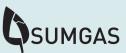
SUMGAS PFS 2 PVC Fusion Spray



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1. Product Identifier

Product Name: SUMGAS PVC FUSION SPRAY 2™

1.2. Intended Use of the Product

Use of the Substance/Mixture: Spray on PVC

Bonding Agent

1.3. Name, Address, and Telephone of the Responsible

Party Company

Ecosum LLC. 500 Brickell Ave Miami, Fl. 33131 1.4. Emergency Telephone Number EmergencyNumber: 1-800-424-9300

CHEMTREC - TOLL FREE 24 HOUR EMERGENCY

TELEPHONE NUMBER

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Flammable Gases, 1 Physical, Flammable Liquids, 2

Physical, Gases Under Pressure, Liquefied Gas

Health, Acute toxicity, 3 Oral

Health, Acute toxicity, 3 Dermal

Health, Acute toxicity, 3 Inhalation

Health, Specific target organ toxicity - Single exposure, 1

2.2. GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER GHS Hazard Pictograms:









GHS Hazard Statements: Precautionary Statements (GHS-US)

H220 - Extremely flammable gas

H225 - Highly flammable liquid and vapor

H280 - Contains gas under pressure; may explode if heated

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H331 - Toxic if inhaled

H370 - Causes damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

GHS Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces.

P260 - Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P280 - Wear protective gloves/ protective clothing. P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P307 + P311 - IF exposed: Call a POISON CENTER or doctor/ physician.

P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381 - Eliminate all ignition sources if safe to do so. P410 + P403 - Protect from sunlight. Store in a well-ventilated place.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Chemical Ingredients

Name	Product identifier
Petroleum gases, liquefied	(CAS No) 74-98-6
2-Butanone	(CAS No) 78-93-3

SECTION 4: FIRST AID MEASURES

Inhalation: If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

Skin Contact: Irritation may result. Immediately wash with soap and water.

Eye Contact: Immediately flush with water, remove any contact lenses, continue flushing with water for at least 15 minutes,

then get medical attention.

Ingestion: This product is a gas, refer to the inhalation section.

SECTION 5: FIREFIGHTING MEASURES

Flammability: 759°F Flash Point: 25°F

Flash Point Method: Setaflash closed cup

Lower Explosive Limit: 2.6%

Upper Explosive Limit: 9% Dry powder, foam, carbon dioxide.

Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Cleanup

Use special care to avoid static electric charges. Keep away from open flames, hot surfaces and sources of ignition. No smoking. Do not get in eyes, on skin, or on clothing. Do not breathe gas. Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas and ventilate closed spaces before entering. Shut off ignition sources: keep flares, smoking or flames out of hazard area.

6.2 Small Spills:

Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

6.3 Large Spills:

Dike far ahead of spill for later disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Handling Precautions

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container. Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2 Storage Requirements

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures. Store away from strong oxidizing agents, chlorine dioxide and/or static discharge.

Sumgas MSDS

SUMGAS PFS 2 PVC Fusion Spray

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Engineering Controls:

Alarm detectors should be used when toxic and/or flammable gases may be released. Use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below recommended exposure limits. Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas. Whenever possible, use outdoors in an open-air area. If using indoors open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering - STOP - ventilation is inadequate. Leave area immediately and move to fresh air.

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

8.2. Personal Protective Equipment:

HMIS PP, G | Safety Glasses, Gloves, Vapor Respirator HMIS PP. C | Safety Glasses, Gloves, Apron Petroleum gases, liquefied cas#: (74-98-6) []

Personal protective equipment:

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected

prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact: Material: Fluorinated rubber Minimum laver thick-

ness: 0.7 mm Break through time: 480 min Material tested: Vitoiect (KCL 890 / Aldrich Z677698, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 60 min Material tested: Camatril (KCL 730 / Aldrich Z677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl. de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi- purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

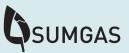
Butanone cas#:(78-93-3) [25-50%] Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. **Eye protection:** Face shield and safety glasses Use

equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.



Petroleum gases, liquefied (74-98-6) [] - Components with workplace control parameters			
Central Nervous System impairment Cardiac sensitization	TWA	1000 ppm	USA. ACGIH Threshold Limit Values (TLV)
The value in mg/m3 is approximate.	TWA	1,800 mg/m3	USA. Occupational Exposure Limits. (OSHA) - Table Z-1 Limits for Air
	TWA	1000 ppm	Contaminants USA. OSHA
		1,800 mg/m3	- TABLE Z-1 Limits for Air Contaminants - 1910.1000
	TWA	1000 ppm	USA. NIOSH Recommended
		1,800 mg/m3	Exposure Limits

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Gas

Odor: Characteristic ketone odor. Specific Gravity or Density: 0.53 **Boiling Point:** -37.8°C (-36.1°F)

Vapor Pressure: 586.05 kPa (85 psi) at 21.1°C (70°F) Freezing or Melting Point: -176.67°C (-286°F) **Autoignition Temperature:** 674.44°C (1246°F)

Upper Flammability Limit and Lower Flammability Limit: 2.5% and 9%

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity: Contains gas under pressure; may explode if headed. Vapor may ignite if exposed to static discharge.
- 10.2 Chemical Stability: Stable under recommended handling and storage conditions.
- 10.3 Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame, heat, sparks, or static discharge.
- 10.4 Materials to Avold: Incompatible with strong oxidizing agents, strong caustics, and hydrogen peroxide.
- 10.5 Hazardous Decomposition: Decomposition may produce carbon monoxide and oxides of carbon. arbon oxides (CO, CO2).
- 10.6 Hazardous Polymerization: Carbon oxides.

Sumgas MSDS

SUMGAS PFS 2 PVC Fusion Spray

SUMGAS

SECTION 11: TOXICOLOGICAL INFORMATION

Petroleum gases, liquefied cas#: (74-98-6) []

11.1 Information on toxicological effects

Acute toxicity: no data available Inhalation: no data available Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available **Respiratory or skin sensitization:** no data available

Germ cell mutagenicity: no data available

11.2 Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available Specific target organ toxicity - repeated exposure: no

data available

Aspiration hazard: no data available

Additional Information: RTECS: TX2275000. Dizziness,

Drowsiness, Unconsciousness

Butanone cas#: (78-93-3) [25-50%]

11.3 Acute toxicity:

Oral LD50: no data available

Inhalation: LC50
Dermal: LD50

11.4 Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: Eyes: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmo-

nized System): no data available

Specific target organ toxicity - repeated exposure (Globally Har-

monized System): no data available

Aspiration hazard: no data available

Potential health effects: Inhalation: Toxic if inhaled. May cause respiratory tract irritation. Ingestion: Toxic if swallowed. Skin: Toxic if absorbed through skin. May cause skin irritation. Eyes: May cause eye irritation.

Signs and Symptoms of Exposure:

Methyl alcohol may be fatal or cause blindness if swallowed.

Cannot be made non-poisonous.

Effects due to ingestion may include: Nausea, dizziness, gastrointestinal disturbance, weakness, confusion, drowsiness, unconsciousness, to the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available
Additional Information: RTECS: Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Propane see also Petroleum gases, liquefied cas#: (74-98-6) []

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not

required/not conducted

Other adverse effects: no data available

12.2 Butanone cas#:(78-93-3) [25-50%]

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available
Other adverse effects: no data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Petroleum gases, liquefied cas#:(74-98-6) []

Waste treatment methods

Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

13.2 Butanone cas#:(78-93-3) [25-50%]

Waste treatment methods

Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

14.TRANSPORT INFORMATION

UN#1950, Class 2.1

15.REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Petroleum gases, liquefied (74-98-6) [n/a%] MASS, NJHS, OSHAWAC, PA, TSCA, TXAIR

RQ(5000LBS), 2-Butanone (78-93-3) [n/a%] CERCLA, HAP, HWRCRA, MASS, NJHS, OSHAWAC, PA, SARA313, TOXICRCRA, TSCA, TXAIR, TXHWL

Regulatory CODE Descriptions

RQ = Reportable Quantity

MASS = MA Massachusetts Hazardous Substances List NJHS = NJ Right-to-Know Hazardous Substances OSHAWAC = OSHA Workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances TSCA = Toxic Substances Control Act

TXAIR = TX Air Contaminants with Health Effects Screening Level CERCLA = Superfund clean-up substance HAP = Hazardous Air Pollutants HWRCRA = RCRA Hazardous Wastes

SARA313 = SARA 313 Title III Toxic Chemicals TOXICRCRA = RCRA Toxic Hazardous Wastes (U-List) TXHWL = TX Hazardous Waste List

16.0THER INFORMATION

HMIS III: Health = 1, Fire = 3, Physical Hazard = **HMIS PPE:** C - Safety Glasses, Gloves, Apron





Disclaimer: Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

