

1 Identification

- **Product identifier**
- **Trade name:** 39352,39357 Flexible Urethane Foam
- **Article number:** 39352, 39357
- **Application of the substance / the mixture** Assembly foam
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SEM Products Inc.
1685 Overview Drive
Rock Hill, SC 29730
803 207 8225
- **Information department:**
cust_care@semproducts.com : SEM Products, Inc. 1685 Overview Dr. Rock Hill, SC 29730 : phone 1-800-831-1122, M - TH 7am - 4pm EDT
- **Emergency telephone number:** CHEMTREC 1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2 H351 Suspected of causing cancer.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
POLYMERIC MDI
diphenylmethanediisocyanate, isomers and homologues
4,4'-methylenediphenyl diisocyanate

(Contd. on page 2)

USA

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 1)

POLYETHER POLYOL

· **Hazard statements**

- 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.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P284 [In case of inadequate ventilation] wear respiratory protection.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P321 Specific treatment (see on this label).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P363 Wash contaminated clothing before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

(Contd. on page 3)



Printing date 06/28/2017

Reviewed on 06/20/2017

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 2)

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization:** Mixtures

· **Description:**

Mixture: consisting of the following components.

Weight percentages

· **Dangerous components:**

| | | |
|------------|--|----------|
| 52624-57-4 | POLYETHER POLYOL | 30 - 40% |
| 53862-89-8 | POLYMERIC MDI | 13 - 30% |
| 9016-87-9 | diphenylmethanediisocyanate, isomeres and homologues | 10 - 13% |
| 9049-71-2 | POLYETHER POLYOL | 10 - 13% |
| 101-68-8 | 4,4'-methylenediphenyl diisocyanate | 7 - 10% |
| 149-57-5 | 2-ethylhexanoic acid | ≤1% |

4 First-aid measures

· **Description of first aid measures**

· **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:** If symptoms persist consult 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:** Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

(Contd. on page 4)



Printing date 06/28/2017

Reviewed on 06/20/2017

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 3)

· **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.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

| | | |
|------------|---|------------------------|
| 9016-87-9 | diphenylmethanediisocyanate, isomers and homologues | 0.15 mg/m ³ |
| 101-68-8 | 4,4'-methylenediphenyl diisocyanate | 0.45 mg/m ³ |
| 77-58-7 | dibutyltin dilaurate | 1.1 mg/m ³ |
| 67762-90-7 | FUMED SILICA | 120 mg/m ³ |
| 1333-86-4 | Carbon black | 9 mg/m ³ |
| 280-57-9 | triethylenediamine | 5.1 mg/m ³ |
| 149-57-5 | 2-ethylhexanoic acid | 15 mg/m ³ |

· **PAC-2:**

| | | |
|------------|---|-------------------------|
| 9016-87-9 | diphenylmethanediisocyanate, isomers and homologues | 3.6 mg/m ³ |
| 101-68-8 | 4,4'-methylenediphenyl diisocyanate | 5 mg/m ³ |
| 77-58-7 | dibutyltin dilaurate | 8 mg/m ³ |
| 67762-90-7 | FUMED SILICA | 1,300 mg/m ³ |
| 1333-86-4 | Carbon black | 99 mg/m ³ |
| 280-57-9 | triethylenediamine | 56 mg/m ³ |
| 149-57-5 | 2-ethylhexanoic acid | 99 mg/m ³ |

· **PAC-3:**

| | | |
|------------|---|-------------------------|
| 9016-87-9 | diphenylmethanediisocyanate, isomers and homologues | 22 mg/m ³ |
| 101-68-8 | 4,4'-methylenediphenyl diisocyanate | 55 mg/m ³ |
| 77-58-7 | dibutyltin dilaurate | 48 mg/m ³ |
| 67762-90-7 | FUMED SILICA | 7,900 mg/m ³ |
| 1333-86-4 | Carbon black | 590 mg/m ³ |
| 280-57-9 | triethylenediamine | 340 mg/m ³ |
| 149-57-5 | 2-ethylhexanoic acid | 590 mg/m ³ |

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

No special measures required.
Ensure good ventilation/exhaustion at the workplace.

· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.

(Contd. on page 5)

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 4)

· **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:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

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

PEL Ceiling limit value: 0.2 mg/m³, 0.02 ppm

REL Long-term value: 0.05 mg/m³, 0.005 ppm
Ceiling limit value: 0.2* mg/m³, 0.02* ppm
*10-min

TLV Long-term value: 0.051 mg/m³, 0.005 ppm

149-57-5 2-ethylhexanoic acid

TLV Long-term value: 5* mg/m³
*as inhalable fraction and vapor

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

· **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.

Store protective clothing separately.

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:**

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



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **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.

(Contd. on page 6)

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 5)

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

| | |
|-----------------|------------------------------------|
| Form: | Liquid |
| Color: | According to product specification |
| Odor: | Characteristic |
| Odor threshold: | Not determined. |

· **pH-value:** Not determined.

· **Change in condition**

| | |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | 190 °C |

· **Flash point:** 121 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 400 °C

· **Decomposition temperature:** Not determined.

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

· **Danger of explosion:** Product does not present an explosion hazard.
In use, may form flammable/explosive vapour-air mixture.

· **Explosion limits:**

| | |
|--------|-----------|
| Lower: | 0.4 Vol % |
| Upper: | 0.0 Vol % |

· **Vapor pressure:** Not determined.

· **Density at 20 °C:** 1.07529 g/cm³

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **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:**

| | |
|-------------------|-------|
| Organic solvents: | 2.6 % |
| Water: | 0.7 % |

(Contd. on page 7)



Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 6)

| | |
|--------------------------|--|
| VOC content: | 2.6 % |
| Solids content: | 96.9 % |
| Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are 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.

- **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 |
| 101-68-8 | 4,4'-methylenediphenyl diisocyanate | 3 |
| 1333-86-4 | Carbon black | 2B |

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

USA

(Contd. on page 8)



Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 7)

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.
- **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, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Void |



Printing date 06/28/2017

Reviewed on 06/20/2017

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 8)

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

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

· **TSCA (Toxic Substances Control Act):**

52624-57-4 POLYETHER POLYOL

53862-89-8 POLYMERIC MDI

9016-87-9 diphenylmethanediisocyanate, isomers and homologues

9049-71-2 POLYETHER POLYOL

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

25265-71-8 oxydipropanol

77-58-7 dibutyltin dilaurate

67762-90-7 FUMED SILICA

1333-86-4 Carbon black

280-57-9 triethylenediamine

149-57-5 2-ethylhexanoic acid

7732-18-5 water

· **Proposition 65**

· **Chemicals known to cause cancer:**

1333-86-4 Carbon black

· **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.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

9016-87-9 diphenylmethanediisocyanate, isomers and homologues

CBD

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

D, CBD

· **TLV (Threshold Limit Value established by ACGIH)**

77-58-7 dibutyltin dilaurate

A4

1333-86-4 Carbon black

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

1333-86-4 Carbon black

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

(Contd. on page 10)

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 9)

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** *Danger*

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

POLYMERIC MDI

diphenylmethanediisocyanate, isomers and homologues

4,4'-methylenediphenyl diisocyanate

POLYETHER POLYOL

· **Hazard statements**

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.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P312 Call a POISON CENTER/doctor if you feel unwell.

P314 Get medical advice/attention if you feel unwell.

P321 Specific treatment (see on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

USA

(Contd. on page 11)

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 10)

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.

· **Department issuing SDS:** Environment protection department.

· **Contact:** Steve Gaver (sgaver@semproducts.com)

· **Date of preparation / last revision** 06/28/2017 / 7

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· *** Data compared to the previous version altered.**