# **GENFLEX**

# SAFETY DATA SHEET

#### 1. Identification

W59RAC1696 - GenFlex LVOC Canister Flush Solution **Product identifier** 

W59RAC1696 Other means of identification

Construction. Adhesive. Recommended use

None known. Recommended restrictions

Manufacturer/Importer/Supplier/Distributor information

Firestone Building Products Company, LLC Company name

> 200 4th Avenue South Nashville, TN 37201 USA

genflexmsds@bfdp.com **Email** 

**Telephone Number** 1-800-443-4272 SDS request **Contact Person** 

**Emergency Telephone** 

Number

CHEMTREC: 1-800-424-9300

# 2. Hazard(s) identification

Flammable aerosols **Physical hazards** Category 1

> Gases under pressure Compressed gas

Serious eye damage/eye irritation **Health hazards** Category 2

> Sensitization, skin Category 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

**Environmental hazards** Hazardous to the aquatic environment, acute

hazard

Hazardous to the aquatic environment,

long-term hazard

Not classified.

Category 2

Category 2

# **OSHA** defined hazards

Label elements



Signal word

**Hazard statement** Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May cause an

allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to

aquatic life with long lasting effects.

**Precautionary statement** 

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open

flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid

breathing mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a

well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid

release to the environment. Wear protective gloves and eye/face protection.

If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable Response

for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical

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advice/attention. Wash contaminated clothing before reuse. Collect spillage.

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from Storage

sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Dispose of contents/container in accordance with local/regional/national/international regulations. Disposal

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Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

Repeated exposure may cause skin dryness or cracking.

# 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	CAS number	%
Acetone	67-64-1	50 - 70
4-Chlorobenzotrifluoride	98-56-6	25 - 50
Carbon dioxide	124-38-9	2.5 - 10
d-Limonene	5989-27-5	< 2

**Composition comments** 

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

#### 4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

Eve contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Not likely, due to the form of the product. In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information** 

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

#### 5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media

Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). Dry sand.

Water. Do not use water as an extinguisher.

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire fighting equipment/instructions In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.

General fire hazards

Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors/spray. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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# Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

#### **Environmental precautions**

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

# 7. Handling and storage

#### Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Protect containers from physical damage; do not drag, roll, slide, or drop. Do not re-use empty containers. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

# Conditions for safe storage, including any incompatibilities

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

# 8. Exposure controls/personal protection

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

#### Occupational exposure limits

Components	Type	Value	
Acetone (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
Carbon dioxide (CAS 124-38-9)	PEL	5000 ppm	
US. ACGIH Threshold Limit Valu	ies		
Components	Туре	Value	
Acetone (CAS 67-64-1)	STEL	500 ppm	
	TWA	250 ppm	
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm	
	TWA	5000 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Components	Туре	Value	
Acetone (CAS 67-64-1)	TWA	590 mg/m3	
		250 ppm	
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3	
		30000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	
US. Workplace Environmental E	xposure Level (WEEL) Guides		
Components	Туре	Value	
	TWA	165.5 mg/m3	
d-Limonene (CAS 5989-27-5)	TWA	ree.e mg/me	

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#### **Biological limit values**

#### **ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	25 mg/l	Acetone	Urine	*

<sup>\* -</sup> For sampling details, please see the source document.

Appropriate engineering

controls

Good general ventilation 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. Provide eyewash station.

#### Individual protection measures, such as personal protective equipment

Tightly fitting safety goggles. Face shield is recommended. Eye/face protection

Skin protection

Wear appropriate chemical resistant gloves. Examples of preferred glove barrier materials include: **Hand protection** 

Butyl rubber. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other Wear appropriate chemical resistant clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Chemical respirator with organic vapor

cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. 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. Contaminated work clothing should not be allowed out of the workplace.

# 9. Physical and chemical properties

**Appearance** 

Physical state Liquid.

Aerosol. Compressed gas. **Form** 

Colorless. Color Solvent-like. Odor Not available. **Odor threshold** Not available. Melting point/freezing point Not available.

Initial boiling point and boiling

range

132.4 - 133.9 °F (55.8 - 56.6 °C)

Flash point < -0.4 °F (< -18.0 °C)

**Evaporation rate** Not available. Flammability (solid, gas) Flammable. Upper/lower flammability or explosive limits

Flammability limit - lower

2.6 % v/v

(%)

Flammability limit - upper

13 % v/v

(%)

174.8 mm Hg (68 °F (20 °C)) Vapor pressure

233 hPa (68 °F (20 °C))

Not available. Vapor density Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble. Partition coefficient Not available.

(n-octanol/water)

869 °F (465 °C) **Auto-ignition temperature** 

**Decomposition temperature** Not available. **Viscosity** Not available.

Other information % Organic solvents: 58.6

% Solids: 0

**Density** 0.95 g/cm³ (68 °F (20 °C))

7.89 lb/gal (68 °F (20 °C))

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

VOC < 25 g/l

# 10. Stability and reactivity

**Reactivity**The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

**Conditions to avoid** 

reactions

No dangerous reaction known under conditions of normal use.

Incompatible materials Acids. Aluminum.

Hazardous decomposition

products

No hazardous decomposition products are known.

## 11. Toxicological information

#### Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be

harmful.

**Skin contact** May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.

**Eye contact** Causes serious eye irritation.

**Ingestion** Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an

Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

allergic skin reaction. Dermatitis. Rash.

#### Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components Species Test Results

#### 4-Chlorobenzotrifluoride (CAS 98-56-6)

Acute Dermal

. - - -

LD50 Rabbit > 3300 mg/kg bw/day

Inhalation

LC50 Rat > 32.03 mg/l, 4 hours

Oral

LD50 Rat 5546 mg/kg bw/day (Male)

Acetone (CAS 67-64-1)

**Acute** 

Dermal

LD50 Rabbit > 15700 mg/kg, 24 Hours

Inhalation

Vapor

LC50 Rat 76 mg/l, 4 Hours

Oral

LD50 Rat 5800 mg/kg

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Components Species Test Results

d-Limonene (CAS 5989-27-5)

Acute Dermal

LD50 Rabbit > 5000 mg/kg

Oral

LD50 Rat 4400 mg/kg/day

Other

NOAEL Rat 300 mg/kg/day

**Skin corrosion/irritation** Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity**No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

d-Limonene (CAS 5989-27-5)

3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

**Reproductive toxicity**This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Based on available data, the classification criteria are not met.

**Chronic effects** Prolonged inhalation may be harmful.

12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components Species Test Results

4-Chlorobenzotrifluoride (CAS 98-56-6)

Aquatic

Acute

Fish LC50 Fish 3 mg/l, 96 hours

Acetone (CAS 67-64-1)

Aquatic

Acute

Crustacea LC50 Daphnia pulex 8800 mg/l, 48 Hours
Fish LC50 Pimephales promelas 7163 mg/l, 96 Hours

Chronic

Crustacea NOEC Daphnia magna > 79 mg/l, 21 days

d-Limonene (CAS 5989-27-5)

Aquatic

Acute

Crustacea EC50 Daphnia magna 0.421 mg/l, 48 Hours Fish LC50 Fathead minnow (Pimephales promelas) 0.702 mg/l, 96 Hours Components **Species Test Results** 

Chronic

NOEC Green algae (Chlamydomonas variabilis) 4.08 mg/l, 96 Hours Algae Crustacea NOFC 0.15 mg/l, 21 days Daphnia magna

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available for this product.

Partition coefficient n-octanol / water (log Kow)

Acetone (CAS 67-64-1) -0.24d-Limonene (CAS 5989-27-5) 4.232

**Bioconcentration factor (BCF)** 

4-Chlorobenzotrifluoride (CAS 98-56-6) 121 - 202

No data available. Mobility in soil

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. Contents

under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Dispose in accordance with all applicable regulations. Local disposal regulations

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

## 14. Transport information

DOT

UN3501 **UN** number

UN proper shipping name Transport hazard class(es)

Chemical under pressure, flammable, n.o.s. (Acetone RQ = 9009 LBS, 4-Chlorobenzotrifluoride)

Class 2.1 Subsidiary risk 2.1 Label(s)

Not available. Packing group

**Environmental hazards** 

Marine pollutant Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

362, T50, TP40 **Special provisions** 

IATA

**UN number** UN3501

UN proper shipping name

Chemical under pressure, flammable, n.o.s. (Acetone, 4-Chlorobenzotrifluoride)

Transport hazard class(es) Class

2.1 Subsidiary risk

Packing group Not available.

**Environmental hazards** Yes. **ERG Code** 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

**IMDG** 

**UN** number UN3501

**UN proper shipping name** Transport hazard class(es) CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. (Acetone, 4-Chlorobenzotrifluoride)

Class 2.1 Subsidiary risk

Packing group Not available.

**Environmental hazards** 

Marine pollutant Yes. EmS F-D, S-U

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to

Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

**US federal regulations**This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

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

Not established.

4-Chlorobenzotrifluoride (CAS 98-56-6) 1.0 % One-Time Export Notification only.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Acetone (CAS 67-64-1) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Toxic Substances Control Act (TSCA)

All components of the mixture on the TSCA 8(b) inventory are designated

"active".

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard Flammable (gases, aerosols, liquids, or solids)

categories Gas under pressure

Serious eye damage or eye irritation Respiratory or skin sensitization

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and

**Chemical Code Number** 

Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1) 35 %WV

**DEA Exempt Chemical Mixtures Code Number** 

Acetone (CAS 67-64-1) 6532

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Acetone (CAS 67-64-1) Low priority

**US** state regulations

**US. Massachusetts RTK - Substance List** 

Acetone (CAS 67-64-1)

Carbon dioxide (CAS 124-38-9)

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

4-Chlorobenzotrifluoride (CAS 98-56-6)

Acetone (CAS 67-64-1)

Carbon dioxide (CAS 124-38-9) d-Limonene (CAS 5989-27-5)

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

Acetone (CAS 67-64-1)

Carbon dioxide (CAS 124-38-9)

#### **US. Rhode Island RTK**

Acetone (CAS 67-64-1)

Carbon dioxide (CAS 124-38-9)

#### **California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

Australian Inventory of Chemical Substances (AICS)

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Acetone (CAS 67-64-1)

#### **International Inventories**

Australia

Country(s) or region

Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

<sup>\*</sup>A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Inventory name

Issue date 02-September-2019 **Revision date** 05-September-2019

Version # 02

**HMIS®** ratings Health: 2

> Flammability: 4 Physical hazard: 3

Firestone Building Products cannot anticipate all conditions under which this information and its Disclaimer

product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use The information in the sheet was written based on the best knowledge and experience currently

available.

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On inventory (yes/no)\*

Yes

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).