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

- · 1.1 Product identifier
- · Trade name: Touch n Seal Mine Foam Kit 180, 200, RF-17 Side A
- · Article number: EHS2322 SDS / A
- 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



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.

H229 Pressurised container: May burst if heated.

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

Xn; Harmful

R20-40-48/20: Harmful by inhalation. Limited evidence of a carcinogenic effect. Harmful: danger of

serious damage to health by prolonged exposure through inhalation.

Xn; Sensitising

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

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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:

diphenylmethanediisocyanate,isomeres and homologues

4,4'-methylenediphenyl diisocyanate

halogenated hydrocarbon

#### · 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

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.

#### · 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.

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- 1,8 % by mass of the contents are flammable
- · Hazard description:
- · WHMIS-symbols:
- A Compressed gas

D2A - Very toxic material causing other toxic effects



· NFPA ratings (scale 0 - 4)



Health = 2Fire = 0Reactivity = 1

· HMIS-ratings (scale 0 - 4)



\*2 Health = \*2 Fire = 0

\* - Indicates a long term health hazard from repeated or prolonged exposures.

### · HMIS Long Term Health Hazard Substances

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

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

- · 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:

CAS: 9016-87-9

diphenylmethanediisocyanate, isomeres and homologues 25-50% 🔀 Xn R20; 🔀 Xn R42/43; 🔀 Xi R36/37/38 Carc. Cat. 3 Resp. Sens. 1, H334; STOT RE 2, H373 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335

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	(Cont	d. of page 3)
CAS: 101-68-8 EINECS: 202-966-0 Index number: 615-005-00-9		25-50%
	Resp. Sens. 1, H334; STOT RE 2, H373 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 811-97-2	Norflurane	10-25%
EINECS: 212-377-0	♦ Press. Gas, H280	
	halogenated hydrocarbon	< 10%
	Xn R22	
• 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

#### · Hazards

Danger of impaired breathing.

Danger of pulmonary oedema.

Danger of convulsion.

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Danger of disturbed cardiac rhythm.

Condition may deteriorate with alcohol consumption.

4.3 Indication of any immediate medical attention and special treatment needed

Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary oedema.

Monitor circulation, possible shock treatment.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

# 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.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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### 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'-	methylenediphenyl diisocyanate
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
TLV (USA)	0,051 mg/m³, 0,005 ppm
EL (Canada)	Short-term value: C 0,01 ppm Long-term value: 0,005 ppm Skin; S

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	(Contd. of page 6	3)
EV (Canada)	0,005 ppm	
811-97-2 Nor	flurane	
WEEL (USA)	1000 ppm	
halo	genated hydrocarbon	
PEL (USA)	790 mg/m³, 200 ppm	Ī
REL (USA)	790 mg/m³, 200 ppm	
TLV (USA)	793 mg/m³, 200 ppm	
EL (Canada)	200 ppm	
EV (Canada)	Short-term value: 990 mg/m³, 250 ppm Long-term value: 790 mg/m³, 200 ppm	

- · DNELs 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

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

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· Eye protection:

Contact lenses should not be worn.



Safety glasses

Goggles recommended during refilling

- · Body protection: Impervious protective clothing
- · Limitation and supervision of exposure into the environment

No further relevant information available.

· Risk management measures

See Section 7 for additional information. No further relevant information available.

# 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: 400 °C (752 °F)
 Decomposition temperature: Not determined.

Self-igniting: Product is not self-igniting.

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

· Explosion limits:

Lower:0,4 Vol %Upper:Not determined.

Vapour pressure at 20 °C:
 Density at 20 °C:
 Relative density
 Vapour density
 Evaporation rate
 5716 hPa
 1,03 g/cm³
 Not determined.
 Not determined.
 Not applicable.

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· 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.

· Solvent content:

**VOC (US EPA Method 24)** 32,8 g/l

• 9.2 Other information No further relevant information available.

# 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'-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:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

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### · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

- · **Sensitisation:** Sensitization possible by inhalation and/or dermal contact.
- · Repeated dose toxicity: Repeated exposures may result in skin and/or respiratory sensitivity.

# 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.

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	(Contd. of page 10)
14 Transport information	
· 14.1 UN-Number · DOT, ADR, IMDG, IATA · 14.2 UN proper shipping name	UN3500
· DOT, IMDG, IATA	Chemical under pressure, n.o.s. (Fluorinated Hydrocarbon, Nitrogen)
· ADR · 14.3 Transport hazard class(es)	3500 CHEMICAL UNDER PRESSURE, N.O.S. (Fluorinated Hydrocarbon, Nitrogen)
· DOT	
To demand	
· Class · Label	2.2 2.2
· ADR	
· Class · Label	2 8A Gases. 2.2
· IMDG, IATA	
· Class · Label	2.2 2.2
· 14.4 Packing group	
· DOT, ADR, IMDG, IATA · 14.5 Environmental hazards:	Not Regulated
· Marine pollutant:	No
<ul> <li>14.6 Special precautions for user</li> <li>Danger code (Kemler):</li> </ul>	Warning: Gases. 20
· EMS Number:	F-D,S-U
<ul> <li>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>	Not applicable.
· Transport/Additional information:	
<ul><li>ADR</li><li>Limited quantities (LQ)</li></ul>	120 ml
· Transport category	3

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C/E

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 $\cdot \ \, \text{Tunnel restriction code}$ 

• UN "Model Regulation": UN3500, CHEMICAL UNDER PRESSURE, N.O.S.

(Fluorinated Hydrocarbon, Nitrogen), 2.2

### 15 Regulatory information

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

· Section 355 (extren	nely hazardous	s substances):
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None of the ingredients is 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 is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic Categories

· EPA (Environmental F	Protection Agency)
------------------------	--------------------

9016-87-9 diphenylmethanediisocyanate,isomeres and homologues	CBD
101-68-8 4,4'-methylenediphenyl diisocyanate	CBD

### · IARC (International Agency for Research on Cancer)

9016-87-9 diphenylmethanediisocyanate,isomeres and homologues	3
101-68-8 4.4'-methylenediphenyl 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.

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- · Canadian Ingredient Disclosure list (limit 0.1%)
  - 101-68-8 4,4'-methylenediphenyl diisocyanate
- · 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

1 1000	
H280	Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

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.

R22 Harmful if swallowed.

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

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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 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

#### Sources

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