Safety Data Sheet RESOLVE, MM

Supercedes Date 09/26/2013 **Issuing Date** 02/24/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name RESOLVE, MM
Recommended use Lubricant
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 5032
Chemical nature Petroleum distillates
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color White - off-white **Physical state** Liquid **Odor** Odorless

GHS
Classification
Physical Hazards

Flammable Aerosols	Category 1
Gases under pressure	Liquefied gas

Health Hazard
None

Other hazards
None

Labeling
Signal Word
DANGER

Hazard statements
H222 - Extremely flammable aerosol
H280 - Contains gas under pressure; may explode if heated

Precautionary Statements
P210 - Keep away from heat, sparks, open flames or hot surfaces.
P211 - Do not spray on an open flame or other ignition source
P251 - Pressurized container: Do not pierce or burn, even after use
P270 - Do not eat, drink or smoke when using this product.
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P403 - Store in a well-ventilated place
P501 - Dispose of contents and container in accordance with applicable local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Weight % *
White mineral oil, solvent refined	8042-47-5	40-70
Petrolatum	8009-03-8	15-40
Isobutane	75-28-5	3-7
Propane	74-98-6	3-7

*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 Wipe up with absorbent material (e.g. cloth, fleece). Wash off with soap and plenty of water. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.
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 if symptoms occur.
Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point > 200 °F / > 93 °C **Method** Seta closed cup
Flammability Limits in Air %: Propellant. **Upper:** 9.5 **Lower:** 1.8
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
Flame extension: >30 inches / >76 cm and Burnback: 0 inch / 0 cm. Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. 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) - 3
NFPA **Health** 1 **Flammability** 4 **Instability** 0
HMIS **Health** 1 **Flammability** 4 **Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Remove all sources of ignition. Material can create slippery conditions. Ensure adequate ventilation. Take precautionary measures against static discharges.
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 Use clean non-sparking tools to collect absorbed material. 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 Store in original container. Keep in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.
Storage Temperature **Minimum** 35 °F / 2 °C **Maximum** 122 °F / 50 °C
Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
White mineral oil, solvent refined	5 mg/m^3	5 mg/m^3	STEL 10 mg/m^3 TWA: 5 mg/m^3
Petrolatum	5 mg/m^3 as oil mist	10 mg/m^3 as oil mist	No data available
Isobutane	STEL: 1000 ppm	No data available	TWA: 800 ppm TWA: 1900 mg/m^3
Propane	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m^3	2100 ppm TWA: 1000 ppm TWA: 1800 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**	Viscous
Color	White - off-white	**Odor**	Odorless
Odor Threshold	Not applicable	**Appearance**	No information available.
pH	Not applicable	**Specific Gravity**	0.822
Evaporation Rate	18.59 (Butyl acetate=1)	**Percent Volatile (Volume)**	15
VOC Content (%)	9.9	**VOC Content (g/L)**	81.4
Vapor Pressure	2174 mmHg @ 70°F	**Vapor Density**	1.4 (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	No data available	**Flammability (solid, gas)**	No data available
Flash Point	> 200 °F / > 93 °C	**Method**	Seta closed cup
Autoignition Temperature	No information available.		
Flammability Limits in Air %:	Propellant	**Upper:** 9.5 **Lower:** 1.8	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Heat, flames, and sparks.
Incompatible Products	Strong oxidizing agents.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Carbon oxides.
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

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, Eye contact, Inhalation.
Acute Effects:	
Eyes	Low hazard for usual industrial or commercial handling.
Skin	Low hazard for usual industrial or commercial handling.
Inhalation	Low hazard for usual industrial or commercial handling.
Ingestion	Low hazard for usual industrial or commercial handling.
Chronic Toxicity	None known.
Target Organ Effects	None known.
Aggravated Medical Conditions	None known.

Component Information

Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
White mineral oil, solvent refined 8042-47-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	no data available	no data available	no data available
Petrolatum 8009-03-8	no data available	= 3600 mg/kg (Rabbit)	no data available	no data available	no data available
Isobutane 75-28-5	no data available	no data available	= 658 mg/L (Rat) 4 h	no data available	no data available
Propane 74-98-6	no data available	no data available	= 658 mg/L (Rat) 4 h	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
White mineral oil, solvent refined 8042-47-5	no data available	no data available	no data available	no data available	Skin Eyes Respiratory system
Isobutane 75-28-5	no data available	no data available	no data available	no data available	Central nervous system
Propane 74-98-6	no data available	no data available	no data available	no data available	Central nervous system

Carcinogenicity There are no known carcinogenic chemicals in this product.

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	log Pow
White mineral oil, solvent refined	No information available.	LC50 > 10000 mg/L Lepomis macrochirus 96 h	No information available	No information available.	6.006
Isobutane	No information available.	No information available.	No information available	No information available.	2.88
Propane	No information available.	No information available.	No information available	No information available.	2.3

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
Proper Shipping Name Consumer Commodity
Hazard Class ORM-D
Description Consumer Commodity, ORM-D

TDG
Proper shipping name AEROSOLS, FLAMMABLE
Hazard Class 2.1
UN-No UN1950
Description UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD QTY

ICAO
UN-No UN1950
Proper Shipping Name AEROSOLS, FLAMMABLE
Hazard Class 2.1
Shipping Description UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD QTY

IATA
UN-No UN1950
Proper Shipping Name AEROSOLS, FLAMMABLE
Hazard Class 2.1
ERG-Code 10L
Shipping Description UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD QTY

IMDG/IMO
Proper Shipping Name AEROSOLS
Hazard Class 2.1
UN-No UN1950
EmS No. F-D, S-U
Description UN1950, AEROSOLS, 2.1, 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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
SARA 311/312 Hazardous Categorization

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

CERCLA

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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