Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: Touch N Seal RF 17 FR ICC Part - A
Article number: EHS2732 - SDS / A REGULAR

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

Application of the substance / the mixture Polyurethane-sealant

1.3 Details of the supplier of the Safety Data Sheet
Manufacturer/Supplier:
Convenience Products, division of Clayton Corp.
866 Horan Drive
Fenton, MO 63026-2416
Phone: 636-349-5855

1.4 Emergency telephone number:
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

⚠ health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

⚠ Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

Pressurised container: May burst if heated.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

Xn; Sensitising
R42/43: May cause sensitisation by inhalation and skin contact.

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Xi; Irritant
R36/37/38: Irritating to eyes, respiratory system and skin.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest valid version.

Warning! Pressurized container.

Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:
diphenylmethanedisocyanate, isomers and homologues
4,4'-methyleneadiiphenyl diisocyanate

Hazard statements
H229 Pressurised container: May burst 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.
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
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P285 In case of inadequate ventilation wear respiratory protection.
P264 Wash thoroughly after handling.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342+P311 IF experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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Additional information:
Contains isocyanates. May produce an allergic reaction.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Hazard description:
WHMIS-symbols:
A - Compressed gas
D2A - Very toxic material causing other toxic effects

NFPA ratings (scale 0 - 4)

Health = 2
Fire = 0
Reactivity = 1

HMIS-ratings (scale 0 - 4)

HEALTH Health = *2
FIRE Fire = 0
REACTIVITY Reactivity = 1

HMIS Long Term Health Hazard Substances
101-68-8 4,4'-methylenebiphenyl diisocyanate
9016-87-9 diphenylmethane diisocyanate, isomers and homologues

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

3.2 Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:
Trade name: Touch N Seal RF 17 FR ICC Part - A

<table>
<thead>
<tr>
<th>CAS: 9016-87-9</th>
<th>diphenylmethanediisocyanate, isomers and homologues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Xn R20; Xn R42/43; Xi R36/37/38</td>
</tr>
<tr>
<td></td>
<td>Resp. Sens. 1, H334; STOT RE 2, H373</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335</td>
</tr>
<tr>
<td>CAS: 101-68-8</td>
<td>4,4'-methylene diphenyl diisocyanate</td>
</tr>
<tr>
<td>EINECS: 202-966-0</td>
<td>Xn R20; Xn R42/43; Xi R36/37/38</td>
</tr>
<tr>
<td>Index number: 615-005-00-9</td>
<td>Resp. Sens. 1, H334; STOT RE 2, H373</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335</td>
</tr>
<tr>
<td>CAS: 811-97-2</td>
<td>Norflurane</td>
</tr>
<tr>
<td>EINECS: 212-377-0</td>
<td>Press. Gas, H280</td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures

General information:
Take affected persons out into the fresh air.
Do not leave affected persons unattended.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact:
Immediately wash with water and soap and rinse thoroughly.
Do not pull solidified product off the skin.
If skin irritation continues, consult a doctor.

After eye contact:
Protect unharmed eye.
Rinse opened eye for several minutes under running water.
Call a doctor immediately.
Do not remove contact lenses if worn.

After swallowing:
Unlikely route of exposure.
Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Asthma attacks
Headache
Allergic reactions
Coughing
Breathing difficulty
Dizziness

(Contd. on page 5)
5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: None.

5.2 Special hazards arising from the substance or mixture
Danger of receptacles bursting because of high vapour pressure when heated.
In case of fire, the following can be released:
Nitrogen oxides (NOx)
Hydrogen cyanide (HCN)
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 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

6.1 Personal precautions, protective equipment and emergency procedures
Use respiratory protective device against the effects of fumes/dust/aerosol.
Remove persons from danger area.
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
Protect from heat.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 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
Dispose contaminated material as waste according to item 13.
7 Handling and storage

7.1 Precautions for safe handling
Use only in well ventilated areas.
Take note of emission threshold.
Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
Do not spray onto a naked flame or any incandescent material.

7.2 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.
Store in a cool location.
Provide ventilation for receptacles.

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 cool, dry conditions in well sealed receptacles.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
Protect from heat and direct sunlight.
Store receptacle in a well ventilated area.

7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

| Ingredients with limit values that require monitoring at the workplace: |
| --- | |
| 101-68-8 4,4'-methylene diphenyl disocyanate | |

| PEL (USA) | Short-term value: C 0,2 mg/m³, C 0,02 ppm |
| REL (USA) | Short-term value: C 0,2* mg/m³, C 0,02* ppm |
| | Long-term value: 0,05 mg/m³, 0,005 ppm |
| | *10-min |

(Contd. on page 7)
### Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

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<table>
<thead>
<tr>
<th>Trade name: Touch N Seal RF 17 FR ICC Part - A</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV (USA)</td>
</tr>
<tr>
<td>EL (Canada)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
</tr>
<tr>
<td>811-97-2 Norflurane</td>
</tr>
<tr>
<td>WEEL (USA)</td>
</tr>
</tbody>
</table>

**DINELs** No further relevant information available.  
**PNECs** No further relevant information available.  
**Additional information:** The lists valid during the making were used as basis.

### 8.2 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.

**Respiratory protection:**

- 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](image)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Material of gloves**

- Nitrile rubber, NBR
- PVC gloves
- Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.  

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Not suitable are gloves made of the following materials:**

- Natural rubber, NR

**Eye protection:**

Contact lenses should not be worn.

(Contd. on page 8)
9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
- Form: Aerosolized liquid with compressed gas in cylinders
- Colour: Cream coloured
- Odour: Characteristic
- Odour threshold: Not determined.
- pH-value: Not determined.

Change in condition
- Melting point/Melting range: Not Determined.
- Boiling point/Boiling range: Not applicable, as aerosol.

Flash point:
- Not applicable, as aerosol.

Flammability (solid, gaseous):
- Not applicable.

Auto/Self-ignition temperature:
- Not determined.

Decomposition temperature:
- Not determined.

Self-igniting:
- Product is not self-igniting.

Danger of explosion:
- Product does not present an explosion hazard.

Explosion limits:
- Lower: Not determined.
- Upper: Not determined.

Vapour pressure at 20 °C:
- 5716 hPa

Density at 20 °C:
- 1.03 g/cm³

Relative density:
- Not determined.

Vapour density:
- Not determined.

Evaporation rate:
- Not applicable.
10 Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions
Reacts with alcohols, amines, aqueous acids and alkalis.
Contact with acids releases toxic gases.
Danger of receptacles bursting because of high vapour pressure when heated.
Reacts with oxidizing agents.
Exothermic polymerization.
10.4 Conditions to avoid Store away from oxidizing agents.
10.5 Incompatible materials: Contact with acids liberates toxic gas.
10.6 Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Ammonia
Isocyanate
Nitrogen oxides

11 Toxicological information

11.1 Information on toxicological effects
Acute toxicity:
LD/LC50 values relevant for classification:
101-68-8 4,4’-methylene diphenyl 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:
Sensitization possible through inhalation.
Sensitization possible through skin contact.
12 Ecological information

12.1 Toxicity
Aquatic toxicity: The product contains materials that are harmful to the environment.
12.2 Persistence and degradability The product is partially biodegradable. Significant residuals remain.
12.3 Bioaccumulative potential Does not accumulate in organisms.
12.4 Mobility in soil No further 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.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation
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.
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
Contact waste processors for recycling information.

Uncleaned packaging:
Recommendation:
Packagings that may not be cleansed are to be disposed of in the same manner as the product.
Disposal must be made according to official regulations.
### 14 Transport information

<table>
<thead>
<tr>
<th>14.1 UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>UN3500</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>DOT, IMDG, IATA</td>
<td>Chemical under pressure, n.o.s. (Fluorinated Hydrocarbon, Nitrogen)</td>
</tr>
<tr>
<td>ADR</td>
<td>3500 CHEMICAL UNDER PRESSURE, N.O.S. (Fluorinated Hydrocarbon, Nitrogen)</td>
<td></td>
</tr>
</tbody>
</table>

#### 14.3 Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class</strong></td>
</tr>
<tr>
<td><strong>Label</strong></td>
</tr>
</tbody>
</table>

#### ADR

| Class | 2, 8A Gases. |
| Label | 2.2 |

#### IMDG, IATA

| Class | 2.2 |
| Label | 2.2 |

#### 14.4 Packing group

| DOT, ADR, IMDG, IATA | Not Regulated |

#### 14.5 Environmental hazards:

- Marine pollutant: No
- Special precautions for user: Warning: Gases.
- Danger code (Kemler): 20
- EMS Number: F-D,S-U

#### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

- Not applicable.

#### Transport/Additional information:

<table>
<thead>
<tr>
<th>ADR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Limited quantities (LQ)</strong></td>
</tr>
<tr>
<td><strong>Transport category</strong></td>
</tr>
</tbody>
</table>
## 15 Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**United States (USA)**

**SARA**

<table>
<thead>
<tr>
<th>Section 355 (extremely hazardous substances):</th>
<th>None of the ingredients is listed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 313 (Specific toxic chemical listings):</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>9016-87-9 diphenylmethanediisocyanate, isomers and homologues</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>101-68-8 4,4'-methylene diphenyl diisocyanate</td>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

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

All ingredients are listed.

**Proposition 65 (California):**

<table>
<thead>
<tr>
<th>Chemicals known to cause cancer:</th>
<th>None of the ingredients is listed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals known to cause reproductive toxicity for females:</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>Chemicals known to cause reproductive toxicity for males:</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>Chemicals known to cause developmental toxicity:</td>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

**Carcinogenic Categories**

**EPA (Environmental Protection Agency)**

| 9016-87-9 diphenylmethanediisocyanate, isomers and homologues | CBD |
| 101-68-8 4,4'-methylene diisocyanate | CBD |

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

| 9016-87-9 diphenylmethanediisocyanate, isomers and homologues | 3 |
| 101-68-8 4,4'-methylene diisocyanate | 3 |

**TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

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

None of the ingredients is listed.

**Canada**

| Canadian Domestic Substances List (DSL) | All ingredients are listed. |

(Contd. on page 13)
**Trade name:** Touch N Seal RF 17 FR ICC Part - A

### Canadian Ingredient Disclosure list (limit 0.1%)

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>101-68-8</td>
<td>4,4'-methylene diphenyl diisocyanate</td>
<td></td>
</tr>
</tbody>
</table>

### Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

### Other regulations, limitations and prohibitive regulations

#### Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

### 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.

#### Relevant phrases

- **H280** Contains gas under pressure; may explode if heated.
- **H315** Causes skin irritation.
- **H317** May cause an allergic skin reaction.
- **H319** Causes serious eye irritation.
- **H332** Harmful if inhaled.
- **H334** May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **H335** May cause respiratory irritation.
- **H373** May cause damage to organs through prolonged or repeated exposure.
- **R20** Harmful by inhalation.
- **R36/37/38** Irritating to eyes, respiratory system and skin.
- **R42/43** May cause sensitisation by inhalation and skin contact.

#### Abbreviations and acronyms:

- **ADR:** Accord européen sur le transport des marchandises dangereuses par Route (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
- **GHS:** Globally Harmonized System of Classification and Labelling of Chemicals
- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **EINECS:** European Inventory of Existing Commercial Chemical Substances
- **ELINCS:** European List of Notified Chemical Substances
- **CAS:** Chemical Abstracts Service (division of the American Chemical Society)
- **NFPA:** National Fire Protection Association (USA)
- **HMIS:** Hazardous Materials Identification System (USA)
- **WHMIS:** Workplace Hazardous Materials Information System (Canada)
- **DNEL:** Derived No-Effect Level (REACH)
- **PNEC:** Predicted No-Effect Concentration (REACH)
- **LC50:** Lethal concentration, 50 percent
- **LD50:** Lethal dose, 50 percent
- **Flammable aerosols, Hazard Category 3**
- **Press. Gas:** Gases under pressure: Compressed gas
- **Acute Tox. 4:** Acute toxicity, Hazard Category 4
- **Skin Irrit. 2:** Skin corrosion/irritation, Hazard Category 2
- **Eye Irrit. 2:** Serious eye damage/eye irritation, Hazard Category 2
- **Resp. Sens. 1:** Sensitisation - Respirat., Hazard Category 1

(Contd. on page 14)
### Trade name: Touch N Seal RF 17 FR ICC Part - A

<table>
<thead>
<tr>
<th>Skin Sens. 1: Sensitisation - Skin, Hazard Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3</td>
</tr>
<tr>
<td>STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2</td>
</tr>
</tbody>
</table>

#### Sources
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