

Material Safety Data Sheet



Fantastic Sams Invisible Dry Shampoo

1. Product and company identification

Product name	: Fantastic Sams Invisible Dry Shampoo
Manufacturer	: Zotos International, INC 100 Tokeneke Road, Darien, CT 06820 www.zotos.com
Validation date	: 11/17/2014.
In case of emergency	: (800) 584-8038 [24 Hours]
Telephone number	: (203) 656-7859 [8:30 a.m. - 5:00 p.m.]
Transportation Emergency	: Contact: CHEMTREC 1-800-424-9300 [US/Canada 24 Hours]
Product type	: Aerosol.

2. Hazards identification

Emergency overview

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED. Additional information on toxicological endpoints is available from the supplier upon request

Color	: Colorless to light yellow.
Odor	: Characteristic. Fragrance-like.
Hazard statements	: FLAMMABLE AEROSOL. CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION.
Precautionary measures	: Avoid contact with eyes, skin and clothing. Keep away from heat, sparks, open flames and 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. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Wash thoroughly after handling.

OSHA/HCS status : None.

Potential acute health effects

Inhalation	: May cause respiratory irritation. Avoid breathing vapor.
Ingestion	: NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.
Skin	: NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED. Mild irritant
Eyes	: May cause slight transient irritation.

Potential chronic health effects

Chronic effects	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Over-exposure signs/symptoms : None identified.

Medical conditions aggravated by over-exposure : None.

See toxicological information (Section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
1,1-difluoroethane	75-37-6	70.00
ethanol	64-17-5	29.31

Canada

Name	CAS number	%
1,1-difluoroethane	75-37-6	70.00
ethanol	64-17-5	29.31

Mexico

Name	CAS number	UN number	%	IDLH	Classification			
					H	F	R	Special
ethanol	64-17-5	UN1993	29.31	3300 ppm	2	3	0	-

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.
- Skin contact** : Remove contaminated clothing and shoes. Wash with plenty of soap and water.
- Inhalation** : Move affected person to fresh air.
- Ingestion** : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED. Treat symptomatically. Never give anything by mouth to an unconscious person. Call a physician.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : None.

5. Fire-fighting measures

- Flammability of the product** : Flammable liquid. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits.
- Extinguishing media** : Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog).
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Unusual fire/explosion hazards** : None known.
- Hazardous thermal decomposition products** : may be released including hydrofluoric and/or carbonyl halides
- Special protective equipment for fire-fighters** : Immediately contact emergency personnel. Flammable material In case of insufficient ventilation, wear suitable respiratory equipment.

6. Accidental release measures

- Personal precautions** : Flammable. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Do not get in eyes. Keep out of reach of children.
- Environmental precautions** : Leaking packages should be placed in open containers outdoors away from any source of ignition
- Methods for cleaning up** : Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Place spilled material in an appropriate container for disposal. After contact with skin, wash immediately with plenty of water.

7. Handling and storage

- Handling** : Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Use only in well-ventilated areas. Avoid contact with ignition and heat sources and oxidizers. Do not spray on an open flame or other ignition source. Keep out of reach of children.
- Storage** : Avoid increased storage temperature. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Avoid contact with ignition and heat sources and oxidizers. Store away from oxidizing agents. Store in cool/well-ventilated place.
- Recommendations** : PRESSURIZED CONTAINER Keep cool and protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
1,1-difluoroethane	AIHA WEEL (United States, 10/2011). TWA: 1000 ppm 8 hours.
ethanol	ACGIH TLV (United States, 6/2013). STEL: 1000 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m ³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours.

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	Notations
1,1-difluoroethane	US AIHA 10/2011	1000	-	-	-	-	-	-	-	-	
ethanol	US ACGIH 6/2013	-	-	-	1000	-	-	-	-	-	
	AB 4/2009	1000	1880	-	-	-	-	-	-	-	
	BC 7/2013	-	-	-	1000	-	-	-	-	-	
	ON 1/2013	-	-	-	1000	-	-	-	-	-	
	QC 12/2012	1000	1880	-	-	-	-	-	-	-	

Mexico

Occupational exposure limits

Ingredient	Exposure limits
ethanol	NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 1000 ppm 8 hours. LMPE-PPT: 1900 mg/m ³ 8 hours.

Consult local authorities for acceptable exposure limits.

8. Exposure controls/personal protection

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures** : When using do not eat, drink or smoke.
- Personal protection**
- Respiratory** : Chemical splash goggles. Protective clothing must be worn.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Other protection** : Not available.

9. Physical and chemical properties

- Physical state** : Liquid. [Viscous liquid.]
- Flash point** : Closed cup: 13°C (55.4°F)
- Color** : Colorless to light yellow.
- Odor** : Characteristic. Fragrance-like.
- pH** : 6 to 9
- Boiling/condensation point** : 78.333°C (173°F)
- Relative density** : 0.81 to 0.85
- Aerosol product**
- Type of aerosol** : Spray
- Heat of combustion** : 12.94 kJ/g

10. Stability and reactivity

- Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- Conditions to avoid** : Store away from direct sunlight. Avoid contact with ignition and heat sources and oxidizers. Store away from oxidizing agents.
- Incompatible materials** : Separate from oxidizing materials.
- Hazardous decomposition products** : Products of combustion
- Possibility of hazardous reactions** : Not available.
- Hazardous polymerization** : Not available.

11. Toxicological information

United States

Acute toxicity

Product/ingredient name	Result	Dose	Exposure
ethanol	LC50 Inhalation Vapor LD50 Oral	124700 mg/m ³ 7 g/kg	4 hours -

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
ethanol	Eyes - Mild irritant	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	-	100 microliters	-
	Eyes - Severe irritant	-	500 milligrams	-
	Skin - Mild irritant	-	400 milligrams	-
	Skin - Moderate irritant	-	24 hours 20 milligrams	-

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : No carcinogenic effect.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
ethanol	A3	1	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

11. Toxicological information

Conclusion/Summary : Not available.

Canada

Acute toxicity

Product/ingredient name	Result	Dose	Exposure
ethanol	LC50 Inhalation Vapor LD50 Oral	124700 mg/m ³ 7 g/kg	4 hours -

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
ethanol	Eyes - Mild irritant	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	-	100 microliters	-
	Eyes - Severe irritant	-	500 milligrams	-
	Skin - Mild irritant	-	400 milligrams	-
	Skin - Moderate irritant	-	24 hours 20 milligrams	-

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
ethanol	A3	1	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Mexico

Acute toxicity

Product/ingredient name	Result	Dose	Exposure
ethanol	LC50 Inhalation Vapor LD50 Oral	124700 mg/m ³ 7 g/kg	4 hours -

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

11. Toxicological information

Irritation/Corrosion

Product/ingredient name	Result	Score	Exposure	Observation
ethanol	Eyes - Mild irritant	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	-	100 microliters	-
	Eyes - Severe irritant	-	500 milligrams	-
	Skin - Mild irritant	-	400 milligrams	-
	Skin - Moderate irritant	-	24 hours 20 milligrams	-

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
ethanol	A3	1	-	-	-	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

12. Ecological information

THE FOLLOWING DATA IN THIS SECTION IS SOURCED FROM PUBLICLY AVAILABLE DATABASES AND NOT THE REPRESENTATION OF ANY DATA COLLECTED BY ZOTOS INTERNATIONAL OR ITS AFFILIATES.

Ecotoxicity : No known significant effects or critical hazards.

United States

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.

12. Ecological information

Canada

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
ethanol	Acute EC50 17.921 mg/l Marine water Acute EC50 2000 µg/l Fresh water Acute LC50 25500 µg/l Marine water	Algae - Ulva pertusa Daphnia - Daphnia magna Crustaceans - Artemia franciscana - Larvae	96 hours 48 hours 48 hours
	Acute LC50 42000 µg/l Fresh water Chronic NOEC 4.995 mg/l Marine water Chronic NOEC 0.375 ul/L Fresh water	Fish - Oncorhynchus mykiss Algae - Ulva pertusa Fish - Gambusia holbrooki - Larvae	4 days 96 hours 12 weeks

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.

Mexico

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
ethanol	Acute EC50 17.921 mg/l Marine water Acute EC50 2000 µg/l Fresh water Acute LC50 25500 µg/l Marine water	Algae - Ulva pertusa Daphnia - Daphnia magna Crustaceans - Artemia franciscana - Larvae	96 hours 48 hours 48 hours
	Acute LC50 42000 µg/l Fresh water Chronic NOEC 4.995 mg/l Marine water Chronic NOEC 0.375 ul/L Fresh water	Fish - Oncorhynchus mykiss Algae - Ulva pertusa Fish - Gambusia holbrooki - Larvae	4 days 96 hours 12 weeks

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.

13. Disposal considerations

Waste disposal : Dispose of according to all federal, state and local applicable regulations.

Contaminated packaging : Waste must be disposed of according to applicable regulations. This material and its container must be disposed of as hazardous waste. Recycle, if possible. Dispose of empty containers and waste safely.


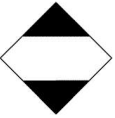

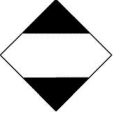

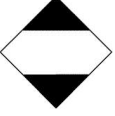

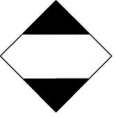

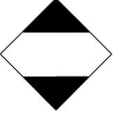
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.



14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information

14. Transport information

DOT Classification	UN1950	Aerosols	2.1	-	 	<p>Limited quantity Yes.</p> <p>Packaging instruction Passenger aircraft Quantity limitation: 75 kg</p> <p>Cargo aircraft Quantity limitation: 150 kg</p> <p>Special provisions 153, N82</p>
TDG Classification	UN1950	AEROSOLS	2.1	-	 	<p>Explosive Limit and Limited Quantity Index 1</p> <p>Passenger Carrying Road or Rail Index 75</p>
Mexico Classification	UN1950	AEROSOLS	2.1	-	 	<p>Special provisions 63, 190, 277</p>
ADR/RID Class	UN1950	AEROSOLS	2	-	 	<p>Limited quantity LQ2</p> <p>Special provisions 190 327 625</p> <p>Tunnel code (D)</p>
IMDG Class	UN1950	AEROSOLS	2.1	-	 	<p>Emergency schedules (EmS) F-D, S-U</p> <p>Special provisions 63, 190, 277, 327, 959</p>

14. Transport information

IATA-DGR Class	UN1950	Aerosols, flammable	2.1	-	 	<u>Passenger and Cargo Aircraft</u> Quantity limitation: 75 kg Packaging instructions: 203 <u>Cargo Aircraft Only</u> Quantity limitation: 150 kg Packaging instructions: 203 <u>Limited Quantities - Passenger Aircraft</u> Quantity limitation: 30 kg Packaging instructions: Y203 <u>Special provisions</u> A145
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PG* : Packing group

15. Regulatory information

United States

HCS Classification : Flammable aerosol
Irritating material

U.S. Federal regulations : TSCA : Exempt

SARA 302/304: No products were found.

SARA 311/312 Hazards identification: Fire hazard, Immediate (acute) health hazard

Clean Air Act (CAA) 112 regulated flammable substances: 1,1-difluoroethane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

State regulations

Massachusetts : The following components are listed: DIFLUOROETHANE; ETHYL ALCOHOL

New York : None of the components are listed.

New Jersey : The following components are listed: 1,1-DIFLUOROETHANE; ETHANE, 1, 1-DIFLUORO-; ETHYL ALCOHOL; ALCOHOL

Pennsylvania : The following components are listed: DENATURED ALCOHOL

California Prop. 65

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer.

15. Regulatory information

United States inventory (TSCA 8b) : Not determined.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid
 Class B-5: Flammable aerosol.
 Class D-2B: Material causing other toxic effects (Toxic).

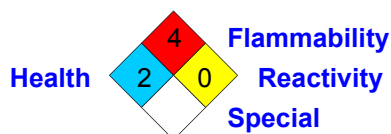
Canadian lists

Canadian NPRI : The following components are listed: Volatile organic compounds; Ethanol
CEPA Toxic substances : The following components are listed: Volatile organic compounds
Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification :



International regulations

Chemical Weapons Convention List Schedule I Chemicals : Not listed
Chemical Weapons Convention List Schedule II Chemicals : Not listed
Chemical Weapons Convention List Schedule III Chemicals : Not listed

16. Other information

Hazardous Material Information System (U.S.A.) :

Health	2
Flammability	4
Physical hazards	0

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. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



16. Other information

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

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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.