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

- **1.1 Product identifier**
  - Trade name: Mine Foam Kit 180 / 200 / RF-17 Side B
  - Article number: EHS2322 - SDS / B 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**
    - Acute Tox. 4 H302 Harmful if swallowed.
    - Skin Irrit. 2 H315 Causes skin irritation.
    - Eye Irrit. 2 H319 Causes serious eye irritation.
    - 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
    - R22: Harmful if swallowed.
  - 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.

(Contd. on page 2)
Trade name: Mine Foam Side B

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

- Signal word Warning

- Hazard-determining components of labelling:
  Polyether polyol
  halogenated aliphatic polyether polyol
  halogenated hydrocarbon

- Hazard statements
  H229 Pressurised container: May burst if heated.
  H302 Harmful if swallowed.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H335 May cause respiratory irritation.

- Precautionary statements
  P280 Wear protective gloves / eye protection.
  P264 Wash thoroughly after handling.
  P261 Avoid breathing mist/vapours/spray.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  P332+P313 If skin irritation occurs: Get medical advice/attention.
  P337+P313 If eye irritation persists: Get medical advice/attention.
  P302+P352 IF ON SKIN: Wash with plenty of soap and water.

- Additional information:
  Contains Neodecanolic Acid. 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.
  7,8 % by mass of the contents are flammable

- Hazard description:

- WHMIS-symbols:
  A - Compressed gas
  D2B - Toxic material causing other toxic effects

(Contd. of page 1)
Trade name: Mine Foam Side B

- NFPA ratings (scale 0 - 4)
  - Health = 2
  - Fire = 0
  - Reactivity = 1

- HMIS-ratings (scale 0 - 4)
  - HEALTH: 2
  - FIRE: 0
  - REACTIVITY: 1

- HMIS Long Term Health Hazard Substances
  - None of the ingredients is listed.

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:
  - Polyether polyol
    - Xn R22; Xi R36/37/38
    - Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335
    - 25-50%
  - Norflurane
    - Press. Gas. H280
    - 10-25%
  - halogenated aliphatic polyether polyol
    - Xn R22; Xi R36
    - Acute Tox. 4, H302; Eye Irrit. 2, H319
    - 10-25%
  - halogenated hydrocarbon
    - Xn R22
    - Acute Tox. 4, H302
    - <10%

- 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:
    - Immediately remove any clothing soiled by the product.
    - Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Trade name: Mine Foam Side B

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
  If skin irritation continues, consult a doctor.
- 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:
  Rinse out mouth and then drink plenty of water.
  Do not induce vomiting; call for medical help immediately.
- 4.2 Most important symptoms and effects, both acute and delayed
  Gastric or intestinal disorders.
  Dizziness
  Coughing
  Allergic reactions
- Hazards No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
  If swallowed, gastric irritation.
  If necessary oxygen respiration treatment.
  Treat skin and mucous membrane with antihistamine and corticoid preparations.
  In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

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
  In case of fire, the following can be released:
  Nitrogen oxides (NOx)
  Carbon monoxide (CO)
  Danger of receptacles bursting because of high vapour pressure when heated.
- 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.
  Ensure adequate ventilation
  Wear protective equipment. Keep unprotected persons away.

(Contd. on page 5)
Trade name: Mine Foam Side B

6.2 Environmental precautions:
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:
Allow to solidity. Pick up mechanically.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

6.4 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

7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.

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.

Information about storage in one common storage facility:
Do not store together with oxidizing and acidic materials.
Store away from foodstuffs.

Further information about storage conditions:
Store in cool, dry conditions in well sealed receptacles.
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:

<table>
<thead>
<tr>
<th>811-97-2 Norflurane</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEL (USA) 1000 ppm</td>
</tr>
</tbody>
</table>

halogenated hydrocarbon

|  | 790 mg/m³, 200 ppm |
|---------------------|
| PEL (USA)  | 790 mg/m³, 200 ppm |
| REL (USA)  | 790 mg/m³, 200 ppm |
| TLV (USA)  | 790 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.
### Trade name: Mine Foam Side B

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

#### 8.2 Exposure information
- **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.
    - Do not inhale gases / fumes / aerosols.
    - 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**

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.

**Eye protection:**

Contact lenses should not be worn.

![Safety glasses]

**Body protection**: Protective work 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:** Aerosol
    - **Colour:** Not determined.
    - **Odour:** Sweetish
    - **Odour threshold:** Not determined.
    - **pH-value:** Not determined.
  - **Change in condition**
    - **Melting point/Melting range:** Not Determined.
    - **Boiling point/Boiling range:** -15 °F / -26 °C
  - **Flash point:** Not applicable, as aerosol.
  - **Flammability (solid, gaseous):** Not applicable.
  - **Auto/Self-ignition temperature:** >500 °F / >260 °C
  - **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:** Not determined.
  - **Relative density**
  - **Vapour density**
  - **Evaporation rate**
  - **Solubility in / Miscibility with water:** Fully miscible.
  - **Partition coefficient (n-octanol/water):** Not determined.
  - **Viscosity**
    - **Dynamic:** Not determined.
    - **Kinematic:** Not determined.
  - **Solvent content:**
    - **VOC (US EPA Method 24)** 32,0 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 catalysts.
  Reacts with peroxides.
  Reacts with strong oxidizing agents.
  Reacts with strong acids.
  Exothermic polymerization.
- 10.4 Conditions to avoid Store away from oxidizing agents.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:
  Carbon monoxide and carbon dioxide
  Phosphorus compounds
  Chlorine compounds
  Nitrogen oxides (NOx)
  Poisonous gases/vapours
  Phosgene
  Hydrogen chloride (HCl)

11 Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity:
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Irritating effect.
  - Sensitization:
    Sensitizing effect by skin contact is possible by prolonged exposure.
    Sensitizing effect through inhalation is possible by prolonged exposure.
  - 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
    Asphyxiant gas.
  - 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 No further relevant information available.
12.4 Mobility in soil No further relevant information available.
Additional ecological information:
General notes:
This statement was deduced from the properties of the single components.
The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

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
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information
14.1 UN-Number
DOT, ADR, IMDG, IATA UN3500
14.2 UN proper shipping name
DOT, IMDG, IATA Chemical under pressure, n.o.s. (Fluorinated Hydrocarbon, Nitrogen)
ADR 3500 CHEMICAL UNDER PRESSURE, N.O.S. (Fluorinated Hydrocarbon, Nitrogen)
14.3 Transport hazard class(es)
DOT
Class 2 Gases.
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Printing date 03.04.2014
Revision: 03.04.2014

Trade name: Mine Foam Side B

- Label 2.2
  (Contd. of page 9)
- ADR

- Class 2 8A Gases.
- Label 2.2
- IMDG, IATA

- Class 2 Gases.
- Label 2.2
- 14.4 Packing group
- DOT, ADR, IMDG, IATA Not Regulated
- 14.5 Environmental hazards:
- Marine pollutant: No
- 14.6 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:

- ADR
- Limited quantities (LQ) 120 ml
- Transport category 3
- Tunnel restriction code C/E
- 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 (extremely hazardous substances):
  None of the ingredients is listed.
- Section 313 (Specific toxic chemical listings):
  None of the ingredients is listed.
- TSCA (Toxic Substances Control Act):
  All ingredients are listed.

(Contd. on page 11)
Trade name: Mine Foam Side B

· Proposition 65 (California):
  (Contd. of page 10)
  · 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 Protection Agency)
    None of the ingredients is listed.
  · IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  · 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.
  · Canadian Ingredient Disclosure list (limit 0.1%)
    None of the ingredients is listed.
  · 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.
  · H302 Harmful if swallowed.
  · H315 Causes skin irritation.
  · H319 Causes serious eye irritation.

(Contd. on page 12)
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Trade name: Mine Foam Side B

<table>
<thead>
<tr>
<th>H335</th>
<th>May cause respiratory irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>R22</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>R36</td>
<td>Irritating to eyes.</td>
</tr>
<tr>
<td>R36/37/38</td>
<td>Irritating to eyes, respiratory system and skin.</td>
</tr>
</tbody>
</table>

• **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)
  - 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
  - STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

• **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