SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Date Printed:

9/22/21

Product ID: Z456

Product Name: GREENCHEM LIQUID RUBBER

Revision Date: May 5, 2021 Supersedes Date: Feb 26, 2020

Version: 2.1

Distributor's Name: GREEN CHEM LABORATORIES

Address: 1650 MARKET ST - STE 3631 - PHILADELPHIA, PA 19103

Emergency Phone: 1-800-535-5053
Information Phone Number: 1-800-964-3151
Product/Recommended Uses: Undercoating

SECTION 2) HAZARDS IDENTIFICATION

Classification

Aerosols - Category 1

Gases Under Pressure - Liquefied Gas

Aspiration Hazard - Category 1

Carcinogenicity - Category 1B

Germ Cell Mutagenicity - Category 1B

Reproductive Toxicity - Category 2

Eye Irritation - Category 2A

Skin Irritation - Category 2

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Pictograms









Signal Word

Danger

Hazardous Statements - Physical

H222 - Extremely flammable aerosol.

H280 - Contains gas under pressure; may explode if heated.

Hazardous Statements - Health

H304 - May be fatal if swallowed and enters airways.

H350 - May cause cancer.

H340 - May cause genetic defects.

H361 - Suspected of damaging fertility or the unborn child.

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- H319 Causes serious eye irritation.
- H315 Causes skin irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements - General

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.

Precautionary Statements - Prevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Do not pierce or burn, even after use.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P280 Wear protective gloves, protective clothing, eye protection and face protection.
- P264 Wash hands thoroughly after handling.
- P260 Do not breathe mist, vapors or spray.

Precautionary Statements - Response

- P314 Get medical attention if you feel unwell.
- P308 + P313 IF exposed or concerned: Get medical attention.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P331 Do NOT induce vomiting.
- 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.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P362 + P364 Take off contaminated clothing and wash it before reuse.
- P332 + P313 If skin irritation occurs: Get medical attention.

Precautionary Statements - Storage

- P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
- P405 Store locked up.
- P403 Store in a well-ventilated place.

Precautionary Statements - Disposal

P501 - Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3) COMPOSITION, INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000471-34-1	CALCIUM CARBONATE	27% - 44%
0068476-86-8	Petroleum gases, liquefied, sweetened	15% - 25%
0008052-42-4	BITUMENS	7% - 14%
0064742-48-9	Naphtha (Petroleum), Hydrotreated Heavy	6% - 13%
0000108-88-3	TOLUENE	5% - 11%
0064475-85-0	MINERAL SPIRITS	3% - 6%
0000108-65-6	PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	0.1% - 2%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

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SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/lf you feel unwell/lf concerned: Call a POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

Eye Contact

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention.

Ingestion

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

Most Important Symptoms/Effects, Acute and Delayed

No data available.

Indication of Immediate Medical Attention and Special Treatment Needed

No data available.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only. Do not direct a solid stream of water or foam into hot, burning pools. This may result in frothing and increased fire intensity.

Unsuitable Extinguishing Media

None known.

Specific Hazards in Case of Fire

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force.

Product is highly flammable and forms explosive mixtures with air, oxygen, and all oxidizinglagents. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. High temperatures can cause sealed containers to rupture due to a build up of internal pressures. Cool with water. Empty Containers retain product residue which may exhibit hazards of material; therefore do not pressurize, cut, glaze, weld or use for any other purposes. Container could potentially burst or be punctured upon mechanical impact, releasing flammable vapors.

Fire-Fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment

Wear liquid tight chemical protective clothing in combination with positive pressure self-contained breathing apparatus (SCBA).

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Personal Precautions

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Absorb liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them.

Store at temperatures below 120°F.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over- boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)
BENZENE		1 (a) / 25ceiling		1		1		0.5
BITUMENS							0.5	
CALCIUM CARBONATE	[15]; [5 (a)];					1		
MINERAL SPIRITS							[(L)]; [5 (I)];	(L)
Naphtha (Petro- leum), Hydro- treated Heavy	2000	500				1	[(L)[N159](L) [N800]]; [5 (I) [N159]5 (I) [N800]];	(L)[N159](L) [N800]

Petroleum gases, liquefied, sweetened	2000	500		1	
TOLUENE	0.2	200 (a)/ 300 ceiling		1,2	20
XYLENE	435	100		1	100

Chemical Name	NIOSH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)
BENZENE	1c		2.5	A1	Leukemia	Skin; A1; BEI		0.1c
BITUMENS				A4	URT & eye irr	A4; BEI		
CALCIUM CARBONATE							10,5a	
MINERAL SPIRITS				[A2]; [A4];	URT irr	[A2]; [A4];		
Naphtha (Petro- leum), Hydro- treated Heavy				[A2[N159]A2 [N800]]; [A4 [N159]A4 [N800]];	URT irr [N159]URT irr [N800]	[A2[N159]A2 [N800]]; [A4 [N159]A4 [N800]];		
Petroleum gases, liquefied, sweetened								
TOLUENE	150			A4	Visual impair; female repro; pregnancy loss	A4; BEI	375	100
XYLENE	150		150	A4	URT & eye irr; CNS imapir	A4; BEI	435	100

Chemical Name	NIOSH STEL (mg/m3)	OSHA STEL (ppm)	NIOSH Carcinogen
BENZENE		50(a)/ 10minutes.	1
BITUMENS			1
CALCIUM CARBONATE			
MINERAL SPIRITS			
Naphtha (Petro- leum), Hydro- treated Heavy			
Petroleum gases, liquefied, sweetened			
TOLUENE	560	500ppm /10 minutes (a)	
XYLENE	655		

⁽C) - Ceiling limit, (L) - Exposure by all routes should be carefully controlled to levels as low as possible, A1 - Confirmed Human Carcinogen, A4 -Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, CNS - Central nervous system, impair - Impairment, irr - Irritation, repro - reproductive, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

 Density
 8.33 lb/gal

 Density VOC
 2.31 lb/gal

 % VOC
 27.7%

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Black Appearance Odor Threshold N.A. Odor Description Petroleum N.A. рΗ Water Solubility N.A. Flammability N.A. Vapor Pressure N.A. Flash Point N.A. Viscosity N.A. Lower Explosion Level N.A. Upper Explosion Level N.A. Vapor Density N.A. Melting Point N.A. Freezing Point N.A. Low Boiling Point N.A. High Boiling Point N.A. Decomposition Pt N.A. Auto Ignition Temp N.A.

Evaporation Rate Slower than ether

SECTION 10) STABILITY AND REACTIVITY

Stability

The product is stable under normal storage conditions.

Conditions to Avoid

Avoid heat, sparks, flame, high temperature and contact with incompatible materials.

Dropping containers may cause bursting.

Incompatible Materials

Avoid strong oxidizers, reducers, acids, and alkalis.

Hazardous Reactions/Polymerization

None known.

Hazardous Decomposition Products

None known.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

Causes skin irritation.

Likely Route of Exposure

Inhalation, ingestion, skin absorption.

Serious Eye Damage/Irritation

Causes serious eye irritation.

Carcinogenicity

May cause cancer.

Germ Cell Mutagenicity

May cause genetic defects.

Reproductive Toxicity

Suspected of damaging fertility or the unborn child.!

Respiratory/Skin Sensitization

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No data available.

Specific Target Organ Toxicity - Single Exposure

No data available.

Specific Target Organ Toxicity - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Acute Toxicity

0064742-48-9 NAPHTHA (PETROLEUM), HYDROTREATED HEAVY

Inhalation of high concentrations can cause CNS depression; Ingestion can cause aspiration into the lungs.

Chronic Exposure

0000108-88-3 TOLUENE

TERATOGENIC EFFECTS: Toluene has been Classified as POSSIBLE for humans.

Potential Health Effects - Miscellaneous

0000108-88-3 TOLUENE

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

0008052-42-4 BITUMENS

Is an IARC carcinogen. Occupational exposures to straight-run bitumens and their emissions during road paving are possibly carcinogenic to humans (Group 2B)

0064742-48-9 NAPHTHA (PETROLEUM), HYDROTREATED HEAVY

Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

0000108-88-3 TOLUENE

LC50 (rat): 8800 ppm (4-hour exposure) (2) LC50 (rat): 6000 ppm (6-hour exposure) (3) LD50 (oral, rat): 2600 to 7500 mg/kg (3,5,11,17) LD50 (oral, neonatal rat): less than 870 mg/kg (3)

LD50 (dermal, rabbit): 12,225 mg/kg (reported as 14.1 ml/kg) (1)

0008052-42-4 BITUMENS

LC50 (Rodent - rat, Inhalation) : >94.4 mg/m3, Toxic effects : Details of toxic effects not reported other than lethal dose value.!

LD50 (Rodent - rat, Oral): >5000 mg/kg, Toxic effects: Gastrointestinal - hypermotility, diarrhea.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

No data available.

Persistence and Degradability

No data available.

Bio-Accumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

	IATA Information	IMDG Information	U.S. DOT Information
UN number:	UN1950	UN1950	UN1950
Proper shipping name:	Aerosols, flammable	Aerosols	Aerosols
Hazard class:	2.1	2.1	2.1
Packaging group:	NA	NA	NA
Hazardous substance (RQ):			No Data Available
Marine Pollutant:		No Data Available	No Data Available
Note / Special Provision:	(LTD QTY)	(LTD QTY)	(LTD QTY)
Toxic-Inhalation Hazard:			No Data Available

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000471-34-1	CALCIUM CARBONATE	27% - 44%	SARA312, TSCA, OSHA
0068476-86-8	Petroleum gases, liquefied, sweetened	15% - 25%	SARA312, TSCA, OSHA
0008052-42-4	BITUMENS	7% - 14%	SARA312, TSCA, ACGIH
0064742-48-9	NAPHTHA (PETROLEUM), HYDROTREATED HEAVY	6% - 13%	SARA312, VOC,TSCA, ACGIH, OSHA
0000108-88-3	TOLUENE	5% - 11%	SARA313, CERCLA, HAPS, SARA312, VOC, TSCA, RCRA, ACGIH, California Proposition 65 Toxicity Developmental, OSHA
0064475-85-0	MINERAL SPIRITS	3% - 6%	SARA312, VOC, ACGIH
0000108-65-6	PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	0.1% - 2%	SARA312, VOC, TSCA
0000071-43-2	BENZENE	Trace	SARA313, CERCLA, HAPS, SARA312, VOC, TSCA, RCRA, ACGIH, California Proposition 65 Cancer - Toxicity Developmental - Toxicity Male, OSHA
0001330-20-7	XYLENE	Trace	SARA313, CERCLA, HAPS, SARA312, VOC, TSCA, RCRA, ACGIH, OSHA

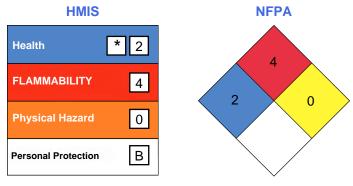
SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire

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Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.



(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks

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