg/L [static]; 96 Hr LC50 Pimephales promelas: 7050 mg/L [semistatic]; 96 Hr LC50 Pimephales promelas: 6420 - 6700 mg/L [static]; 96 Hr LC50

Oncorhynchus mykiss: 4747 - 7824 mg/L [flow-through]

48 Hr EC50 Daphnia magna: 1000 mg/L; 48 Hr EC50 Daphnia magna: 340.7 -

469.2 mg/L [Static]

Section 13: Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section 14: Transportation Informations

Refer to Bill of Lading or container label for DOT or other transportation hazard classification, if any.

Section 15: Regulatory Information

CERCLA/SARA Hazardous Substances

1310-73-2 Sodium hydroxide

TSCA 8(b) Inventory

7647-14-5 Sodium chloride Trade Secret 1310-73-2 Sodium hydroxide

<u>Country</u> <u>Regulation</u> <u>All Components Listed</u>

Section 16: Other Information

Date Prepared: 6/11/2015

Reviewer Revision

Disclaimer

The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are

SDS for: 1.H001580.DF55L.Std.4 Page 5 of 6

stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.

SDS for: 1.H001580.DF55L.Std.4 Page 6 of 6