Safety Data Sheet: NM-50

Supercedes Date: 06/04/2018 **Issuing Date:** 05/18/2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: NM-50
Recommended use Cleaning agent
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code: 0028
Chemical nature Aqueous solution Acidic
Emergency Telephone
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless - Amber **Physical state** Liquid **Odor** Pungent

GHS Classification

Physical Hazards

Corrosive to Metals	Category 1

Health Hazard

Acute Oral Toxicity	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ systemic toxicity (single exposure)	Category 3

Other hazards
None

Labeling
Signal Word
DANGER

Hazard statements
H314 - Causes severe skin burns and eye damage
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H302 - Harmful if swallowed
H290 - May be corrosive to metals

Precautionary Statements
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P260 - Do not breathe mist
P271 - Use in a well-ventilated area.
P270 - Do not eat, drink or smoke when using this product
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P332 + P313 - If skin irritation occurs, get medical attention.
P363 - Wash contaminated clothing before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a physician.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P342 + P311 - If experiencing respiratory symptoms, call a physician.
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P406 - Store in a corrosion-resistant container.
P390 - Absorb spillage to prevent damage.
P501 - Dispose of contents and container in accordance with applicable regulations

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%

Hydrochloric acid	7647-01-0	10-30

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

General advice Do not get in eyes, on skin or on clothing. Do not breathe mist.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.

Skin Contact Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least least 15 minutes. Get medical attention immediately.

Inhalation Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Notes to physician The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed.

5. FIRE-FIGHTING MEASURES

Flash Point Does not flash **Method** No data available

Flammability Limits in Air %: Hydrogen, by reaction with metals. **Upper:** 75 **Lower:** 4

Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Material can create slippery conditions. Contact with metals liberates flammable hydrogen gas.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.

NFPA	**Health** 3	**Flammability** 0	**Instability** 0
HMIS -	**Health** 3	**Flammability** 0	**Physical Hazard** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

Environmental precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Neutralizing Agent Neutralize with lime milk or soda and flush with plenty of water.

7. HANDLING AND STORAGE

Handling Do not get in eyes, on skin or on clothing. Do not breathe mist.

Storage Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Storage Temperature **Minimum** 35 °F / 2 °C **Maximum** 120 °F / 49 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Hydrochloric acid	Ceiling: 2 ppm	Ceiling: 5 ppm Ceiling: 7 mg/m^3	50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m^3

Engineering Measures Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should should be achieved by the use of local exhaust ventilation and good general extraction.

Personal Protective Equipment

- **Eye/Face Protection** Tightly fitting safety goggles. Face-shield.
- **Skin Protection** Wear suitable protective clothing, Impervious gloves.
- **Respiratory Protection** In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	**Viscosity**	Non viscous
Color	Colorless - Amber	**Odor**	Pungent
Odor Threshold	Not applicable	**Appearance**	Transparent - Hazy
pH	< 1	**Specific Gravity**	1.09
Evaporation Rate	0.6 (Butyl acetate=1)	**Percent Volatile (Volume)**	0
VOC Content (%)	0	**VOC Content (g/L)**	0
Vapor pressure	15.4 mmHg @ 70°F	**Vapor Density**	0.7 (Air = 1.0)
Solubility	Completely soluble	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available
Boiling Point/Range	220 °F / 104 °C	**Flammability (solid, gas)**	No data available
Flash Point	Does not flash	**Method**	No data available
Autoignition Temperature	No information available.		
Flammability Limits in Air %:	Hydrogen, by reaction with metals	**Upper:** 75 **Lower:** 4	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	None known.
Incompatible Products	Bases, Strong oxidizing agents, Reducing agents, Metals.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Hydrogen chloride gas, Chlorine gas, Hydrogen, by reaction with metals, Carbon oxides, Nitrogen oxides (NOx), Contact with metals liberates hydrogen gas.
Possibility of Hazardous Reactions	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Product Information — No information available.

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	No information available
Vapor	No information available

Principle Route of Exposure	Skin contact, Eye contact, Inhalation.
Primary Routes of Entry	Skin contact.
Acute Effects:	
Eyes	Corrosive to the eyes and may cause severe damage including blindness.
Skin	Causes skin burns.
Inhalation	Harmful by inhalation. Causes burns.
Ingestion	If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.
Chronic Toxicity	Inhaled corrosive substances can lead to a toxic edema of the lungs.
Target Organ Effects:	Respiratory system, Eyes, Skin, Teeth.
Aggravated Medical Conditions	Respiratory disorders, Skin disorders.

Component Information

Acute Toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
Hydrochloric acid 7647-01-0	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h	No data available	No data available

Chemical name	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Hydrochloric acid 7647-01-0	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system

Carcinogenicity — The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA	Other
Hydrochloric acid 7647-01-0	Not applicable	Group 3	Not applicable	Not applicable	Not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Additional Ecological Information: No information available

Component Information No information available.

Chemical name	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficient
Hydrochloric acid	No information available.	LC50 = 282 mg/L Gambusia affinis 96 h	No information available	No information available.	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name Hydrochloric acid solution
Hazard Class 8
UN-No UN1789
Packing Group II
Reportable Quantity (RQ) Hydrochloric acid, RQ kg= 11816.76
Description UN1789, Hydrochloric acid solution, 8, PG II

TDG
Proper shipping name Hydrochloric acid solution
Hazard Class 8
UN-No UN1789
Packing Group II
Description Hydrochloric acid solution,8,UN1789,PG II

ICAO
UN-No UN1789
Proper Shipping Name Hydrochloric acid solution
Hazard Class 8
Packing Group II
Shipping Description UN1789, Hydrochloric acid solution,8,PG II

IATA
UN-No UN1789
Proper Shipping Name Hydrochloric acid solution
Hazard Class 8
Packing Group II
ERG-Code 8L
Shipping Description UN1789,Hydrochloric acid solution,8,PG II

IMDG/IMO
UN proper shipping name Hydrochloric acid solution
Hazard Class 8
UN Number UN1789
Packing Group II
EmS No. F-A, S-B
Description UN1789, Hydrochloric acid solution,8,PG II

15. REGULATORY INFORMATION

Inventories
TSCA Complies
DSL Complies
U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values
Hydrochloric acid	7647-01-0	10-30	1.0
Nonyl phenol polyethylene glycol ether	9016-45-9	<0.1	1.0

SARA 311/312 Hazardous Categorization
See Section 2

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA EHS RQs
Hydrochloric acid	5000 lb	500 lb TPQ (gas only) 5000 lb

16. OTHER INFORMATION

Prepared By Samantha Purvis
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Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

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