SAFETY DATA SHEET



Techspray E-Line Flux Remover 1621-10S

GHS product identifier	: Techspray E-Line Flux Remover 1621-10S
Product code	: 1621-10S
Other means of identification	: Fluxing agents Remover.
Product type	: Aerosol.
	f the substance or mixture and uses advised against
Not applicable.	
Supplier's details	: Techspray 8125 Cobb Center Drive Kennesaw, GA 30152 Tel: 678-819-1408 Toll free: 1-800-858-4043 Fax: 1 806-372-8750
Emergency telephone number (with hours of operation)	: Chemtrec - 1-800-424-9300 CANUTEC (Canadian Transportation): (613) 996-6666 Emergency phone: (800) 858-4043 24/7
Section 2. Hazar	ds identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE AEROSOLS - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A GASES UNDER PRESSURE Compressed gas
	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25%
GHS label elements	
GHS label elements Hazard pictograms	
Hazard pictograms	 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25% Constant of the mixture consisting of ingredient(s) of unknown toxicity: 25% Constant of the mixture consisting of ingredient(s) of unknown toxicity: 25% Constant of the mixture consisting of ingredient(s) of unknown toxicity: 25% Constant of the mixture consisting of ingredient(s) of unknown toxicity: 25% Constant of the mixture consisting of ingredient(s) of unknown toxicity: 25% Constant of the mixture consisting of ingredient(s) of unknown toxicity: 25% Constant of the mixture constant of the m
Hazard pictograms	 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25% When the provide the mixture consisting of ingredient(s) of unknown toxicity: 25% Danger Extremely flammable aerosol. Causes serious eye irritation. Contains gas under pressure; may explode if heated.
Hazard pictograms Signal word Hazard statements	 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25% Wear protective gloves. Wear eye or face protection. Keep away from heat, hot
Hazard pictograms Signal word Hazard statements Precautionary statements	 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25% Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray o an open flame or other ignition source. Wash hands thoroughly after handling.
Signal word Hazard statements <u>Precautionary statements</u> Prevention	 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25% i i i i i i i i i i i i i i i i i i i

Section 2. Hazards identification

Hazards not otherwise classified

: None known.

: Mixture

Section 3. Composition/information on ingredients

Substance/mixture
Other means of

identification

: Fluxing agents Remover.

Ingredient name	%	CAS number	
	≥10 - ≤25 ≥10 - ≤25	64-17-5 67-63-0	

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures		
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. 	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.	
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.	
Ingestion	Wash out mouth with water. Remove dentures if any. 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 unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.	

Most important symptoms/effects, acute and delayed			
Potential acute health effects			
Eye contact	: Causes serious eye irritation.		
Inhalation	 Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. 		
Skin contact	: May cause skin irritation.		
Ingestion	: Do not ingest. If swallowed then seek immediate medical assistance. Irritating to mouth, throat and stomach.		

Over-exposure signs/symptoms

2/13

Section 4. First aid measures

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: Adverse symptoms may include the following: nausea or vomiting central nervous system depression Ingestion Seek medical attention.

Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.	
Specific treatments	: No specific treatment.	
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.	

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable 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 may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides
Special protective actions for fire-fighters	: 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.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protec	uipment and emergency procedures	
For non-emergency personnel	action shall be taken involving any personal risk or without suitab cuate surrounding areas. Keep unnecessary and unprotected pe ering. In the case of aerosols being ruptured, care should be take ape of the pressurized contents and propellant. If a large numbe ured, treat as a bulk material spillage according to the instruction tion. Do not touch or walk through spilled material. Shut off all ig es, smoking or flames in hazard area. Avoid breathing vapor or r quate ventilation. Wear appropriate respirator when ventilation is appropriate personal protective equipment.	ersonnel from en due to the rapid r of containers are is in the clean-up inition sources. No nist. Provide
For emergency responders	pecialized clothing is required to deal with the spillage, take note tion 8 on suitable and unsuitable materials. See also the informatergency personnel".	
Environmental precautions	id dispersal of spilled material and runoff and contact with soil, w sewers. Inform the relevant authorities if the product has cause ution (sewers, waterways, soil or air). Water polluting material. I environment if released in large quantities.	d environmental
Methods and materials for co	ent and cleaning up	
Small spill	b leak if without risk. Move containers from spill area. Use spark losion-proof equipment. Dilute with water and mop up if water-so water-insoluble, absorb with an inert dry material and place in an posal container. Dispose of via a licensed waste disposal contract	oluble. Alternatively, appropriate waste
Large spill	b leak if without risk. Move containers from spill area. Use spark losion-proof equipment. Approach release from upwind. Preven er courses, basements or confined areas. Wash spillages into a at or proceed as follows. Contain and collect spillage with non-co orbent material e.g. sand, earth, vermiculite or diatomaceous ear tainer for disposal according to local regulations (see Section 13) nsed waste disposal contractor. Contaminated absorbent materi ne hazard as the spilled product. Note: see Section 1 for emerge rmation and Section 13 for waste disposal.	t entry into sewers, n effluent treatment mbustible, th and place in b. Dispose of via a al may pose the

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
ethanol	ACGIH TLV (United States, 3/2015). STEL: 1000 ppm 15 minutes. NIOSH REL (United States, 10/2013). TWA: 1900 mg/m ³ 10 hours. TWA: 1000 ppm 10 hours. OSHA PEL (United States, 2/2013). TWA: 1900 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 1900 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours. TWA: 1000 ppm 8 hours.
Isopropyl alcohol	ACGIH TLV (United States, 3/2015). STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours. NIOSH REL (United States, 10/2013). STEL: 1225 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 980 mg/m ³ 10 hours. TWA: 400 ppm 10 hours. OSHA PEL (United States, 2/2013). TWA: 980 mg/m ³ 8 hours. TWA: 400 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). STEL: 1225 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 980 mg/m ³ 8 hours. TWA: 400 ppm 8 hours.

Appropriate engineering controls	:	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
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.
Individual protection measure	<u>es</u>	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	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, gases 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 protection		

Section 8. Exposure controls/personal protection

-	
Hand protection	: 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.
Body protection	: 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.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and 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.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	1	Liquid.
Color	1	Clear. Colorless.
Odor	1	Characteristic.
Odor threshold	1	Not available.
рН	1	Not applicable.
Melting point	1	Not available.
Boiling point	1	Not available.
Flash point	1	Not available.
Evaporation rate	1	>1 ((TCE=1) = 1)
Flammability (solid, gas)	:	Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	1	7.4 kPa (55.5 mm Hg) [room temperature]
Vapor density	1	Not available.
Relative density	1	Not available.
Solubility	1	Not available.
Solubility in water	1	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	1	Not available.
Decomposition temperature	1	Not available.
Viscosity	1	Not available.
Flow time (ISO 2431)	1	Not available.
Aerosol product		
Type of aerosol	:	Spray
Heat of combustion	:	30.26 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: Reactive or incompatible with the following materials: Alkali. Alkaline earth metal salt. Aluminum. zinc
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LC50 Inhalation Vapor LD50 Oral	Rat Rat	124700 mg/m³ 7 g/kg	4 hours -
Isopropyl alcohol	LD50 Dermal LD50 Oral		12800 mg/kg 5000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Isopropyl alcohol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity Not available.

Classification

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
ethanol	None.	-	-
Isopropyl alcohol	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely : Not available. routes of exposure

Potential acute health	<u>effects</u>
Eye contact	: Causes serious eye irritation.
Inhalation	 Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	: May cause skin irritation.
Ingestion	: Do not ingest. If swallowed then seek immediate medical assistance. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: Adverse symptoms may include the following: nausea or vomiting central nervous system depression Ingestion Seek medical attention.

Delayed and immediate effect	cts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
Not available.	

Date of issue/Date of revision

Section 11. Toxicological information

General	: 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.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	38204.5 mg/kg

Section 12. Ecological information

<u>Toxicity</u>			
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 100 ul/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks
Isopropyl alcohol	Acute LC50 1400000 to 1950000 μg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethanol	-0.35	-	low
Isopropyl alcohol	0.05	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	ΙΑΤΑ
UN number	-	-	-	UN1950	UN1950	ID8000
UN proper shipping name	Consumer commodity ORM-D	Consumer commodity ORM-D	Consumer commodity ORM-D	Aerosols, flammable	AEROSOLS IN LIMITED QUANTITIES OF CLASS 2 (heptane, 1, 1-difluoroethane)	Consumer commodity ID8000 (ethanol)
Transport hazard class(es)	ORM-D	ORM-D	ORM-D		2.1	9
Packing group	-	-	-	-	11	-
Environmental hazards	Yes.	No.	No.	Yes.	No.	No.
Additional information	This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 13-2.17 (Class 2).	-	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Tunnel code</u> (D)	-	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transport information

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) PAIR: heptane
	TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	United States inventory (TSCA 8b): All components are listed or exempted.
	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
SARA 302/304	
Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.

SARA 311/312

Classification : Fire hazard Sudden release of pressure Immediate (acute) health hazard

Composition/information on ingredients

Name	%		Sudden release of pressure	Reactive		Delayed (chronic) health hazard
ethanol Isopropyl alcohol		Yes. Yes.		No. No.	Yes. Yes.	No. No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Isopropyl alcohol	67-63-0	≥10 - ≤25
Supplier notification	Isopropyl alcohol	67-63-0	≥10 - ≤25

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

State regulations	
Massachusetts	 The following components are listed: HEPTANE; N-HEPTANE; DIFLUOROETHANE; ETHYL ALCOHOL; DENATURED ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL
New York	: None of the components are listed.
New Jersey	: The following components are listed: n-HEPTANE; HEPTANE; 1,1-DIFLUOROETHANE; ETHANE, 1,1-DIFLUORO-; ETHYL ALCOHOL; ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL

Section 15. Regulatory information

Pennsylvania

: The following components are listed: HEPTANE; DENATURED ALCOHOL; ETHANOL; ISOPROPYL ALCOHOL MANUFACTURE (STRONG-ACID PROCESS)

California Prop. 65

Ingredient name	Cancer	•	level	Maximum acceptable dosage level
ethanol	No.	No.	Yes.	No.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

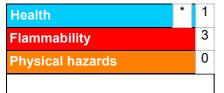
Not listed.

International lists

National inventory	
Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): All components are listed or exempted. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Turkey	: All components are listed or exempted.

Section 16. Other information

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



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 SDSs 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.)

Section 16. Other information



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

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.

Procedure used to derive the classification

	Justification	
FLAMMABLE AEROSOLS GASES UNDER PRESSUR SKIN IRRITATION - Catego EYE IRRITATION - Catego	On basis of test data On basis of test data Calculation method Calculation method	
History		
Date of printing	: 8/15/2019	
Date of issue/Date of revision	: 8/15/2019	
Date of previous issue	: No previous validation	
Version	: 1	
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classificatio IATA = International Air Transport Association IBC = Intermediate Bulk Container	n and Labelling of Chemicals

References

: Not available. Indicates information that has changed from previously issued version.

UN = United Nations

Notice to reader

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 the accuracy or completeness of the information contained herein.

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

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.