



## 1 Identification

- **Product identifier**
- **Trade name:** 39352,39357 Flexible Urethane Foam
- **Article number:** 39352, 39357
- **Application of the substance / the mixture** Assembly foam

## 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



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

· **PAC-2:**

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

· **PAC-3:**

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

**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)



Printing date 06/28/2017

Reviewed on 06/20/2017

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.

<b>101-68-8 4,4'-methylenediphenyl diisocyanate</b>	
PEL	Ceiling limit value: 0.2 mg/m <sup>3</sup> , 0.02 ppm
REL	Long-term value: 0.05 mg/m <sup>3</sup> , 0.005 ppm
	Ceiling limit value: 0.2* mg/m <sup>3</sup> , 0.02* ppm *10-min
TLV	Long-term value: 0.051 mg/m <sup>3</sup> , 0.005 ppm
<b>149-57-5 2-ethylhexanoic acid</b>	
TLV	Long-term value: 5* mg/m <sup>3</sup> *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)



Printing date 06/28/2017

Reviewed on 06/20/2017

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/cm<sup>3</sup>

· 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)



Printing date 06/28/2017

Reviewed on 06/20/2017

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 6)

<b>VOC content:</b>	2.6 %
<b>Solids content:</b>	96.9 %
<b>Other information</b>	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, isomers 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)



Printing date 06/28/2017

Reviewed on 06/20/2017

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**

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

USA  
(Contd. on page 9)





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, isomeres 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, isomeres 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.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

9016-87-9 diphenylmethanediisocyanate, isomeres 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, isomeres 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)



Printing date 06/28/2017

Reviewed on 06/20/2017

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.

· **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.**

USA