

Safety Data Sheet

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

Printing date: 11/27/17

Revision: 11/27/17

1 Identification

- **Product identifier**
- **Trade name:** Touch 'n Seal Transportation Foam Part A
- **Other product identifiers:** 00047201508 EHS 2632
- **Recommended use and restriction on use**
- **Recommended use:** Polyurethane-sealant
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
DAP Foam, Inc.
- 307 Integram
- Pacific, MO 63069
- Phone: (800) 325-6180
- **Emergency telephone number:**
- Infotrac Inc.
- (800)535-5053, +1 (352)323-3500



2 Hazard(s) identification

- **Classification of the substance or mixture**
- Press. Gas H280 Contains gas under pressure; may explode if heated.
- Acute Tox. 4 H332 Harmful if inhaled.
- Skin Irrit. 2 H315 Causes skin irritation.
- Eye Irrit. 2A H319 Causes serious eye irritation.
- Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin Sens. 1 H317 May cause an allergic skin reaction.
- STOT SE 3 H335 May cause respiratory irritation.
- STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **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.
 H332 Harmful if inhaled.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

(Cont'd. on page 2)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 1)

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P233 Keep container tightly closed.

P260 Do not breathe mist/vapors/spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection.

P284 In case of inadequate ventilation wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/attention if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

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	diphenylmethanediisocyanate, isomeres and homologues ⚠ Resp. Sens. 1, H334; STOT RE 2, H373 ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
101-68-8	4,4'-methylenediphenyl diisocyanate ⚠ Resp. Sens. 1, H334; STOT RE 2, H373 ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	25-50%
811-97-2	Norflurane ⚠ Press. Gas, H280 Simple Asphyxiant	10-25%

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.

(Cont'd. on page 3)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 2)

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

Supply fresh air and to be sure to call for a doctor.
Provide oxygen treatment if affected person has difficulty breathing.
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 continues, consult a doctor.

- **After eye contact:**

Protect unharmed eye.
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:**

Asthma attacks
Headache
Breathing difficulty
Coughing
Allergic reactions
Irritant to skin and mucous membranes.
Causes eye irritation.
May cause respiratory irritation.

- **Danger:**

Danger of impaired breathing.
Danger of convulsion.
Condition may deteriorate with alcohol consumption.
May cause damage to organs through prolonged or repeated exposure.

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

Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.
Medical supervision for at least 48 hours.
If necessary oxygen respiration treatment.
Later observation for pneumonia and pulmonary edema.
Contains diphenylmethanediisocyanate, isomeres and homologues, 4,4'-methylenediphenyl diisocyanate.
May produce an allergic reaction.
Treat skin and mucous membrane with antihistamine and corticoid preparations.
In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

(Cont'd. on page 4)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 3)

- **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.
 Formation of toxic gases is possible during heating or in case of fire.
- **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 unprotected persons away.
 Protect from heat.
- **Environmental precautions**
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Methods and material for containment and cleaning up**
 Allow to solidify. Pick up mechanically.
 Clean the affected area carefully; suitable cleaners are:
 Warm water and cleansing agent
- **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.
 Avoid contact with the eyes and skin.
 Keep out of reach of children.
- **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 any 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.

(Cont'd. on page 5)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 4)

- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Do not store together with acids.
Store away from oxidizing agents.
- **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:**

101-68-8 4,4'-methylenediphenyl diisocyanate

PEL (USA)	Ceiling limit value: 0.2 mg/m ³ , 0.02 ppm
REL (USA)	Long-term value: 0.05 mg/m ³ , 0.005 ppm Ceiling limit value: 0.2* mg/m ³ , 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.051 mg/m ³ , 0.005 ppm
EL (Canada)	Long-term value: 0.005 ppm Ceiling limit value: 0.01 ppm Skin; S
EV (Canada)	Long-term value: 0.005 ppm Ceiling limit value: 0.02 ppm
LMPE (Mexico)	Long-term value: 0.005 ppm

811-97-2 Norflurane

WEEL (USA)	Long-term value: 1000 ppm
------------	---------------------------

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Engineering controls:** Use only outdoors or in a well-ventilated area.
- **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.

(Cont'd. on page 6)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 5)

· **Eye protection:**



Safety glasses

· **Body protection:** Impervious protective clothing

· **Limitation and supervision of exposure into the environment**

No relevant information available.

· **Risk management measures** No relevant information available.

9 Physical and chemical properties

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

· **Appearance:**

Form: Aerosolized liquid with compressed gas in cylinders

Color: Cream colored

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** Not applicable, as aerosol.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Not determined.

· **Explosion limits**

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Not determined.

· **Vapor pressure at 20 °C (68 °F):** 5716 hPa (4287 mm Hg)

· **Density:**

Relative density: 1.03

Vapor density: Not determined.

Evaporation rate: Not applicable.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity**

Dynamic: Not determined.

Kinematic: Not determined.

(Cont'd. on page 7)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 6)

VOC content:	0 g/l
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.
- **Possibility of hazardous reactions**
Reacts with catalysts, oxidizing agents and strong alkali.
Reacts with strong acids and oxidizing agents.
Exothermic polymerization.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizing agents
- **Hazardous decomposition products**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Ammonia

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
- | | |
|---|---------------------------|
| LD/LC50 values that are relevant for classification: | |
| 101-68-8 4,4'-methylenediphenyl diisocyanate | |
| Oral | LD50 2200 mg/kg (mouse) |
- **Primary irritant effect:**
 - **On the skin:** Irritant to skin and mucous membranes.
 - **On the eye:** Irritating effect.
 - **Sensitization:** May cause sensitisation by inhalation and skin contact.

- **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.

(Cont'd. on page 8)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 7)

Irritating to eyes, respiratory system and skin.

- **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.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** May cause respiratory irritation.
- **STOT-repeated exposure:** May cause damage to organs through prolonged or repeated exposure.
- **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:** Does not accumulate in organisms
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:**
This statement was deduced from products with a similar structure or composition.
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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:**
Contact waste processors for recycling information.
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.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

(Cont'd. on page 9)




Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 8)

14 Transport information

· UN-Number · DOT, ADR, IMDG, IATA	UN3500
· UN proper shipping name · DOT, IATA · ADR, IMDG	Chemical under pressure, n.o.s. (Fluorinated hydrocarbon, Nitrogen) CHEMICAL UNDER PRESSURE, N.O.S. (FLUORINATED HYDROCARBON, NITROGEN)
· Transport hazard class(es) · DOT	
	
· Class · Label	2.2 2.2
· ADR	
	
· Class · Label	2 8A Gases 2.2
· IMDG, IATA	
	
· Class · Label	2 Gases 2.2
· Packing group	This UN-number is not assigned a packing group.
· Environmental hazards · Marine pollutant:	No
· Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Gases 20 F-C,S-V
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

(Cont'd. on page 10)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 9)

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):**

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues
-----------	--

101-68-8	4,4'-methylenediphenyl diisocyanate
----------	-------------------------------------

· **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 categories**

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

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	CBD
-----------	--	-----

101-68-8	4,4'-methylenediphenyl diisocyanate	D, CBD
----------	-------------------------------------	--------

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

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

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

All ingredients are listed.

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** April 13, 2017 / -

(Cont'd. on page 11)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part A

(Cont'd. of page 10)

· **Abbreviations and acronyms:**

LDLo: Lowest Lethal Dose Observed
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
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 & Health
Press. Gas: Gases under pressure – Compressed gas
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
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com

Safety Data Sheet

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

Printing date: 11/27/17

Revision: 11/27/17

1 Identification

- **Product identifier**
- **Trade name:** Touch 'n Seal Transportation Foam Part B
- **Other product identifiers:** 00047202508 EHS 2632
- **Recommended use and restriction on use**
- **Recommended use:** Polyurethane-sealant
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
DAP Foam, Inc.
- 307 Integram
- Pacific, MO 63069
- Phone: (800) 325-6180
- **Emergency telephone number:**
- Infotrac Inc.
- (800)535-5053, +1 (352)323-3500



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.
- **Label elements**
- **GHS label elements**
 The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

GHS04 GHS07
- **Signal word:** Warning
- **Hazard statements:**
 H280 Contains gas under pressure; may explode if heated.
 H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
- **Precautionary statements:**
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear protective gloves/protective clothing/eye protection.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

(Cont'd. on page 2)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

(Cont'd. of page 1)

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P330 Rinse mouth.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P410+P403 Protect from sunlight. Store in a well-ventilated place.
 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:**

13674-84-5	tris(2-chlorisopropyl)-phosphate ⚠ Acute Tox. 4, H302	10-25%
811-97-2	Norflurane ⚠ Press. Gas, H280 Simple Asphyxiant	10-25%
68441-62-3	halogenated aliphatic polyether polyol ⚠ Acute Tox. 4, H302; Eye Irrit. 2A, H319	10-25%
52019-35-9	Methyloxirane polymer with oxirane, ether with 2,6-bis[(bis(2-hydroxyethyl)amino) methyl]-4-nonylphenol (5:1) ⚠ Eye Dam. 1, H318 ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	<20%
460-73-1	1,1,1,3,3-Pentafluoropropane, (Genetron®245fa) ⚠ Press. Gas, H280	<10%

· **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:**

Supply fresh air; consult doctor in case of complaints.
 Provide oxygen treatment if affected person has difficulty breathing.

· **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.

(Cont'd. on page 3)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

(Cont'd. of page 2)

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

Irritant to skin and mucous membranes.

Causes eye irritation.

· **Danger:** Harmful if swallowed.

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

If swallowed, gastric irrigation.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

· **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.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

· **Environmental precautions**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Methods and material for containment and cleaning up**

Allow to solidify. Pick up mechanically.

Clean the affected area carefully; suitable cleaners are:

Organic solvent

Send for recovery or disposal in suitable receptacles.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Cont'd. on page 4)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

See Section 13 for disposal information.

(Cont'd. of page 3)

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
Use only in well ventilated areas.
Avoid contact with the eyes and skin.
Keep out of reach of children.
- **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
- **Conditions for safe storage, including any 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.
- **Further information about storage conditions:**
Keep containers tightly sealed.
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

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Pregnant women should strictly avoid inhalation or skin contact.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
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.

(Cont'd. on page 5)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

(Cont'd. of page 4)

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**



Safety glasses

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

No relevant information available.

· **Risk management measures** No relevant information available.

9 Physical and chemical properties

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

· **Appearance:**

Form: Aerosolized liquid with compressed gas in cylinders

Color: Amber colored

· **Odor:** Like aromates

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not applicable, as aerosol.

· **Boiling point/Boiling range:** -26 °C (-15 °F)

· **Flash point:** Not applicable, as aerosol.

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** >260 °C (>500 °F)

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Not determined.

· **Explosion limits**

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Not determined.

· **Vapor pressure at 20 °C (68 °F):** 5716 hPa (4287 mm Hg)

· **Density:**

Relative density: 1.21

Vapor density: Not determined.

Evaporation rate: Not applicable.

(Cont'd. on page 6)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

(Cont'd. of page 5)

- | | |
|---|------------------------------------|
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| VOC content: | 0 g/l |
| · 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.
- **Possibility of hazardous reactions**
Toxic fumes may be released if heated above the decomposition point.
Reacts with strong acids and alkali.
Reacts with strong oxidizing agents.
Exothermic polymerization.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizers
- **Hazardous decomposition products**
Carbon monoxide and carbon dioxide
Halogenated hydrocarbons
Phosphorus compounds
Nitrogen oxides (NOx)
Chlorine compounds

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
- | | | |
|---|------|------------------|
| · LD/LC50 values that are relevant for classification: | | |
| 13674-84-5 tris(2-chlorisopropyl)-phosphate | | |
| Oral | LD50 | 1101 mg/kg (rat) |
| 68441-62-3 halogenated aliphatic polyether polyol | | |
| Oral | LD50 | 1337 mg/kg (rat) |
- **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.

(Cont'd. on page 7)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

(Cont'd. of page 6)

· **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 swallowed.

Irritating to eyes and skin.

· **CMR effects (carcinogenity, 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.

· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

· **STOT-single exposure:** Based on available data, the classification criteria are not met.

· **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 material is harmful to the environment.

13674-84-5 tris(2-chlorisopropyl)-phosphate

LC50 51 mg/l (pimephales promelas)

EC50 131 mg/l (daphnia)

· **Persistence and degradability** The product is partially biodegradable. Significant residuals remain.

· **Bioaccumulative potential:** No relevant information available.

· **Mobility in soil:** No relevant information available.

· **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 available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No relevant information available.

(Cont'd. on page 8)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

(Cont'd. of page 7)

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Contact manufacturer for recycling information.

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.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- **Uncleaned packagings**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

- DOT, ADR, IMDG, IATA

UN3500

- **UN proper shipping name**

- DOT, IATA

Chemical under pressure, n.o.s. (Fluorinated hydrocarbon, Nitrogen)

- ADR, IMDG

CHEMICAL UNDER PRESSURE, N.O.S. (FLUORINATED HYDROCARBON, NITROGEN)

- **Transport hazard class(es)**

- DOT



- Class

2.2

- Label

2.2

- ADR



- Class

2 8A Gases

- Label

2.2

- IMDG, IATA



- Class

2 Gases

(Cont'd. on page 9)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

(Cont'd. of page 8)

· Label	2.2
· Packing group	This UN-number is not assigned a packing group.
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Warning: Gases
· Danger code (Kemler):	20
· EMS Number:	F-C,S-V
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

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 categories**

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

None of the ingredients are listed.

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

None of the ingredients are listed.

(Cont'd. on page 10)

Safety Data Sheet

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

Trade name: Touch 'n Seal Transportation Foam Part B

(Cont'd. of page 9)

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

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

All ingredients are listed.

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** April 13, 2017 / -

· **Abbreviations and acronyms:**

LDLo: Lowest Lethal Dose Observed

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

IMDG: International Maritime Code for Dangerous Goods

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 & Health

Press. Gas: Gases under pressure – Compressed gas

Acute Tox. 4: Acute toxicity – Category 4

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

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com