

Printing date 02/22/2016 Reviewed on 01/08/2016

## 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.



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

07 GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

POLYMERIC MDI

diphenylmethanediisocyanate, isomeres and homologues

4,4'-methylenediphenyl diisocyanate

(Contd. on page 2)



Printing date 02/22/2016 Reviewed on 01/08/2016

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

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

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

*P280* Wear protective gloves.

P280 Wear eye protection / face protection. 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.

*P201 Obtain special instructions before use.* 

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

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

*P363* Wash contaminated clothing before reuse.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

*P314 Get medical advice/attention if you feel unwell.* 

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

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

P405 Store locked up.

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

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

regulations.

#### · Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 1Reactivity = 0

#### · HMIS-ratings (scale 0 - 4)



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

(Contd. on page 3)

SEM

Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39352,39357 Flexible Urethane Foam

· vPvB: Not applicable.

(Contd. of page 2)

## 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%
	dibutyltin dilaurate	≤1%
1333-86-4	Carbon black	≤1%
149-57-5	2-ethylhexanoic acid	≤1%

## 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · 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 eve 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

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.

(Contd. on page 4)



Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 3)

· 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.

· 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

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · 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.
- $\cdot$  *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:

#### 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/m<sup>3</sup>, 0.005 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:

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.

(Contd. on page 5)



Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 4)

#### · 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 trough 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	l and cl	<u>nemical</u>	pro	perties
------------	----------	----------------	-----	---------

· Information	on hasic	nhysical	and chemic	cal properties
· III   OI III uu i OII	on vasic	vnvsicai	ини спети	ai biobeines

· 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.

(Contd. on page 6)

SEM

Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39352,39357 Flexible Urethane Foam

		(Contd. of page
Explosion limits:		
Lower:	0.4 Vol %	
Upper:	0.0 Vol %	
Vapor pressure:	Not determined.	
Density at 20 °C:	1.08181 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-octano	l/water): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	2.6 %	
Water:	0.7 %	
VOC content:	2.6 %	
Solids content:	85.5 %	
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.

(Contd. on page 7)



Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 6)

· 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 (Natio	· NTP (National Toxicology Program)		
None of the	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.
- · 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

(Contd. on page 8)

SEM

Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39352,39357 Flexible Urethane Foam

		(Contd. of page
· 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 MARPOL73/78 and the IBC Code	<b>II of</b> Not applicable.	
· UN ''Model Regulation'':	Void	

## 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 Triethylendiamin
- 149-57-5 2-ethylhexanoic acid
- 7732-18-5 water, distilled, conductivity or of similar purity
- · Proposition 65
- · Chemicals known to cause cancer:

1333-86-4 Carbon black

(Contd. on page 9)

-USA



Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 8) · 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,isomeres and homologues CBD101-68-8 4,4'-methylenediphenyl diisocyanate D, CBD · TLV (Threshold Limit Value established by ACGIH) 77-58-7 dibutyltin dilaurate A41333-86-4 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).
- · 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

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P284	[In case of inadequate ventilation] wear respiratory protection.
P280	Wear protective gloves.
P280	Wear eye protection / face protection.
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.

*P201 Obtain special instructions before use.* 

(Contd. on page 10)



Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 9)

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

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P363 Wash contaminated clothing before reuse.

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

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 *If eye irritation persists: Get medical advice/attention.* 

P314 Get medical advice/attention if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of water. P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

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

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

regulations.

## 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 02/22/2016 / 6
- · Abbreviations and acronvms:

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, 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

Repr. 2: Reproductive toxicity, Hazard Category 2

(Contd. on page 11)

<sup>·</sup> Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SEM

Printing date 02/22/2016 Reviewed on 01/08/2016

Trade name: 39352,39357 Flexible Urethane Foam

(Contd. of page 10)

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

\* Data compared to the previous version altered.

IIC A