1 Identification

· Product identifier
  · Trade name: POWERFOAM 12 and 29 oz.
  · Relevant identified uses of the substance or mixture and uses advised against
    No further relevant information available.
  · Application of the substance / the mixture Polyurethane foam hand held

· Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    Powers Fasteners, Inc.
    2 Powers Lane
    Brewster, NY 10509 / USA
  · Information department:
    Phone +1 800-524-3244
    Fax +1 877-871-1965
  · Emergency telephone number:
    CHEMTREC: +1 703-741-5500 (24h Emergency Contact Information Only)
    USA: 800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture
  · Classification according to Directive 67/548/EEC or Directive 1999/45/EC
    Harmful
    Harmful by inhalation. Limited evidence of a carcinogenic effect. Harmful: danger of serious
damage to health by prolonged exposure through inhalation.
  · Irritant
    Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin
    contact.
  · Extremely flammable
    Extremely flammable.
    May cause long-term adverse effects in the aquatic environment. May cause harm to breastfed
    babies.

· Information concerning particular hazards for human and environment:
  The product has to be labeled due to the calculation procedure of international guidelines.
  Warning! Pressurized container.

· Classification system:
  The classification was made according to the latest editions of international substances lists, and
  expanded upon from company and literature data.

· Label elements
  · Labelling according to EU guidelines:
    The product has been classified and marked in accordance with directives on hazardous materials.
  · Code letter and hazard designation of product:
    ![Hazard symbol]
    Harmful
    Extremely flammable

· Hazard-determining components of labeling:
  diphenylmethanediisocyanate, isomers and homologues

· Risk phrases:
  Extremely flammable.
  Harmful by inhalation.
  Irritating to eyes, respiratory system and skin.
  Limited evidence of a carcinogenic effect.

(Contd. on page 2)
Trade name: POWERS FOAM 12 and 29 oz.

May cause sensitisation by inhalation and skin contact. Harmful: danger of serious damage to health by prolonged exposure through inhalation. May cause long-term adverse effects in the aquatic environment. May cause harm to breastfed babies.

- **Safety phrases:**
  - Keep out of the reach of children.
  - Keep away from sources of ignition - No smoking.
  - Do not breathe spray.
  - After contact with skin, wash immediately with plenty of soap and water.
  - Wear suitable protective clothing and gloves.
  - If swallowed, seek medical advice immediately and show this container or label.
  - Use only in well-ventilated areas.

- **Special labeling of certain preparations:**
  - Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
  - Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
  - This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.
  - Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.
  - Contains isocyanates. See information supplied by the manufacturer.
  - 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.

- **Classification system:**
  - **NFPA ratings (scale 0 - 4):**
    - Health = 2
    - Fire = 0
    - Reactivity = 3
  - **HMIS-ratings (scale 0 - 4):**
    - Health = *2
    - Fire = 0
    - Reactivity = 3

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

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

#### Dangerous components:
- 9016-87-9 diphenylmethanediisocyanate,isomers and homologues 40-50%
- 13674-84-5 tris(2-chlorisopropyl)-phosphate 1-10%
- 75-28-5 isobutane 1-10%
- 85535-85-9 alkanes, C14-17, chloro 1-10%
- 115-10-6 dimethyl ether 1-10%
- 74-98-6 propane <5%
4 First-aid measures

· Description of first aid measures
  · General information:
    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:
    If skin irritation continues, consult a doctor.
    Immediately wash with water and soap and rinse thoroughly.
  · After eye contact:
    Rinse opened eye for several minutes under running water. Then consult a doctor.
  · After swallowing:
    Immediately call a doctor.
  · Information for doctor:
    · Most important symptoms and effects, both acute and delayed
      No further relevant information available.
    · Indication of any immediate medical attention and special treatment needed
      No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
  · Suitable extinguishing agents:
    Foam
    CO2, sand, extinguishing powder. Do not use water.
    · For safety reasons unsuitable extinguishing agents: Water with full jet
  · Special hazards arising from the substance or mixture
    In case of fire, the following can be released:
    Nitrogen oxides (NOx)
    Carbon monoxide (CO)
    Hydrogen cyanide (HCN)
  · Advice for firefighters
    · Protective equipment: Mouth respiratory protective device.
    · Additional information
      Cool endangered receptacles with water spray.
      Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Keep away from ignition sources
  Ensure adequate ventilation
  Wear protective equipment. Keep unprotected persons away.
· Environmental precautions:
  Do not allow to enter sewers/ surface or ground water.
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
· Methods and material for containment and cleaning up:
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Do not flush with water or aqueous cleansing agents
Trade name: POWERS FOAM 12 and 29 oz.

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
  Ensure that suitable extractors are available on processing machines
  Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires:
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.

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:
    Store away from water.
    Do not store together with acids.
    Do not store together with alkalis (caustic solutions).
  - Further information about storage conditions:
    Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
    Protect from humidity and water.
    Keep receptacle tightly sealed.
    Store in cool, dry conditions in well sealed receptacles.
    Protect from heat and direct sunlight.

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

8 Exposure controls/personal protection

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

- Control parameters
  - Components with limit values that require monitoring at the workplace:
    | Compound       | REL  | WEEL |
    |----------------|------|------|
    | 75-28-5 isobutane | 1900 mg/m³, 800 ppm | |
    | 115-10-6 dimethyl ether | 1000 ppm | |
    | 74-98-6 propane | 1800 mg/m³, 1000 ppm |
    | REL | 1800 mg/m³, 1000 ppm |
    | TLV | Varies mg/m³, 1000 ppm |

- Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      Immediately remove all soiled and contaminated clothing.
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes and skin.
Trade name: POWERS FOAM 12 and 29 oz.

- **Breathing equipment:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **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.

- **Eye protection:**
  [Tightly sealed goggles]

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**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - Form: Aerosol
    - Color: According to product specification
  - **Odor:** Characteristic

- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.

- **Flash point:** -21 °C (-6 °F)

- **Ignition temperature:** 199 °C (390 °F)

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Heating may cause an explosion.

- **Explosion limits:**
  - Lower: 3.0 Vol %
  - Upper: 18.6 Vol %

- **Density:** Not determined.

- **Solubility in / Miscibility with Water:** Insoluble.

- **Solvent content:**
  - VOC content: 15.4 %
10 Stability and reactivity

- Reactivity
  - Chemical stability
  - Thermal decomposition / conditions to be avoided:
    No decomposition if used according to specifications.
- Possibility of hazardous reactions: Contact with water releases flammable gases.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products:
  - Hydrogen cyanide (prussic acid)
  - Carbon monoxide
  - Nitrogen oxides (NOx)

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 3600 mg/kg (rat)
  - 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.
  - Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations:
    - Harmful
    - Irritant
  - Carcinogenic categories
    - IARC (International Agency for Research on Cancer)
      9016-87-9 diphenylmethanediisocyanate, isomers and homologues 3
    - NTP (National Toxicology Program)
      None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
Trade name: POWERS FOAM 12 and 29 oz.

Additional ecological information:
- General notes:
  Water hazard class 1 (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.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations
- Waste treatment methods
  - Recommendation:
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information
- UN-Number
  - DOT
  - ADR, IMDG, IATA
    UN1950
    1950
- UN proper shipping name
  - ADR
    1950 AEROSOLS
  - IMDG
    AEROSOLS
  - IATA
    AEROSOLS, flammable
- Transport hazard class(es)
  - DOT, IMDG, IATA
    - Class
      2.1
    - Label
      2.1
  - ADR
    - Class
      2.1
    - Label
      2.1
- Packing group
  - DOT, ADR, IMDG, IATA
    Void
- Environmental hazards:
  - Marine pollutant: No
- Special precautions for user
  - Warning: Gases
    - EMS Number: F-D,S-U
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.
Trade name: POWERS FOAM 12 and 29 oz.

- Transport/Additional information:
  - ADR
  - Remarks: LQ: 1l

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      None of the ingredient is listed.
    - Section 313 (Specific toxic chemical listings):
      9016-87-9 diphenylmethanediisocyanate, isomers and homologues
    - TSCA (Toxic Substances Control Act):
      All ingredients are listed.
    - Proposition 65
      - 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)
      9016-87-9 diphenylmethanediisocyanate, isomers and homologues D;CBD
    - 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.
    - OSHA-Ca (Occupational Safety & Health Administration)
      None of the ingredients is listed.
  - Product related hazard informations:
    The product has been classified and marked in accordance with directives on hazardous materials.
    - Hazard symbols:
      Harmful
      Extremely flammable
  - Hazard-determining components of labeling:
    diphenylmethanediisocyanate, isomers and homologues
  - Risk phrases:
    Extremely flammable.
    Harmful by inhalation.
    Irritating to eyes, respiratory system and skin.
Limited evidence of a carcinogenic effect.
May cause sensitisation by inhalation and skin contact.
Harmful: danger of serious damage to health by prolonged exposure through inhalation.
May cause long-term adverse effects in the aquatic environment.
May cause harm to breastfed babies.

- **Safety phrases:**
  - Keep out of the reach of children.
  - Keep away from sources of ignition - No smoking.
  - Do not breathe spray.
  - After contact with skin, wash immediately with plenty of soap and water.
  - Wear suitable protective clothing and gloves.
  - If swallowed, seek medical advice immediately and show this container or label.
  - Use only in well-ventilated areas.

- **Special labeling of certain preparations:**
  - Contains isocyanates. See information supplied by the manufacturer.
  - 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.

- **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.