Safety Data Sheet: NF-2000

Supercedes Date 12/28/2016 **Issuing Date** 05/15/2019

1. PRODUCT AND COMPANY IDENTIFICATION

Formula Code NF-2000
Recommended use Solvent degreaser
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 0936
Chemical nature Solvent mixture
Emergency Telephone
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

2. HAZARD IDENTIFICATION

Color Colorless **Physical state** Liquid **Odor** Ether-like

GHS Classification

Physical Hazards
None

Health Hazard

Acute Inhalation Toxicity - Gas	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitization	Category 1
Carcinogenicity	Category 1B
Specific target organ systemic toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Other hazards
None

Labeling
Signal Word
DANGER

Hazard statements
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H336 - May cause drowsiness or dizziness
H350 - May cause cancer
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves, protective clothing and eye protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P260 - Do not breathe vapors or mists.
P271 - Use in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs, get medical attention
P362 - Take off contaminated clothing and wash 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.
P337 + P313 - If eye irritation persists, get medical attention.
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a physician if unwell.
P308 + P313 - IF exposed or concerned, get medical attention
P501 - Dispose of contents and container in accordance with applicable local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Tetrachloroethylene	127-18-4	80-100
Methylene chloride	75-09-2	10-30

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

4. FIRST AID MEASURES

General advice Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing.

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 Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.

Inhalation Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.

Ingestion Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth.

Notes to physician May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Flash Point > 201 °F / > 94 °C **Method** Tag closed cup

Flammability Limits in Air %: Mixture. **Upper:** 23 **Lower:** 13

Suitable Extinguishing Media

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

Specific hazards arising from the chemical

Material can create slippery conditions. Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode.

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** 2	**Flammability** 1	**Instability** 0
HMIS -	**Health** 2	**Flammability** 1	**Instability** 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 Pick up and transfer to properly labeled containers.

Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing.

Storage Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

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
Tetrachloroethylene	TWA: 25 ppm STEL: 100 ppm	TWA: 100 ppm Ceiling: 200 ppm	150 ppm
Methylene chloride	TWA: 50 ppm	TWA: 25 ppm STEL: 125 ppm	2300 ppm
Propylene oxide	TWA: 2 ppm	TWA: 100 ppm TWA: 240 mg/m^3	400 ppm
Methyl alcohol	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 200 ppm TWA: 260 mg/m^3	6000 ppm STEL 250 ppm STEL 325 mg/m^3 TWA: 200 ppm TWA: 260 mg/m^3
Chloroform	TWA: 10 ppm	Ceiling: 50 ppm	500 ppm

		Ceiling: 240 mg/m^3	STEL 2 ppm STEL 9.78 mg/m^3
Methyl chloride	TWA: 50 ppm Skin STEL: 100 ppm	TWA: 100 ppm Ceiling: 200 ppm	2000 ppm
Ethyl chloride	TWA: 100 ppm Skin	TWA: 1000 ppm TWA: 2600 mg/m^3	3800 ppm
Vinyl chloride	TWA: 1 ppm	TWA: 1 ppm STEL: 5 ppm	No data available

Engineering Measures Ensure adequate ventilation, especially in confined areas. Engineering control measures should be used in preference to personnel protective equipment wherever possible.

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles.

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	**Odor**	Ether-like
Odor Threshold	Not applicable	**Appearance**	Transparent
pH	Not applicable	**Specific Gravity**	1.58
Evaporation Rate	5.2 (Butyl acetate=1)	**Percent Volatile (Volume)**	100
VOC Content (%)	0.4	**VOC Content (g/L)**	0
Vapor pressure	63.2 mmHg @ 70°F	**Vapor Density**	3.2 (Air = 1.0)
Solubility	Negligible	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available
Boiling Point/Range	208 °F / 98 °C	**Flammability (solid, gas)**	No data available
Flash Point	> 201 °F / > 94 °C	**Method**	Tag closed cup
Autoignition Temperature	No information available.		
Flammability Limits in Air %:	Mixture	**Upper:** 23 **Lower:** 13	

10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous polymerization does not occur.

Conditions to Avoid Heating can release hazardous gases.

Incompatible Products Strong oxidizing agents, Acids, Bases, Aluminum, Oxygen, Peroxides, Reactive metals, Alkali metals, Potassium, Magnesium, Zinc.

Decomposition Temperature No data available

Hazardous Decomposition Products Carbon oxides, Hydrogen chloride gas, Chlorine, Phosgene.

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 Inhalation, Skin contact, Eye contact.

Primary Routes of Entry Skin contact, Skin Absorption.

Acute Effects:

Eyes Severe eye irritant.

Skin Severe skin irritant. May cause sensitization by skin contact.

Inhalation Irritating to mucous membranes. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Irregular cardiac activity. May cause cardiac arrhythmia.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Toxicity Liver and kidney injuries may occur. Prolonged skin contact may defat the skin and produce

dermatitis. Contains a known or suspected carcinogen. May cause irregular heartbeats, especially under conditions of stress. Excessive exposure may cause carboxyhemoglobinemia, thereby impairing the blood's ability to transport oxygen.

Target Organ Effects: Respiratory system, Central nervous system, Kidney, Liver, Skin, Eyes, Lungs.

Aggravated Medical Conditions Respiratory disorders, Skin disorders, Kidney disorders, Liver disorders, Blood disorders, Neurological disorders.

Component Information

Acute Toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
Tetrachloroethylene 127-18-4	= 2629 mg/kg (Rat)	> 3228 mg/kg (Rabbit)	= 27.8 mg/L (Rat) 4 h	No data available	No data available
Methylene chloride 75-09-2	= 1600 mg/Kg (rat)	no data available	= 53 mg/L (Rat) 6 h	No data available	No data available

Chemical name	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Tetrachloroethylene 127-18-4	No data available	Skin sensitization	No data available	No data available	Skin; Central nervous system; Eyes; Respiratory system; Liver; Kidney
Methylene chloride 75-09-2	No data available	No data available	No data available	No data available	Skin; Central nervous system; Eyes

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

Chemical name	ACGIH	IARC	NTP	OSHA	Other
Tetrachloroethylene 127-18-4	A3	Group 2A	Not applicable	X	Not applicable
Methylene chloride 75-09-2	A3	Group 2A	Reasonably Anticipated	X	Not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Chemical name	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficien
Tetrachloroethylene	EC50 > 500 mg/L Pseudokirchneriella subcapitata 96 h	LC50 12.4 - 14.4 mg/L Pimephales promelas 96 h LC50 8.6 - 13.5 mg/L Pimephales promelas 96 h LC50 11.0 - 15.0 mg/L Lepomis macrochirus 96 h LC50 4.73 - 5.27 mg/L Oncorhynchus mykiss 96 h	EC50 = 100 mg/L 24 h EC50 = 112 mg/L 24 h EC50 = 120.0 mg/L 30 min	6.1 - 9.0: 48 h Daphnia magna mg/L EC50 Static	2.88
Methylene chloride	EC50 > 500 mg/L Pseudokirchneriella subcapitata 96 h EC50 > 500 mg/L Pseudokirchneriella subcapitata 72 h	LC50 140.8 - 277.8 mg/L Pimephales promelas 96 h LC50 262 - 855 mg/L Pimephales promelas 96 h LC50 = 193 mg/L Lepomis macrochirus 96 h	EC50 = 1 mg/L 24 h EC50 = 2.88 mg/L 15 min	1532 - 1847: 48 h Daphnia magna mg/L EC50 Static 190: 48 h Daphnia magna mg/L EC50	1.25

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 TOXIC LIQUIDS, ORGANIC, N.O.S.

Hazard Class 6.1

UN-No UN2810

Packing Group III

Reportable Quantity (RQ) Tetrachloroethylene, RQ kg = 53.65

Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to DOT.

Description UN2810, TOXIC, LIQUID, ORGANIC, N.O.S., (DICHLOROMETHANE, TETRACHLOROETHYLENE), MARINE POLLUTANT

TDG

Proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S.,
Hazard Class	6.1
UN-No	UN2810
Packing Group	III
Marine Pollutant	This product contains a chemical which is listed as a marine pollutant according to TDG.
Description	UN2810, TOXIC, LIQUID, ORGANIC, N.O.S., (DICHLOROMETHANE, TETRACHLOROETHYLENE), MARINE POLLUTANT

ICAO

UN-No	UN2810
Proper Shipping Name	TOXIC LIQUID, ORGANIC, N.O.S.
Hazard Class	6.1
Packing Group	III
Shipping Description	UN2810,TOXIC LIQUID, ORGANIC, N.O.S.,(DICHLOROMETHANE, TETRACHLOROETHYLENE),6.1,PG III

IATA

UN-No	UN2810
Proper Shipping Name	TOXIC LIQUID, ORGANIC, N.O.S.
Hazard Class	6.1
Packing Group	III
Shipping Description	UN2810,TOXIC LIQUID, ORGANIC, N.O.S.,(DICHLOROMETHANE, TETRACHLOROETHYLENE),6.1, PG III

IMDG/IMO

UN proper shipping name	TOXIC, LIQUID, ORGANIC, N.O.S.
Hazard Class	6.1
UN Number	UN2810
Packing Group	III
Marine Pollutant	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
Description	UN2810, TOXIC, LIQUID, ORGANIC, N.O.S., (DICHLOROMETHANE, TETRACHLOROETHYLENE), MARINE POLLUTANT

15. REGULATORY INFORMATION

Inventories

TSCA	Complies
DSL	Complies

U.S. Federal Regulations

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

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
Tetrachloroethylene	127-18-4	60-100	0.1

SARA 311/312 Hazardous Categorization

See Section 2

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA EHS RQs
Tetrachloroethylene	100 lb 1 lb	Not applicable
Methylene chloride	1000 lb 1 lb	Not applicable

16. OTHER INFORMATION

Prepared By	Samantha Purvis
Supercedes Date	12/28/2016
Issuing Date	05/15/2019
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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