

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 06/12/2019

Revision: 06/01/2019


## 1 Identification

- **Product Identifier**
- **Trade name:** GRA Services International, Secure Set Polyurethane Foam Spray, Side B
- **Product Code:** EHS 2322, 2422, 2921, 3021
  
- **Recommended use and restriction on use**
- **Recommended use:** Polyurethane-sealant
- **Restrictions on use:** See Sections 8 and 10 for further information.
  
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
GRA Services International  
5540 NE 2nd Street  
Oklahoma City, OK 73117  
Phone: (405) 672-8885
  
- **Emergency telephone number:**  
GRA Service International  
(405) 672-8885



## 2 Hazard(s) Identification

- **Classification of the substance or mixture**

Press. Gas	H280 Contains gas under pressure; may explode if heated.
Acute Tox. 4	H302 Harmful if swallowed.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2A	H319 Causes serious eye irritation.
Muta. 1B	H340 May cause genetic defects.
STOT SE 3	H361 Suspected of damaging fertility or the unborn child.
STOT RE 3	H335 May cause respiratory irritation.
  
- **Label Elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS)
- **Hazard pictograms:**  
  
GHS04 GHS07 GHS08
  
- **Signal word:** Danger
- **Hazard statements**  
H280 Contains gas under pressure; may explode if heated.  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H340 May genetics defects.  
H361 Suspected of damaging fertility or the unborn child.  
H335 May cause respiratory irritation.

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- Precautionary Statements:**







P201	Obtain special Instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing mist, vapors or spray.
P264	Wash thoroughly after handling.
P280	Wear protective gloves and eye protection.
P270	Do not eat, drink or smoke using this product.
P271	Use only outdoors or in well-ventilated area.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P332+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P362+P364	Take of contaminated clothing and wash it before reuse.
P405	Store locked up.
P410+P403	Protect from sunlight. Store in well-ventilated place.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- Other hazards:** There are no other hazards not otherwise classified that have been identified.

## 3 Composition/information on ingredients

- Chemical characterization: Mixtures**

- Components:**

9016-87-9	Polyether polyol	20-40%
	 Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	
811-97-2	Norflurane	10-20%
	 Press. Gas, H280 Simple Asphyxiant	
68441-62-3	Halogenated aliphatic polyether polyol	10-20%
	 Acute Tox. 4, H302; Eye Irrit. 2A, H319	
13674-84-5	Tris(2-chlorispropyl)-phosphate	10-20%
	Acute Tox. 4, H302	
	Brominated Aromatic	10-20%
	Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
756-79-6	Dimethyl methylphosphonate	<5%
	 Muta. 1B, H340: Repr. 2, H361	
	 Eye Irrit. 2A, H319  Flam. Liq. 2, H225	

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
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156-60-5	Halogenated hydrocarbon	<5%
	 Flam. Liq. 2, H225	
	 Acute Tox. 4, H332	
68928-76-7	Dimethylbis [(1-oxoneodecyl) oxy]stannane	<1%
	 Muta. 1B, H340: Repr. 2, H361	
	 Eye Irrit, 2A, H319	
	 Flam. Liq. 2, H225	

- **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

## 4 First-aid Measures

- **Description of first aid measures**

- **After inhalation:**

Apply fresh air and be sure to call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**

Do not pull solidified product away from the skin.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation or rash occurs: Get medical advice/attention.

- **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:**

Unlikely route of exposure.

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

- **Most important symptoms and effects, both acute and delayed:**

Headache

Coughing

Dizziness

Breathing difficulty

May cause respiratory irritation.

Irritant to skin and mucous membranes.

Irritant to eyes.

Gastic or intestinal disorders.

- **Danger:**

Harmful if swallowed.

Suspected of damaging fertility or the unborn child.

- **Indication of any immediate medical attention and special treatment needed:**

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

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## 5 Fire-fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None
- **Special hazards arising from the substance or mixture:**  
Danger of receptacles bursting because of high vapor pressure if heated.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information:**  
Cool endangered receptacles with water spray.

## 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:**  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Ensure adequate ventilation.  
Wear protective equipment. Keep unprotects persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Allow to solidify. Pick up mechanically.  
Dispose contaminated materials as waste according to item 13.
- **Reference to other sections:**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:** Use only in well-ventilated areas.
- **Information about protection against explosions and fires:**  
Pressurized container; protect from sunlight and do not expose to temperatures exceeding 120° F/  
49° C, i.e. electric lights. Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material.
- **Conditions for safe storage, including an incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**  
Observe official regulations on storing packagings with pressurized containers.  
Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Do not store together with oxidizing and acidic materials.

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- **Further information about storage conditions:**  
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **Specific end use(s):** No relevant information available.

## 8 Exposure Controls/ Personal Protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

### 811-97-2 Norflurane

WEEL (USA)	Long-term value: 1000 ppm
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### 156-60-5 halogenated hydrocarbon

PEL (USA)	Long-term value: 790 mg/m <sup>3</sup> , 200 ppm
REL (USA)	Long-term value: 790 mg/m <sup>3</sup> , 200 ppm
TLV (USA)	Long-term value: 793 mg/m <sup>3</sup> , 200 ppm
EL (Canada)	Long-term value: 200 ppm
EV (Canada)	Short-term value: 990 mg/m <sup>3</sup> , 250 ppm
	Long-term value: 790 mg/m <sup>3</sup> , 200 ppm
LMPE (Mexico)	Long-term value: 200 ppm

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverage and feed.  
Immediately remove any soiled and contaminated clothing.  
Pregnant women should strictly avoid inhalation or skin contact.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Engineering controls:** No relevant information available.
- **Breathing Equipment:**  
Use suitable respiratory protective device in case of insufficient ventilation.  
Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**



Protective gloves.

The glove material has to be impermeable and resistant to the product / the substance/ the preparation.  
Gloves should provide protection from freezing temperatures.

- **Eye protection:**



Safety glasses.

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**  
No relevant information
- **Risk management measures:** See section 7 for additional information.

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## 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**

- **Appearance:**

Form:	Aerosol
Color:	Not determined.
Odor:	Sweetish
Odor threshold:	Not determined

pH-value	Not determined.
Melting point/ Melting range:	Not determined.
Boiling point/ Boiling range:	-26°C (-15°F)

Flash point:	Not applicable, as aerosol
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Flammability (solid, gaseous):	Not applicable
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Auto-ignition temperature:	Not determined.
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Decomposition temperature:	Not determined.
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Danger of explosion:	Product does not pose and explosion hazard.
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- **Explosion limits**

Lower:	Not determined.
Upper:	Not determined.

Vapor pressure at 20°C (68°F):	5716 hPa (4287 mm Hg)
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Density:	Not determined.
Relative density:	Not determined.
Vapor density:	Not determined.
Evaporation rate:	Not determined.

Solubility in / Miscibility with water:	Fully miscible.
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Partition coefficient (n-octanol/water):	Not determined.
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Viscosity	
Dynamic:	Not determined.
Kinematic:	Not determined.
VOC (California):	32.0 g/L (EPA Method 24)
Other Information	No relevant information available.

## 10 Stability and Reactivity

- **Reactivity:** No relevant information available
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**  
Danger of receptacles bursting because of high vapor pressure if heated.

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- **Possibility of hazardous reactions:**  
Reacts with catalysts.  
Reacts with peroxides.  
Reacts with strong acids and oxidizing agents.  
Exothermic polymerization.
- **Conditions to avoid:** Store away from oxidizing agents.
- **Incompatible materials:** No relevant information available.
- **Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Halogenated hydrocarbons  
Phosphorus compounds  
Nitrogen oxides (NO<sub>x</sub>)  
Chlorine compounds  
Poisonous gases/vapors

## 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**68441-62-3 halogenated aliphatic polyether polyol**

Oral	LD50	1337 mg/kg (rat)
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- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **Sensitization:** Based on available data, the classification criteria are not met.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

- **Probable route(s) of exposure:**

Inhalation.  
Eye contact.  
Skin contact.

**Acute effects (acute toxicity, irritation and corrosivity):**

Harmful if inhaled.  
Irritating to eyes, respiratory system and skin.

- **Repeated dose toxicity:** Possible risk of irreversible effects.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.

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- **Reproductive toxicity:** Suspected of damaging fertility or the unborn child.
- **STOT-single exposure:** May cause respiratory irritation.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

## 12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** The product contains materials that are harmful to the environment.
- **Persistence and degradability:** The product is partially biodegradable. Significant residuals remain.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Due to mechanical actions of the product (e.g. agglutinations), damages may occur.
- **Additional ecological information**
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Due to the available data on eliminability/decomposition and bioaccumulation potential prolong term damage of the environmental can not be excluded.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No relevant information available.

## 13 Disposal Considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Can be burned with household garbage after consulting with waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.  
Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to the official regulations

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## 14 Transport Information

<ul style="list-style-type: none"> <li>• UN-Number</li> <li>• DOT, ADR, IMG, IAT A</li> </ul>	UN3500
<ul style="list-style-type: none"> <li>• UN-Number</li> <li>• DOT, ADR, IMG, IAT A</li> <li>• ADR</li> <li>• IMDG</li> </ul>	Chemical under pressure, n.o.s. (Fluorinated Hydrocarbon, Nitrogen) 3500 CHEMICAL UNDER PRESSURE, N.O.S. (Fluorinated Hydrocarbon, Nitrogen) CHEMICAL UNDER PRESSURE, N.O.S. (Fluorinated Hydrocarbon, Nitrogen)
<ul style="list-style-type: none"> <li>• Transport hazard class(es)</li> <li>• DOT</li> </ul>	2 Gas
<ul style="list-style-type: none"> <li>• Class</li> <li>• Label</li> </ul>	2.2
<ul style="list-style-type: none"> <li>• ADR</li> </ul>	2 8A Gases
<ul style="list-style-type: none"> <li>• DOT</li> <li>• Class</li> </ul>	2.2
<ul style="list-style-type: none"> <li>• IMDG, IATA</li> </ul>	2 Gases
<ul style="list-style-type: none"> <li>• Class</li> <li>• Label</li> </ul>	2.2
<ul style="list-style-type: none"> <li>• Packing group</li> </ul>	This UN-number is not assigned a packing group.
<ul style="list-style-type: none"> <li>• Environmental hazards</li> <li>• Marine pollutant:</li> </ul>	No
<ul style="list-style-type: none"> <li>• Special precautions for user</li> <li>• Danger code (Kemler):</li> <li>• EMS Number:</li> </ul>	Warning: Gases 20 F-D, S-U
<ul style="list-style-type: none"> <li>• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>	Not applicable

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## 15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

- **Proposition 65 (California)**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females):**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males):**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **Carcinogenic catagories**

- **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **NIOSH-Ca (National Institution of Occupational Safety and Health):**

None of the ingredients are listed.

- **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 16 Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 06/01/2019

- **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Codes

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety and Health

LDLo: Lowest Lethal Dose Observed

Press. Gas: Gases under pressure — Compressed gas

Flam. Liq. 2: Flammable liquids — Category 2

Flam. Liq. 4: Flammable liquids — Category 4

Acute Tox. 4: Acute toxicity — Category 4

Skin Irrit. 2: Skin corrosion/irritation — Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation — Category 2A

Muta. 1B: Germ cell mutagenicity — Category 1B

Repr. 2: Reproductive toxicity — Category 2

STOT SE 3: Specific target organ toxicity (single exposure) — Category 3

STOT SE 2: Specific target organ toxicity (repeated exposure) — Category 2