



Abesco FP200 Foam

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name Abesco FP200 FR Expanding Foam
Description Fire Retardant Polyurethane Foam In Hand Held Aerosol Dispenser
Supplier Abesco Fire LLC
Address 9777 Satellite Blvd, Unit 325
 Orlando, FL 32837
 USA
Phone Number 407-851-3300
Fax Number 407-851-3388
E-mail ustechnical@abesco.net

2. COMPOSITION / INFORMATION ON THE COMPONENTS

| Substance | CAS | Range (%) |
|--|------------|-----------|
| diphenylmethanediisocyanate, isomeres and homologues | 9016-87-9 | 40-45% |
| tris(2-chlorisopropyl)-phosphate | 13674-84-5 | 15-25% |
| 1,1,1,2-Tetrafluorethane | 811-97-2 | 10-20% |
| dimethyl ether | 115-10-6 | 1-5% |

3. HAZARD 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.

· **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**

· **Labeling 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:**



Harmful / Extremely flammable (In Aerosol Can)

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· 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.

· Safety phrases:

Keep out of the reach of children.

Keep away from sources of ignition - No smoking.

Do not breathe aerosol.

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:

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.

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.

Contains isocyanates. See information supplied by the manufacturer.

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

B5 - Flammable aerosol

D2A - Very toxic material causing other toxic effects



· Classification system:

· NFPA ratings (scale 0 - 4)

Health = 2

Fire = 0

Reactivity = 3



· HMIS-ratings (scale 0 - 4)

Health = *2

Fire = 0

Reactivity = 3

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4. 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: Immediately wash with water and soap and rinse thoroughly.

· After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: Immediately call a doctor.

5. FIRE FIGHTING MEASURES

· 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

Carbon monoxide (CO)

Nitrogen oxides (NO_x)

Hydrogen cyanide (HCN)

· Protective equipment: Mouth respiratory protective device.

· Additional information Cool endangered receptacles with water spray.

6. ACCIDENTAL RELEASE MEASURES

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

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.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

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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 good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· Storage:

· Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

· Information about storage in one common storage facility:

Store away from oxidizing agents.

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

· Further information about storage conditions:

Store in dry conditions.

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

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.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional information about design of technical systems:

No further data; see item 7.

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|---|
| Components with limit values that require monitoring at the workplace: |
| 115-10-6 dimethyl ether |
| EL 1000 ppm |

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

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.

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.

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

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9. 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

· Ignition temperature: 199°C

· Auto igniting: Product is not self-igniting.

· Danger of explosion: Heating may cause an explosion.

· Density: Not determined.

· Solubility in / Miscibility with Water: Insoluble.

· Other information No further relevant information available.

10. STABILITY AND REACTIVITY

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products:

Carbon monoxide

Nitrogen oxides (NO_x)

Hydrogen cyanide (prussic acid)

11. TOXICOLOGICAL INFORMATION

· 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

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12. ECOLOGICAL INFORMATION

- **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.
- **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.

13. DISPOSAL INFORMATION

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 |
| · TDG, IMDG, IATA | 1950 |
| · UN proper shipping name | |
| · DOT, IATA | AEROSOLS, flammable |
| · TDG | 1950 AEROSOLS |
| · IMDG | AEROSOLS |
| · Transport hazard class(es) | |
| · DOT, IMDG, IATA | |
| · Class | 2.1 |
| · Label | 2.1 |
| · TDG (Transport dangerous goods): | |
| · TDG class: | 2 5F Gases |
| · Label | 2.1 |
| · Packing group | |
| · DOT, TDG, 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. |
| · Transport/Additional information: | |
| · TDG | |
| · Remarks: | LQ: 1I |

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15. REGULATORY INFORMATION

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- **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 |
| · 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.
- **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.
- **Canadian substance listings:**
- **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.
- **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 labelling:**
diphenylmethanediisocyanate, isomeres and homologues
- **Risk phrases:**
Extremely flammable.
Harmful by inhalation.

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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.

· **Safety phrases:**

Keep out of the reach of children.
Keep away from sources of ignition - No smoking.
Do not breathe aerosol.
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.
Do not pierce or burn, even after use.

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.

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