# Safety Data Sheet OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 3.

Revision date: 09.19.25

Page: 1/11

## Trade Name: FS-FLEXIBLE HOLD REAL SHAPING SPRAY

## **SECTION 1: Identification**

Product identifier used on the label:

Product Name: FS-Flexible Hold Real Shaping Spray

Other means of identification:

**Product Code Number:** 80-FSFHRSS

Recommended use of the chemical and restrictions on use:

**Recommended use:** Flexible Hold Real Shaping Spray **Recommended restrictions:** Uses other than as recommended above

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Company Name: Farouk Systems, Inc. 880 E. Richey Road

Houston TX, 77090 USA

Company Telephone: 281-876-2000

Company Contact Email: Compliance@farouk.com

**Emergency phone number:** 1-832-633-7903

## **SECTION 2: Hazard(s) identification**

## Classification of the chemical in accordance with paragraph (d) of §1910.1200:

## Physical hazards

Flammable aerosol, category 2

Gases under pressure, compressed gas.

#### Health hazards

Eye irritation, category 2B

Specific target organ toxicity, single exposure, category 3

#### Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: WARNING

**GHS Hazard statement(s):** Flammable aerosol

Contains gas under pressure; may explode if heated

Causes eye irritation

May cause drowsiness or dizziness

Revision Date: September 19, 2025 Page 1 of 11

## **GHS** Hazard symbol(s):



## **GHS Precautionary statement(s):**

#### **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 dust/fume/gas/mist/ vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Wash thoroughly after handling.

#### **Response:**

- If inhaled: Remove person to fresh air and keep comfortable 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 eye irritation persists: Get medical advice/attention

## Storage:

- Store in a well-ventilated place. Keep container tightly closed.
- Protect from sunlight. Do not expose to temperatures exceeding 50°C/122 °F.

#### **Disposal:**

• Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

## Hazard(s) not otherwise classified (HNOC):

None known.

#### Percentage of ingredient(s) of unknown acute toxicity:

69% of the mixture consists of ingredients of unknown acute toxicity (dermal). 4% of the mixture consists of ingredients of unknown acute toxicity (oral/inhalation).

## **SECTION 3:** Composition/information on ingredients

#### Mixture:

Revision Date: September 19, 2025

Chemical name	CAS#	Concentration (weight %)
1,1-difluoroethane	75-37-6	45 - 55%
Ethanol	64-17-5	45 - 55%

Note: The balance of the ingredients is not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

#### **SECTION 4: First-aid measures**

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

**Inhalation:** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Seek medical advice.

**Skin contact:** Flush skin with plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur.

**Eye contact:** If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Ingestion:** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

#### Most important symptoms/effects, acute and delayed:

Causes eye irritation. May cause drowsiness or dizziness.

#### **Indication of immediate medical attention and special treatment needed:**

If any symptoms are observed, contact a physician, and give them this SDS sheet. Provide general supportive measures and treat symptomatically.

Revision Date: September 19, 2025 Page 3 of 11

## **SECTION 5:** Fire-fighting measures

## Suitable (and unsuitable) extinguishing media:

**Suitable extinguishing media:** Use water spray, alcohol resistant foam, dry chemical, or 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 (e.g., nature of any hazardous combustion products):

Flammable aerosol! In a fire or if heated, a pressure increase can occur, and container may burst with the risk of additional explosion. Gases may accumulate in low or confined areas and may travel a long distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer can cause fire or explosion hazard.

Hazardous combustion products may include the following substances: Carbon monoxide, Carbon dioxide (CO2).

## Special protective equipment and precautions for fire-fighters:

Water spray maybe ineffective on fire but can protect fire-fighters and cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full protective equipment. For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

#### **SECTION 6: Accidental release measures**

## Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Aerosols may rupture and care should be taken due to the rapid release of the pressurized contents and propellant. Vapors may ignite explosively and spread long distances. Prevent vapor build-up. Remove all ignition sources, Stay upwind and away from spill/release. Avoid direct contact with liquid and vapors. For large spillages, notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

## **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. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard.

#### Methods and material for containment and cleaning up:

Revision Date: September 19, 2025 Page 4 of 11

Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g., skimming, booms, or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

## **SECTION 7: Handling and storage**

#### **Precautions for safe handling:**

Pressurized container: protect from sunlight and so not expose to temperatures exceeding 50 °C / 120 °F. Do not pierce or burn, even after use. Do not breathe vapors or mists. Do not ingest. Store away from heat, sparks, open flames, or other ignition sources. Use explosion-proof equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

## Conditions for safe storage, including any incompatibles:

Keep in fireproof surroundings. Keep container(s) tightly closed, upright and properly labeled. Store only in approved containers. Keep away from incompatible materials (see Section 10) and food / feedstuffs. Do not eat, drink, or smoke when using this product. Protect container(s) against physical damage. Keep cool.

#### **SECTION 8: Exposure controls/personal protection**

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200) (Table Z-1 Limits for Air Contaminants):		
Substance	PEL-TWA (8 hour)	PEL-STEL (15 min)
1,1-difluoroethane	No data available	No data available
Ethanol	1000 ppm 1900 mg/m3	No data available

US ACGIH Threshold Limit Values		
Substance	TLV-TWA (8 hour)	TLV-STEL (15 min)
1,1-difluoroethane	No data available	1000 ppm

Revision Date: September 19, 2025 Page 5 of 11

US ACGIH Threshold Limit Values		
Substance	TLV-TWA (8 hour)	TLV-STEL (15 min)
Ethanol	No data available	1000 ppm 1884 mg/m3

#### **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. Provide eyewash station. Eye wash fountain and emergency showers are recommended. Concentrations should be monitored hazardous substances in the workplace in accordance with recognized test methods. Mode, method, type and frequency of testing and measurement of harmful factors in the working environment should meet the requirements of local/regional/national laws.

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

**Eye/face protection:** Manufacturing site - if contact is likely, safety glasses with side shields are recommended.

**Skin and hand protection:** No special protective equipment required in normal use. Where risk assessment shows potential for exposure, use protective gloves. The selection of suitable gloves does not only depend on the material, but also on further criteria of quality which may vary from one manufacturer to another. Since the product represents a preparation composed of several substances, the resistance of the glove materials cannot be calculated in advance and must therefore be checked before use.

**Respiratory protection:** No special protective equipment required in normal use. Where risk assessment shows potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Use respirators and components evaluated and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**General hygiene considerations:** Avoid contact with skin, eyes, and clothing. When using, do not eat, drink, or smoke. Wash hands before breaks and immediately after handling the product.

## **SECTION 9: Physical and chemical properties**

Appearance (physical state, color, etc.):

Physical state:
Color:
Liquid
Light yellow
Odor:
Fragrance

Revision Date: September 19, 2025 Page 6 of 11

Odor threshold:

pH:

Not determined

Melting point/freezing point:

Not determined

Not determined

Not determined

boiling range:

Flash point:

Evaporation rate:

Not determined

Not determined

Flammability (solid, gas):

Flammable aerosol

Upper/lower flammability or explosive limits

Flammability limit – lower %): Not determined Flammability limit – upper (%): Not determined Explosive limit – lower (%): Not determined Explosive limit – upper (%): Not determined Not determined Vapor pressure: Not determined Vapor density: Not determined **Relative density:** Not determined **Solubility (ies):** Partition coefficient (n-octanol/water): Not determined Not determined **Auto-ignition temperature:** Not determined **Decomposition temperature: Viscosity:** Not applicable

## **SECTION 10: Stability and reactivity**

**Reactivity:** No hazardous reactions anticipated under normal storage

and handling conditions.

Chemical stability: Stable under normal ambient and anticipated conditions

of use

Possibility of hazardous reactions: None expected

Conditions to avoid: Keep away from heat, sparks, electric equipment and

open flames.

**Incompatible materials:** Strong oxidizers.

Hazardous decomposition Products: None under normal use conditions. Carbon monoxide,

Carbon dioxide (CO2) may be formed during a fire.

## **SECTION 11: Toxicological information**

**Information on likely routes of exposure:** 

**Inhalation:** May cause drowsiness or dizziness. **Ingestion:** None expected during normal use.

**Skin:** None expected during normal use.

Eyes: Causes eye irritation.

Revision Date: September 19, 2025 Page 7 of 11

Symptoms related to the physical, chemical, and toxicological characteristics:

Causes eye irritation. May cause drowsiness or dizziness.

Delayed and immediate effects and chronic effects from short or long-term exposure:

Other than the symptoms above, no further effects are known.

Numerical measures of toxicity (such as acute toxicity estimates):

#### **Ingredient Information:**

Substance	Test Type (species)	Value
	LD <sub>50</sub> Oral (Rat)	> 1500 mg/kg
1,1-difluoroethane	LD <sub>50</sub> Dermal (Rabbit)	None known
	LC50 Inhalation (Rat)	437500 ppm 4h
	LD <sub>50</sub> Oral (Rat)	7060 mg/kg
Ethanol	LD <sub>50</sub> Dermal (Rabbit)	17100 mg/kg
	LC50 Inhalation (Rat)	124.7 mg/L 4h

**Skin corrosion/irritation:** Not expected to cause skin irritation.

**Serious eye damage/eye irritation:** Causes eye irritation.

**Respiratory or skin sensitization:** Not expected to cause respiratory or skin

sensitization.

Germ cell mutagenicity: Not expected to cause genetic defects.

Carcinogenicity: Not expected to cause carcinogenic defects

**Reproductive toxicity:** Not expected to damage fertility or the unborn child.

**STOT – Single exposure:** May cause drowsiness or dizziness.

STOT – Repeat exposure: Not expected to cause specific target organ toxicity

after prolonged or repeated exposure.

**Aspiration hazard:** Not expected to cause an aspiration hazard.

## **SECTION 12: Ecological information**

**Ecotoxicity (aquatic and terrestrial, where available):** 

**Product data:** Harmful to aquatic life with long lasting effects.

**Ingredient Information:** 

Revision Date: September 19, 2025 Page 8 of 11

Substance	Test Type	Species	Value
	LC <sub>50</sub>	Fish - Freshwater fish	719.611 mg/L 96h
1,1- difluoroethane	EC50	Invertebrates	364.06 mg/L 48h
	EC <sub>50</sub>	Algae	168.276 mg/L 96h
	LC50	Fish - Oncorhynchus mykiss	12.0 - 16.0 mL/L 96 h
Ethanol EC <sub>50</sub> EC <sub>50</sub>	EC <sub>50</sub>	Invertebrates - Daphnia magna	2 mg/L 48 h
	EC <sub>50</sub>	Algae - Chlorella vulgaris	275mg/L 72h

## Persistence and Degradability:

Not determined

#### **Bioaccumulative Potential:**

Not determined

#### **Mobility in Soil:**

Not determined.

## Other adverse effects (such as hazardous to the ozone layer):

Harmful to aquatic life with long lasting effects

## **SECTION 13: Disposal considerations**

# Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

## **Product**

Dispose of waste materials in accordance with applicable local and national laws and regulations.

## Contaminated packaging

Since emptied containers retain product residue, follow label warnings even after container is emptied.

## **SECTION 14: Transport Information**

Limited Quantity will apply for packages less than 30 kg gross and inner packaging less than 1L each.

# **US Department of Transportation Classification (49CFR)**

UN 1950 AEROSOLS, FLAMMABLE, 2.1

## IMDG (Transport by sea)

UN 1950 AEROSOLS, FLAMMABLE, 2.1

Revision Date: September 19, 2025 Page 9 of 11

## IATA (Country variations may apply)

UN 1950 Aerosols, Flammable, 2.1

#### **Environmental hazards**

Marine pollutant: No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not applicable

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

None known

#### **SECTION 15: Regulatory Information**

#### **USA:**

**United States Federal Regulations:** This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as hazardous under OSHA.

**Toxic Substances Control Act (TSCA)** – All of the ingredients are listed on the U.S. EPA TSCA Inventory List.

Emergency Planning and Community Right To-Know Act (EPCRA)
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed

# SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370 (amended 2018)):

Flammable (gases, aerosols, liquids, or solids)

Gas under pressure

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure);

## Section 313 Toxic Chemicals (40 CFR 372.65):

None of the components are listed

#### STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986: Ethanol is listed as carcinogen, 4/29/2011 (in alcoholic beverages) and developmental toxicity, 10/1/1987 (in alcoholic beverages)

**Massachusetts Right to Know:** 1,1-difluoroethane and ethanol are listed on the Massachusetts Right to Know list.

Revision Date: September 19, 2025 Page 10 of 11

**New Jersey Right to Know** 1,1-difluoroethane and ethanol are listed on the New Jersey Right to Know List.

**Pennsylvania Right to Know:** 1,1-difluoroethane and ethanol are listed on the Pennsylvania Right to Know List.

## **SECTION 16: Other Information**

Original Date: July 18, 2023

Revision Date: September 19, 2025

## DISCLAIMER:

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 1910.1200. To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Revision Date: September 19, 2025 Page 11 of 11