SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	**Quick Seal Repair Patch (4299-25, 4299-26, 4299-27)**
Other means of identification	Not available
Recommended use	Repairs and seals
Recommended restrictions	None known.
Manufacturer information	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)
Supplier	See above.

2. Hazards Identification

Physical hazards	Not classified.	
Health hazards	Carcinogenicity	Category 2
	Reproductive toxicity (the unborn child)	Category 2
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	

Label elements

Signal word	Warning
Hazard statement	Suspected of causing cancer. Suspected of damaging the unborn child.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection and face protection.
Response	IF exposed or concerned: Get medical attention.
Storage	Store locked up.
Disposal	Dispose of container in accordance with local, regional, national and international regulations.
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Carbonic acid calcium salt (1:1)		471-34-1	45-70*
Fibrous glass		65997-17-3	10-30*
Styrene		100-42-5	0.1-1*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.
*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

4. First Aid Measures

Inhalation	Not a normal route of harmful exposure. If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Ingestion	Not a normal route of harmful exposure. Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention.
Most important symptoms/effects, acute and delayed	Direct contact with skin may cause irritation. Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media	Water fog. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Avoid contact with eyes and skin.
Methods and materials for containment and cleaning up	Pick up and discard.
Environmental precautions	Avoid discharge into drains.

7. Handling and Storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pregnant or breastfeeding women must not handle this product. Keep away from heat, sparks and open flame. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Store below 22°C.

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Carbonic acid calcium salt (1:1) (CAS 471-34-1)	TWA	10 mg/m3	
Fibrous glass (CAS 65997-17-3)	TWA	0.2 fibers/cm3	Fiber.
		5 mg/m3	Total particulate.
		5 mg/m3	Fiber, total

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Styrene (CAS 100-42-5)	STEL	170 mg/m3	
		40 ppm	
	TWA	85 mg/m3	
		20 ppm	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Carbonic acid calcium salt (1:1) (CAS 471-34-1)	STEL	20 mg/m3	Total dust.
	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
Fibrous glass (CAS 65997-17-3)	TWA	0.2 fibers/cm3	Fiber.
		5 mg/m3	Inhalable fibers.
Styrene (CAS 100-42-5)	STEL	75 ppm	
	TWA	50 ppm	

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Fibrous glass (CAS 65997-17-3)	TWA	5 mg/m3	Inhalable fraction.
Styrene (CAS 100-42-5)	STEL	40 ppm	
	TWA	20 ppm	

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Fibrous glass (CAS 65997-17-3)	TWA	0.5 fibers/ml	Respirable fibers.
		5 mg/m3	Inhalable fraction.
Styrene (CAS 100-42-5)	STEL	100 ppm	
	TWA	35 ppm	

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Carbonic acid calcium salt (1:1) (CAS 471-34-1)	TWA	10 mg/m3	Total dust.
Fibrous glass (CAS 65997-17-3)	TWA	1 fibers/cm3n	Fiber.
		10 mg/m3	Total dust.
Styrene (CAS 100-42-5)	STEL	426 mg/m3	
		100 ppm	
	TWA	213 mg/m3	
		50 ppm	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Carbonic acid calcium salt (1:1) (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Styrene (CAS 100-42-5)	Ceiling	200 ppm
	TWA	100 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Styrene (CAS 100-42-5)	STEL	40 ppm
	TWA	20 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Carbonic acid calcium salt (1:1) (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Fibrous glass (CAS 65997-17-3)	TWA	3 fibers/cm3	Fibrous dust.
		3 fibers/cm3	Fiber.
		5 mg/m3	Fiber, total
		5 mg/m3	fibers, total dust
Styrene (CAS 100-42-5)	STEL	425 mg/m3 100 ppm	
	TWA	215 mg/m3 50 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Styrene (CAS 100-42-5)	40 µg/l	Styrene	Urine	*
	400 mg/g	Mandelic acid plus phenylglyoxylic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

Canada - Quebec OELs: Skin designation

Styrene (CAS 100-42-5) Can be absorbed through the skin.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields.

Skin protection

Hand protection Impervious gloves. Confirm with reputable supplier first.

Other As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards Not applicable.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance A soft, tacky material

Physical state Solid.

Form Powder.

Color Grey

Odor Sweet

Odor threshold Low

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	840.0 °F (448.9 °C)
Evaporation rate	0
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	> 0.9 (Styrene)
Flammability limit - upper (%)	< 6.6 (Styrene)
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	4.5 (styrene)
Vapor density	3.6 (styrene)
Relative density	Not available.
Solubility(ies)	Insoluble
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Do not mix with other chemicals. High temperatures.
Incompatible materials	Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure	
Ingestion	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
Inhalation	Not a normal route of exposure. Prolonged inhalation may be harmful.
Skin contact	Direct contact with skin may cause irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with skin may cause irritation. Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components	**Species**	**Test Results**
Carbonic acid calcium salt (1:1) (CAS 471-34-1)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours, ECHA
Inhalation		
LC50	Rat	> 3 mg/L, 4 Hours, ECHA

Components	Species	Test Results
Oral		
LD50	Mouse	6450 mg/kg, HSDB
	Rat	> 2000 mg/kg, ECHA

Fibrous glass (CAS 65997-17-3)

Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	> 5000 mg/kg, ECHA
		> 2000 mg/kg, ECHA

Styrene (CAS 100-42-5)

Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Guinea pig	> 5.1 mg/L, 7 Hours, ECHA
	Mouse	> 2.1 mg/L, 6 Hours, ECHA
		4940 ppm, 2 Hours, HSDB
	Rat	2770 ppm, 4 Hours, HSDB
		24 mg/L, 4 Hours, HSDB
		11.8 mg/l/4h, ECHA
Oral		
LD50	Hamster, Syrian	> 6000 mg/kg, ECHA

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Exposure minutes Not available.

Erythema value Not available.

Oedema value Not available.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Corneal opacity value Not available.

Iris lesion value Not available.

Conjunctival reddening value Not available.

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

Carbonic acid calcium salt (1:1) (CAS 471-34-1)	Irritant
Fibrous glass (CAS 65997-17-3)	Irritant

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.
See below.

ACGIH Carcinogens

Fibrous glass (CAS 65997-17-3)	A2 Suspected human carcinogen.

Canada - Alberta OELs: Carcinogen category

Fibrous glass (CAS 65997-17-3)	Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

REFRACTORY CERAMIC FIBERS (CAS 65997-17-3)	Suspected human carcinogen.

Canada - Quebec OELs: Carcinogen category

Fibrous glass (CAS 65997-17-3)	Detected carcinogenic effect in animals.
Styrene (CAS 100-42-5)	Detected carcinogenic effect in animals.

IARC Monographs. Overall Evaluation of Carcinogenicity

Styrene (CAS 100-42-5)	Volume 60, Volume 82 - 2B Possibly carcinogenic to humans.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Styrene (CAS 100-42-5)

US NTP Report on Carcinogens: Anticipated carcinogen

Styrene (CAS 100-42-5)	Reasonably Anticipated to be a Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	Suspected of damaging the unborn child.
Teratogenicity	Not available.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
Carbonic acid calcium salt (1:1) (CAS 471-34-1)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 56000 mg/L, 96 hours
Styrene (CAS 100-42-5)			
Algae	IC50	Algae	1.4 mg/L, 72 Hours
Crustacea	EC50	Daphnia	5.35 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3.3 - 7.4 mg/L, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	5.1 - 16 mg/L, 96 hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	
Mobility in soil	No data available.
Mobility in general	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification	Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada CEPA Schedule I: Listed substance

Fibrous glass (CAS 65997-17-3) Listed.

Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Styrene (CAS 100-42-5) 1 TONNES

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All chemicals used are on the TSCA inventory.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Styrene (CAS 100-42-5) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Styrene	100-42-5	0.1-1*

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Styrene (CAS 100-42-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Fibrous glass (CAS 65997-17-3) Listed.
Styrene (CAS 100-42-5) Listed.

US - Illinois Chemical Safety Act: Listed substance

Styrene (CAS 100-42-5)

US - Louisiana Spill Reporting: Listed substance

Styrene (CAS 100-42-5) Listed.

US - Michigan Critical Materials Register: Parameter number

Styrene (CAS 100-42-5)

US - Minnesota Haz Subs: Listed substance

Carbonic acid calcium salt (1:1) (CAS 471-34-1) Listed.
Fibrous glass (CAS 65997-17-3) Listed.
Styrene (CAS 100-42-5) Listed.

US - New Jersey RTK - Substances: Listed substance

Carbonic acid calcium salt (1:1) (CAS 471-34-1)
Fibrous glass (CAS 65997-17-3)
Styrene (CAS 100-42-5)

US - North Carolina Toxic Air Pollutants: Listed substance

Styrene (CAS 100-42-5)

US - Texas Effects Screening Levels: Listed substance

Carbonic acid calcium salt (1:1) (CAS 471-34-1)	Listed.
Fibrous glass (CAS 65997-17-3)	Listed.
Styrene (CAS 100-42-5)	Listed.

US - Washington Chemical of High Concern to Children: Listed substance

Styrene (CAS 100-42-5)

US. Massachusetts RTK - Substance List

Carbonic acid calcium salt (1:1) (CAS 471-34-1)
Fibrous glass (CAS 65997-17-3)
Styrene (CAS 100-42-5)

US. New Jersey Worker and Community Right-to-Know Act

Styrene (CAS 100-42-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Carbonic acid calcium salt (1:1) (CAS 471-34-1)
Fibrous glass (CAS 65997-17-3)
Styrene (CAS 100-42-5)

US. Rhode Island RTK

Carbonic acid calcium salt (1:1) (CAS 471-34-1)
Fibrous glass (CAS 65997-17-3)
Styrene (CAS 100-42-5)

US. California Proposition 65

WARNING: This product can expose you to Styrene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Styrene (CAS 100-42-5)	Listed: April 22, 2016

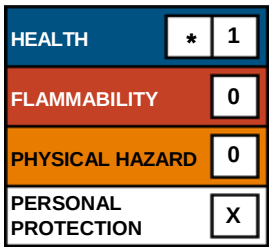
Inventory status

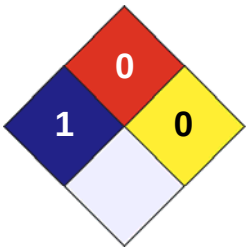
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by Nu-Calgon Technical Service Phone: (314) 469-7000

Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.