Safety Data Sheet: SUPER CALSOLV, MM

Supercedes Date 02/26/2016 **Issuing Date** 10/05/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name SUPER CALSOLV, MM
Recommended use Cleaning agent
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 5088
Chemical nature Mixture
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless **Physical state** Liquid **Odor** Sweet

GHS Classification

Physical Hazards

Gases under pressure	Compressed Gas

Health Hazard

Aspiration Toxicity	Category 1
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2B
Reproductive Toxicity	Category 1B
Carcinogenicity	Category 2
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
H336 - May cause drowsiness or dizziness
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H304 - May be fatal if swallowed and enters airways
H373 - May cause damage to organs through prolonged or repeated exposure
H360 - May damage fertility or the unborn child
H351 - Suspected of causing cancer
H280 - Contains gas under pressure; may explode if heated

Precautionary Statements
P202 - Do not handle until all safety precautions have been read and understood
P251 - Pressurized container: Do not pierce or burn, even after use
P210 - Keep away from heat, sparks, open flames or hot surfaces.
P260 - Do not breathe vapor, mist or gas
P271 - Use in a well-ventilated area.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves, protective clothing and eye protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
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.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation 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.
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P403 + P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents and container in accordance with applicable local regulations.

4 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %
n-Propyl bromide	106-94-5	60-100
Carbon dioxide	124-38-9	3-7
Isopropyl alcohol	67-63-0	1-5
tert-Butyl alcohol	75-65-0	1-5
1,2-Butylene oxide	106-88-7	0.1-1.0
Ethanol	64-17-5	<0.1

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

4. FIRST AID MEASURES

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

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

Skin Contact Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms occur.

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 Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

5. FIRE-FIGHTING MEASURES

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

Flammability Limits in Air %: Mixture. **Upper:** 12.7 **Lower:** 2.0

Suitable Extinguishing Media

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

Specific hazards arising from the chemical

Flame extension: 0 inches / 0 cm and Burnback: 0 inch / 0 cm. Material can create slippery conditions.

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.

Aerosol Level (NFPA 30B) - 1

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 Keep away from open flames, hot surfaces and sources of ignition. Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.

Storage Keep away from heat and sources of ignition. 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

Component	ACGIH TLV	OSHA PEL	NIOSH
n-Propyl bromide	TWA: 0.1 ppm	No data available	No data available
Carbon dioxide	TWA: 5000 ppm STEL: 30000 ppm	TWA: 5000 ppm TWA: 9000 mg/m^3	40000 ppm STEL 30000 ppm

			STEL 54000 mg/m^3 TWA: 5000 ppm TWA: 9000 mg/m^3
Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm TWA: 980 mg/m^3	2000 ppm STEL 500 ppm STEL 1225 mg/m^3 TWA: 400 ppm TWA: 980 mg/m^3
tert-Butyl alcohol	TWA: 100 ppm	TWA: 100 ppm TWA: 300 mg/m^3	1600 ppm STEL 150 ppm STEL 450 mg/m^3 TWA: 100 ppm TWA: 300 mg/m^3
Ethanol	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m^3	3300 ppm TWA: 1000 ppm TWA: 1900 mg/m^3

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

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.

Skin Protection For prolonged or repeated contact, use protective gloves with appropriate chemical resistance.

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 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**	Sweet
Odor Threshold	Not applicable	**Appearance**	Transparent
pH	Not applicable	**Specific Gravity**	0.98
Evaporation Rate	94.3 (Butyl acetate=1)	**Percent Volatile (Volume)**	0
VOC Content (%)	96.5	**VOC Content (g/L)**	945
Vapor Pressure	4153.6 mmHg @ 70°F	**Vapor Density**	1.6 (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	160 °F / 71 °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:** 12.7 **Lower:** 2.0	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Keep away from open flames, hot surfaces, and sources of ignition.
Incompatible Products	Strong oxidizing agents, Strong bases.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Carbon oxides, Hydrogen bromide.
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 > 2000

Dermal LD50 No information available

Inhalation LC50

Gas No information available

Mist No information available

Vapor >10

Principle Route of Exposure Skin contact, Eye contact, Inhalation.

Primary Routes of Entry Skin Absorption, Skin contact.

Acute Effects:

Eyes May cause eye irritation.

Skin May cause skin irritation. May be absorbed through the skin in harmful amounts.

Inhalation May cause irritation of respiratory tract. 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. Lowered blood pressure.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

Chronic Toxicity Liver and kidney injuries may occur. Prolonged or repeated inhalation may cause damage to the lungs. Prolonged skin contact may defat the skin and produce dermatitis. Contains a known or suspected reproductive toxin. Contains a known or suspected carcinogen.

Target Organ Effects Respiratory system, Central nervous system, Cardiovascular system, Peripheral Nervous System (PNS), Reproductive System, Liver, Kidney, Heart, Skin, Eyes.

Aggravated Medical Conditions Skin disorders, Liver disorders, Kidney disorders, Neurological disorders, Respiratory disorders, Heart disease.

Component Information

Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
n-Propyl bromide 106-94-5	No data available	no data available	= 253 g/m^3 (Rat) 30 min	No data available	No data available
Isopropyl alcohol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m^3 (Rat) 4 h	No data available	No data available
tert-Butyl alcohol 75-65-0	= 2200 mg/kg (Rat)	> 2 g/kg (Rabbit)	> 10000 ppm (Rat) 4 h	No data available	No data available
1,2-Butylene oxide 106-88-7	No data available	= 1757 mg/kg (Rabbit)	= 6300 mg/m^3 (Rat) 4 h	No data available	No data available
Ethanol 64-17-5	No data available	no data available	= 124.7 mg/L (Rat) 4 h	No data available	No data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
n-Propyl bromide 106-94-5	No data available	No data available	No data available	X	Central nervous system; Heart; Liver; Kidney; Respi system; Reproductive System; Peripheral Nervous System (PNS)
Carbon dioxide 124-38-9	No data available	No data available	No data available	No data available	Respiratory system; Cardiovascular system
Isopropyl alcohol 67-63-0	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system
tert-Butyl alcohol 75-65-0	No data available	No data available	No data available	No data available	Skin; Central nervous system; Eyes; Respiratory system
Ethanol 64-17-5	No data available	No data available	No data available	No data available	Blood; Skin; Central nervous system; Eyes; Respiratory system; Reproductive System; Liver

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
n-Propyl bromide 106-94-5	A3	Group 2B	Reasonably Anticipated	X	not applicable
1,2-Butylene oxide 106-88-7	not applicable	Group 2B	not applicable	X	not applicable
Ethanol 64-17-5	A3	Group 1	not applicable	X	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficien
n-Propyl bromide	No information available.	LC50 = 67.3 mg/L Pimephales promelas 96 h	No information available	No information available.	2.1
Isopropyl alcohol	EC50 > 1000 mg/L Desmodesmus subspicatus 96 h EC50 > 1000 mg/L Desmodesmus subspicatus 72 h	LC50 = 9640 mg/L Pimephales promelas 96 h LC50 = 11130 mg/L Pimephales promelas 96 h LC50 > 1400000 µg/L Lepomis macrochirus 96 h	EC50 = 35390 mg/L 5 min	13299: 48 h Daphnia magna mg/L EC50	0.05
tert-Butyl alcohol	EC50 > 1000 mg/L Desmodesmus	LC50 6130 - 6700 mg/L Pimephales promelas 96 h	EC50 > 10000 mg/L 17 h	933: 48 h Daphnia magna mg/L EC50	0.35

	subspicatus 72 h			4607 - 6577: 48 h Daphnia magna mg/L EC50 Static	
1,2-Butylene oxide	EC50 > 500 mg/L Desmodesmus subspicatus 72 h	No information available.	EC50 = 4840 mg/L 17 h	69.8: 48 h Daphnia magna mg/L EC50	0.416
Ethanol	No information available.	LC50 12.0 - 16.0 mL/L Oncorhynchus mykiss 96 h LC50 > 100 mg/L Pimephales promelas 96 h LC50 13400 - 15100 mg/L Pimephales promelas 96 h	No information available	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static	-0.32

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 Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT DOT
- **Proper Shipping Name** Consumer commodity
- **Hazard Class** ORM-D
- **Description** Consumer commodity, ORM-D

TDG TDG
- **Proper shipping name** Aerosols, Non Flammable
- **Hazard Class** 2.2
- **UN-No** UN1950
- **Description** UN1950, Aerosols, Non-Flammable, 2.2, LTD QTY

ICAO ICAO
- **UN-No** UN1950
- **Proper Shipping Name** Aerosols, Non-Flammable
- **Hazard Class** 2.2
- **Shipping Description** UN1950,Aerosols, Non-Flammable, 2.2, LTD QTY

IATA IATA
- **UN-No** UN1950
- **Proper Shipping Name** Aerosols, Non-Flammable
- **Hazard Class** 2.2
- **Shipping Description** UN1950, Aerosols, Non-Flammable, 2.2, LTD QTY

IMDG/IMO IMDG/IMO
- **Proper Shipping Name** Aerosols, Non-Flammable
- **Hazard Class** 2.2
- **UN-No** UN1950
- **Description** UN1950, Aerosols, Non-Flammable, 2.2, LTD QTY

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:

Component	CAS No.	Weight %	SARA 313 - Threshold Values
tert-Butyl alcohol	75-65-0	1-5	1.0
1,2-Butylene oxide	106-88-7	0.1-1.0	0.1

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	Yes	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
1,2-Butylene oxide	100 lb	Not applicable

16. OTHER INFORMATION

Prepared By Adrienne McKee
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Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

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