

Printing date 06/08/2015

Reviewed on 06/08/2015

1 Identification

· **Product identifier**

· **Trade name:** POWERFOAM

· **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 B2

· **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**

Flam. Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurized container: May burst 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.
Carc. 2	H351	Suspected of causing cancer.
Lact.	H362	May cause harm to breast-fed children.
STOT SE 3	H335	May cause respiratory irritation.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 4	H413	May cause long lasting harmful effects to aquatic life.

· **Label elements**

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

diphenylmethanediisocyanate, isomeres and homologues

· **Hazard statements**

Extremely flammable aerosol. Pressurized container: May burst if heated.
Harmful if inhaled.

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- Causes skin irritation.
- Causes serious eye irritation.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.
- Suspected of causing cancer.
- May cause harm to breast-fed children.
- May cause respiratory irritation.
- May cause damage to organs through prolonged or repeated exposure.
- May cause long lasting harmful effects to aquatic life.

Precautionary statements

- Obtain special instructions before use.
- Keep out of reach of children.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not spray on an open flame or other ignition source.
- Do not pierce or burn, even after use.
- In case of inadequate ventilation wear respiratory protection (a protective mask with an appropriate gas filter - i.e. type A1 according to standard EN 14387).
- Wear protective gloves/protective clothing/eye protection.
- Do not breathe vapours/spray.
- If on skin: Wash with plenty of water/ soap.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF exposed or concerned: Get medical advice/attention.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
- Dispose of container to in accordance with local/regional/national/international regulation.

Classification system:

NFPA ratings (scale 0 - 4)



HMIS-ratings (scale 0 - 4)



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, isomeres 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%

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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 (NO_x)
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.

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· **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

· **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:**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

WEEL	Short-term value: 0.07 mg/m ³
	Long-term value: 0.02 mg/m ³

115-10-6 dimethyl ether

WEEL	Long-term value: 1920 mg/m ³ , 1000 ppm
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· **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.

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Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **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.

· **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:**



Tightly sealed goggles

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.

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- **Solvent content:**
- **VOC content:** 15.4 %
- **Other information** No further relevant information available.

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:**
- **115-10-6 dimethyl ether**
- Inhalative LC50/4 h 308 mg/l (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, isomeres and homologues 3
- **NTP (National Toxicology Program)**
- None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**
- None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.

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- **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.
- **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	UN1950
· ADR, IMDG, IATA	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 5F Gases
· 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

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· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Remarks:** LQ: 1I

· **UN "Model Regulation":** UN1950, Aerosols, 2.1

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, isomeres 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, isomeres 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.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** Danger

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Safety Data Sheet

acc. to OSHA HCS

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- **Hazard-determining components of labeling:**
diphenylmethanediisocyanate, isomeres and homologues
- **Hazard statements**
Extremely flammable aerosol. Pressurized container: May burst if heated.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing cancer.
May cause harm to breast-fed children.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
May cause long lasting harmful effects to aquatic life.
- **Precautionary statements**
Obtain special instructions before use.
Keep out of reach of children.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
In case of inadequate ventilation wear respiratory protection (a protective mask with an appropriate gas filter - i.e. type A1 according to standard EN 14387).
Wear protective gloves/protective clothing/eye protection.
Do not breathe vapours/spray.
If on skin: Wash with plenty of water/ soap.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Dispose of container in accordance with local/regional/national/international regulation.
- **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.

- **Date of preparation / last revision** 06/08/2015 / -
- **Abbreviations and acronyms:**
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
Lact.: Reproductive toxicity, Additional category, Effects on or via lactation
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4