Printing date 06/01/2016



Reviewed on 01/08/2016

1 Identification

- · Product identifier
- · Trade name: 41807 Quick-Set 180
- · Article number: 41807
- · Application of the substance / the mixture Adhesives
- · 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

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

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*



· Signal word Danger

• Hazard-determining components of labeling: POLYMERIC MDI 4,4'-methylenediphenyl diisocyanate 3-aminomethyl-3,5,5-trimethylcyclohexylamine

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| | (Contd. of page 1) | | | |
|-------------------------------|--|--|--|--|
| | ated poly(oxyalkylated)polyol / proprietary | | | |
| • Hazard stateme | | | | |
| H302 Harmful | | | | |
| H315 Causes si | kin irritation. | | | |
| H319 Causes se | prious eye irritation. | | | |
| H334 May caus | e allergy or asthma symptoms or breathing difficulties if inhaled. | | | |
| H317 May caus | e an allergic skin reaction. | | | |
| H351 Suspected | l of causing cancer. | | | |
| H335 May caus | e respiratory irritation. | | | |
| H373 May caus | e 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. | | | |
| P270 | Do not eat, drink or smoke when using this product. | | | |
| 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+P | 338 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. | | | |
| P301+P312 | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. | | | |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. | | | |
| 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. | | | |
| P330 | Rinse mouth. | | | |
| 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 s | ystem: | | | |
| · NFPA ratings | (scale 0 - 4) | | | |
| | | | | |
| | lealth = 2 | | | |
| | ire = 1 | | | |
| | Peactivity = 0 | | | |
| UMIS natings | (real 0, 1) | | | |
| · HMIS-ratings (scale 0 - 4) | | | | |
| HEALTH 1 Health = $*1$ | | | | |
| FIRE 1 Fire = 1 | | | | |
| | Reactivity = 0 | | | |
| | · | | | |

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

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:
- Mixture: consisting of the following components.
- Weight percentages

| · Dangerous components: | | |
|-------------------------|---|----------|
| | Hydroxy terminated poly(oxyalkylated)polyol / proprietary | 30 - 40% |
| 53862-89-8 | POLYMERIC MDI | 30 - 40% |
| 101-68-8 | 4,4'-methylenediphenyl diisocyanate | 13 - 30% |
| 2855-13-2 | 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 1.5 - 5% |

4 First-aid measures

· Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

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.
- · 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.

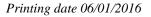
5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · 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.

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6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Environmental precautions: 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.
- **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.
- · 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.
- · 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 constituent is the only constituent of the product which has 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

• 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.

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· Flash point:

· Flammability (solid, gaseous):

· Decomposition temperature:

· Ignition temperature:



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| | (Contd. of page 4) | | | |
|--|---|--|--|--|
| Wash hands before breaks and at the e | end of work. | | | |
| Store protective clothing separately. | | | | |
| Avoid contact with the eyes and skin. | | | | |
| · Breathing equipment: | | | | |
| In case of brief exposure or low pollut respiratory protective device that is in Protection of hands: | ion use respiratory filter device. In case of intensive or longer exposure use dependent of circulating air. | | | |
| | Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the | | | |
| | Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation | | | |
| Protective gloves | | | | |
| | able 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 a observed. | The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be | | | |
| · Eye protection: | | | | |
| Tightly sealed goggles | | | | |
| 9 Physical and chemical properti | es | | | |
| • Information on basic physical and ch • General Information | emical properties | | | |
| · Appearance: | 7 | | | |
| Form: | Liquid | | | |
| Color: | According to product specification | | | |
| · Odor: | Characteristic | | | |
| · Odor threshold: | Not determined. | | | |
| · pH-value: | Not applicable. | | | |
| · Change in condition | | | | |
| Melting point/Melting range: | Undetermined. | | | |
| Boiling point/Boiling range: | 208 °C | | | |

94 °C

520 °C

Not determined.

Not determined.

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|--|---|--|
| 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: | | |
| <i>Lower:</i> 0.4 Vol % | | |
| Upper: | 0.0 Vol % | |
| · Vapor pressure: | Not applicable. | |
| Density at 20 °C: | 1.10967 g/cm ³ | |
| Relative density | Not determined. | |
| · Vapor density | Not applicable. | |
| Evaporation rate | Not applicable. | |
| · Solubility in / Miscibility with | | |
| Water: | Insoluble. | |
| Partition coefficient (n-octanol/w | ater): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not applicable. | |
| Kinematic: | Not applicable. | |
| · Solvent content: | | |
| Organic solvents: | 0.0 % | |
| VOC content: | 0.0 g/l / 0.00 lb/gl | |
| Solids content: | 98.0 % | |
| 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)

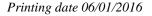
· Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

• on the eye: Irritating effect.

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3

2B

• 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)

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

1333-86-4 Carbon black

· 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.
- · 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

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| | | (Contd. of page 7) |
|--|---------------------------------|--------------------|
| · 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 | II of 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): | |
| 101-68-8 4,4'-methylenediphenyl diisocyanate | |
| · TSCA (Toxic Substances Control Act): | |
| 53862-89-8 POLYMERIC MDI | |
| 101-68-8 4,4'-methylenediphenyl diisocyanate | |
| 102-60-3 1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol | |
| 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine | |
| 1333-86-4 Carbon black | |
| · 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) | |
| 101-68-8 4,4'-methylenediphenyl diisocyanate | D, CBI |
| | (Contd. on page |

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• TLV (Threshold Limit Value established by ACGIH)

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). · Hazard pictograms GHS07 GHS08 · Signal word Danger · Hazard-determining components of labeling: POLYMERIC MDI 4,4'-methylenediphenyl diisocyanate 3-aminomethyl-3,5,5-trimethylcyclohexylamine *Hydroxy terminated poly(oxyalkylated)polyol / proprietary* · Hazard statements H302 Harmful if swallowed. 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. 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. *Wear eye protection / face protection.* P280 P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. 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). If experiencing respiratory symptoms: Call a POISON CENTER/doctor. P342+P311 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P301+P312 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P363 Wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention. P308+P313 *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. P330 Rinse mouth. P302+P352 IF ON SKIN: Wash with plenty of water.

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| P301 | regulations. |
|-------------------|--|
| P403+P233 P501 | Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/international |
| P405 | Store locked up. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| | (Contd. of page 9) |

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 06/01/2016 / 8
- Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

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

Acute Tox. 4: Acute toxicity – Category 4

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

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 -