## 1 Identification

- **Product identifier**
  - **Trade name:** POLYFLEX WP54A CATALYST
  - **Article number:** WP54A .0

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Wasser Corporation
    - 4118 B PL NW, Suite B
    - Auburn, WA 98001, US
    - Phone 253-850-2967

- **Information department:** Product safety department

- **Emergency telephone number:**
  - EMERGENCY PHONE NUMBERS:
    - USA and Canada: 1-800 424-9300
    - International: 1-703 527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**
  - Flam. Liq. 3  H226 Flammable liquid and vapor.
  - Acute Tox. 4  H332 Harmful if inhaled.
  - Skin Irrit. 2  H315 Causes skin irritation.
  - Eye Irrit. 2A H319 Causes serious eye irritation.
  - Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - Skin Sens. 1 H317 May cause an allergic skin reaction.
  - Carc. 2  H351 Suspected of causing cancer.
  - STOT SE 3 H335 May cause respiratory irritation.
  - STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **Label elements**
  - **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - ![GHS pictograms](image)
      - GHS02
      - GHS07
      - GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - 4,4’-methylenediphenyl disiocyanate
  - diphenylmethanediisocyanate, isomers and homologues
  - o-(p-isocyanatobenzyl)phenyl isocyanate
  - 4-methyl-m-phenylene diisocyanate

- **Hazard statements**
  - H226 Flammable liquid and vapor.
  - H332 Harmful if inhaled.
  - 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.

(Contd. on page 2)
Trade name: POLYFLEX WP54A CATALYST

H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements**
  Keep out of reach from children.
  - P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  - P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  - P260 Do not breathe dust/fume/gas/mist/vapors/spray.
  - P284 [In case of inadequate ventilation] wear respiratory protection.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P240 Ground/bond container and receiving equipment.
  - P242 Use only non-sparking tools.
  - P243 Take precautionary measures against static discharge.
  - 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.
  - P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - 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.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - 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.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
  **NFPA ratings (scale 0 - 4)**
  - Health = 2
  - Fire = 2
  - Reactivity = 0
  ![NFPA Ratings](image)

- **HMIS-ratings (scale 0 - 4)**
  - [HEALTH](#) Health = *2
  - [FIRE](#) Fire = 2
  - [REACTIVITY](#) Reactivity = 0

- **Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Compound</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>101-68-8</td>
<td>4,4'-methylenezphenyl disocyanate</td>
</tr>
<tr>
<td>9016-87-9</td>
<td>diphenylmethanezdisocyanate, isomers and homologues</td>
</tr>
<tr>
<td>64742-95-6</td>
<td>Solvent naphtha (petroleum), light arom.</td>
</tr>
<tr>
<td>5873-54-1</td>
<td>o-(p-isocyanatobenzyl)phenyl isocyanate</td>
</tr>
<tr>
<td>584-84-9</td>
<td>4-methyl-m-phenylene diisocyanate</td>
</tr>
<tr>
<td>91-08-7</td>
<td>2-methyl-m-phenylene diisocyanate</td>
</tr>
<tr>
<td>26447-40-5</td>
<td>methylenediphenyl disocyanate</td>
</tr>
</tbody>
</table>

4 First-aid measures

- Description of 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 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: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/surface or ground water.
Trade name: POLYFLEX WP54A CATALYST

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

Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

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 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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
<td>Ceiling limit value: 0.2 mg/m³, 0.02 ppm</td>
</tr>
<tr>
<td>REL</td>
<td>Long-term value: 0.05 mg/m³, 0.005 ppm</td>
</tr>
<tr>
<td></td>
<td>Ceiling limit value: 0.2* mg/m³, 0.02* ppm*10-min</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 0.051 mg/m³, 0.005 ppm</td>
</tr>
</tbody>
</table>

584-84-9 4-methyl-m-phenylene diisocyanate

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>PEL</td>
<td>Ceiling limit value: 0.14 mg/m³, 0.02 ppm</td>
</tr>
<tr>
<td>REL</td>
<td>See Pocket Guide App. A</td>
</tr>
<tr>
<td>TLV</td>
<td>Short-term value: 0.035* mg/m³, 0.005* ppm*inh.fraction+vapour; Skin;DSEN,RSEN;BEI</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 0.007* mg/m³, 0.001* ppm*inh.fraction+vapour; Skin;DSEN,RSEN;BEI</td>
</tr>
</tbody>
</table>

91-08-7 2-methyl-m-phenylene diisocyanate

<p>| | |</p>
<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV</td>
<td>Short-term value: 0.035* mg/m³, 0.005* ppm*inh.fraction+vapour; Skin;DSEN,RSEN;BEI</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 0.007* mg/m³, 0.001* ppm*inh.fraction+vapour; Skin;DSEN,RSEN;BEI</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.
44.0

- **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:**
    During mixing, handling and application: Splash goggles. Full protective clothing. Gloves (impervious). When air concentrations are not known (or above the TLV), an air-supplied respirator is required. Refer to OSHA Respiratory Protection Standard (29 CFR 1910.134). In presence of air movement, air-purifying (cartridge type) respirators are not the best protection but can be used, if you replaced them frequently. Change cartridges after 8h max or less due to their low warning properties. When in a confined space wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.
  - **Protection of hands:**
    - **Eye protection:**
      Tightly sealed goggles

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:**

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - Form: Fluid
      - Color: Amber colored
      - Odor: Aromatic
      - Odor threshold: Not determined.
  - **pH-value:** Not determined.
  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
Trade name: POLYFLEX WP54A CATALYST

Boiling point/Boiling range: 190 °C (374 °F)
- Flash point: 45 °C (113 °F)
- Flammability (solid, gaseous): Not applicable.
- Ignition temperature: 400 °C (752 °F)
- Decomposition temperature: Not determined.
- Auto igniting: Product is not selfigniting.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- Explosion limits:
  - Lower: 0.4 Vol %
  - Upper: 7.5 Vol %
- Vapor pressure at 20 °C (68 °F): 5 hPa (4 mm Hg)
- Density at 20 °C (68 °F): 1.08 g/cm³ (9.013 lbs/gal)
- 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.
- 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'-methylene diphenyl diisocyanate
    Oral LD50 2200 mg/kg (mouse)
  64742-95-6 Solvent naphtha (petroleum), light arom.
    Oral LD50 >6800 mg/kg (rat)
44.0 Dermal LD50 >3400 mg/kg (rab)
Inhalative LC50/4 h >10.2 mg/l (rat)

584-84-9 4-methyl-m-phenylene diisocyanate

Oral LD50 5800 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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)
  101-68-8 4,4’-methylenebisphenyl diisocyanate 3
  9016-87-9 diphenylmethanediisocyanate, isomers and homologues 3

· NTP (National Toxicology Program)
  584-84-9 4-methyl-m-phenylene diisocyanate R
  91-08-7 2-methyl-m-phenylene diisocyanate R

· 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 2 (Self-assessment): hazardous for water
  Do not allow product to reach ground water, water course or sewage system.
  Danger to drinking water if even small quantities leak into the ground.
· 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.
Trade name: POLYFLEX WP54A CATALYST

- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1263

- **UN proper shipping name**
  - DOT
  - ADR
  - IMDG, IATA

- **Transport hazard class(es)**
  - DOT
    - Class: 3 Flammable liquids
    - Label: 3
  - ADR, IMDG, IATA
    - Class: 3 Flammable liquids
    - Label: 3

- **Packing group**
  - DOT, ADR, IMDG, IATA
  - Class: III

- **Environmental hazards:** Not applicable.

- **Special precautions for user** Warning: Flammable liquids
- **Danger code (Kemler):** 30
- **EMS Number:** F-E,S-E
- **Stowage Category** A

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:**
  - DOT
    - Quantity limitations
      - On passenger aircraft/rail: 60 L
      - On cargo aircraft only: 220 L
  - ADR
    - Excepted quantities (EQ)
      - Code: E1
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 1000 ml
Trade name: POLYFLEX WP54A CATALYST

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances): 
      - 584-84-9 4-methyl-m-phenylene diisocyanate
      - 91-08-7 2-methyl-m-phenylene diisocyanate
    - Section 313 (Specific toxic chemical listings): 
      - 101-68-8 4,4'-methylene diphenyl diisocyanate
      - 9016-87-9 diphenylmethanediisocyanate, isomers and homologues
      - 584-84-9 4-methyl-m-phenylene diisocyanate
      - 91-08-7 2-methyl-m-phenylene diisocyanate
  - 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) 
    - 101-68-8 4,4'-methylene diphenyl diisocyanate D, CBD
    - 9016-87-9 diphenylmethanediisocyanate, isomers and homologues CBD
  - TLV (Threshold Limit Value established by ACGIH) 
    - 4-methyl-m-phenylene diisocyanate (A4)
    - 2-methyl-m-phenylene diisocyanate (A4)
  - NIOSH-Ca (National Institute for Occupational Safety and Health) 
    - 584-84-9 4-methyl-m-phenylene diisocyanate
    - 91-08-7 2-methyl-m-phenylene diisocyanate
  - GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
Trade name: POLYFLEX WP54A CATALYST

- **Hazard pictograms**

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  4,4'-methylene diphenyl diisocyanate
  diphenylmethanediisocyanate, isomers and homologues
  o-(p-isocyanatobenzyl)phenyl isocyanate
  4-methyl-m-phenylene diisocyanate

- **Hazard statements**
  H226 Flammable liquid and vapor.
  H332 Harmful if inhaled.
  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**
  P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  P260 Do not breathe dust/fume/gas/mist/vapors/spray.
  P284 [In case of inadequate ventilation] wear respiratory protection.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P240 Ground/bond container and receiving equipment.
  P242 Use only non-sparking tools.
  P243 Take precautionary measures against static discharge.
  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.
  P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P313 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.
  P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  P362+P364 Take off contaminated clothing and wash it before reuse.
  P405 Store locked up.
  P403+P333 Store in a well-ventilated place. Keep container tightly closed.
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:** Product safety department
- **Contact:** HS REG.DEPART.REG.SS
- **Date of preparation / last revision** 05/26/2017 / -
- **Abbreviations and acronyms:**
  - 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
  - Flam. Liq. 3: Flammable liquids – Category 3
  - 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
1 Identification

· Product identifier
  · Trade name: POLYFLEX WP54B RED RAL 3003
  · Article number: WP54B.0301

· Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    Wasser Corporation
    4118 B PL NW, Suite B
    Auburn, WA 98001, US
    Phone 253-850-2967

· Information department: Product safety department

· Emergency telephone number:
  EMERGENCY PHONE NUMBERS:
  USA and Canada: 1-800 424-9300
  International: 1-703 527-3887

2 Hazard(s) identification

· Classification of the substance or mixture
  Flam. Liq. 3 H226 Flammable liquid and vapor.
  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.
  Carc. 1A H350 May cause cancer.
  STOT SE 3 H335 May cause respiratory irritation.
  STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

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

   GHS02 GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labeling:
  Extracts (petroleum), heavy paraffinic distillate solvent
  Ferric oxide
  bis(4-(1,2-bis(ethoxycarbonyl)ethy-lamino)-3-methylcyclohexyl)methane
  Talc (Mg3H2(SiO3)4)

· Hazard statements
  H226 Flammable liquid and vapor.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H317 May cause an allergic skin reaction.
  H350 May cause cancer.
  H335 May cause respiratory irritation.
  H372 Causes damage to organs through prolonged or repeated exposure.

· Precautionary statements
  Keep out of reach from children.
Safety Data Sheet
acc. to OSHA HCS

Printing date 05/26/2017
Reviewed on 05/26/2017

Trade name: POLYFLEX WP54B RED RAL 3003

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P240 Ground/bond container and receiving equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
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.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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P321 Specific treatment (see on this label).
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P312 Call a POISON CENTER/doctor if you feel unwell.
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P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
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.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 2
  - Fire = 3
  - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - HEALTH Health = *2
  - FIRE Fire = 3
  - REACTIVITY Reactivity = 0

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

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
4 First-aid measures

- Description of 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:
  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:
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- 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
  Wear protective equipment. Keep unprotected persons away.
- 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.
Trade name: POLYFLEX WP54B RED RAL 3003

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

· **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
· **Information about protection against explosions and fires:**
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
· **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 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.

<table>
<thead>
<tr>
<th>110-43-0 methyl amyl ketone</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td>TLV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>108-65-6 2-methoxy-1-methylethyl acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEEL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14808-60-7 Quartz (SiO2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>TLV</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>100-41-4 ethylbenzene</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>TLV</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 5)
### Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>BEI</th>
<th>Medium</th>
<th>Time</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-41-4 ethylbenzene</td>
<td>0.7 g/g creatinine</td>
<td>urine</td>
<td>end of shift at end of workweek</td>
<td>Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>end-exhaled air</td>
<td>not critical</td>
<td>Ethyl benzene (semi-quantitative)</td>
</tr>
</tbody>
</table>

#### 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:
During mixing, handling and application: Splash goggles. Full protective clothing. Gloves (impervious). When air concentrations are not known (or above the TLV), an air-supplied respirator is required. Refer to OSHA Respiratory Protection Standard (29 CFR 1910.134). In presence of air movement, air-purifying (cartridge type) respirators are not the best protection but can be used, if you replaced them frequently. Change cartridges after 8h max or less due to their low warning properties. When in a confined space wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

#### 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**
### 9 Physical and chemical properties

**Information on basic physical and chemical properties**

**General Information**

- **Appearance:**
  - **Form:** Fluid
  - **Color:** Red
- **Odor:** Like aromatic solvents
- **Odor threshold:** Not determined.

- **pH-value:** Not determined.

**Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** 351 °C (664 °F)

- **Flash point:** 24 °C (75 °F)

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

- **Ignition temperature:** 450 °C (842 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not self-igniting.

**Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

**Explosion limits:**

- **Lower:** Not determined.
- **Upper:** Not determined.

- **Vapor pressure:** Not determined.

- **Density at 20 °C (68 °F):** 1.44 g/cm³ (12.017 lbs/gal)
- **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.

**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.
Trade name: POLYFLEX WP54B RED RAL 3003

11 Toxicological information

· Information on toxicological effects
  · Acute toxicity:
    · LD/LC50 values that are relevant for classification:
      | 1309-37-1 Ferric oxide |
      | Oral LD50 >5000 mg/kg (rat) |
      | 64742-95-6 Solvent naphtha (petroleum), light arom. |
      | Oral LD50 >6800 mg/kg (rat) |
      | Dermal LD50 >3400 mg/kg (rab) |
      | Inhalative LC50/4 h >10.2 mg/l (rat) |
  
  · Primary irritant effect:
    · on the skin: Irritant to skin and mucous membranes.
    · on the eye: Irritating effect.
  
  · Sensitization: Sensitization possible through skin contact.
  
  · Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1309-37-1 Ferric oxide 3</td>
</tr>
<tr>
<td>14807-96-6 Talc (Mg3H2(SiO3)4) 3</td>
</tr>
<tr>
<td>7631-86-9 silicon dioxide, chemically prepared 3</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2) 1</td>
</tr>
<tr>
<td>13463-67-7 titanium dioxide 2B</td>
</tr>
<tr>
<td>1330-20-7 xylene 3</td>
</tr>
<tr>
<td>100-41-4 ethylbenzene 2B</td>
</tr>
<tr>
<td>111-76-2 2-butoxyethanol 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7 Quartz (SiO2) K</td>
</tr>
</tbody>
</table>

· 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 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

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, IMDG, IATA: UN1263

- UN proper shipping name
  - DOT: Paint
  - ADR: 1263 Paint
  - IMDG, IATA: PAINT

- Transport hazard class(es)
  - DOT
    - Class: 3 Flammable liquids
    - Label: 3

- ADR, IMDG, IATA
  - Class: 3 Flammable liquids
  - Label: 3

- Packing group
  - DOT, ADR, IMDG, IATA: III

- Environmental hazards: Not applicable.

- Special precautions for user
  - Warning: Flammable liquids

- Danger code (Kemler):
  - 30

- EMS Number:
  - F-E, S-E

- Stowage Category: A
Safety Data Sheet
acc. to OSHA HCS

Trade name: POLYFLEX WP54B RED RAL 3003

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

· DOT
  · Quantity limitations
    On passenger aircraft/rail: 60 L
    On cargo aircraft only: 220 L

· ADR
  · Excepted quantities (EQ)
    Code: E1
    Maximum net quantity per inner packaging: 30 ml
    Maximum net quantity per outer packaging: 1000 ml

· IMDG
  · Limited quantities (LQ)
    5L
  · Excepted quantities (EQ)
    Code: E1
    Maximum net quantity per inner packaging: 30 ml
    Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation": UN 1263 PAINT, 3, III

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

  · Sara
    None of the ingredients is listed.

  · Section 313 (Specific toxic chemical listings):
    1344-28-1 aluminium oxide
    1330-20-7 xylene
    100-41-4 ethylbenzene
    111-76-2 2-butoxyethanol

  · TSCA (Toxic Substances Control Act):
    All ingredients are listed.

  · Proposition 65
    None of the ingredients is listed.

· Chemicals known to cause cancer:
  14808-60-7 Quartz (SiO2)
  13463-67-7 titanium dioxide
  100-41-4 ethylbenzene

· 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.
44.0

· Carcinogenic categories
- EPA (Environmental Protection Agency)

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical</th>
<th>Carcinogenicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td>I</td>
</tr>
<tr>
<td>100-41-4</td>
<td>ethylbenzene</td>
<td>D</td>
</tr>
<tr>
<td>111-76-2</td>
<td>2-butoxyethanol</td>
<td>NL</td>
</tr>
</tbody>
</table>

- TLV (Threshold Limit Value established by ACGIH)

<table>
<thead>
<tr>
<th>Chemical</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferric oxide</td>
<td>A4</td>
</tr>
<tr>
<td>Talc (Mg3H2(SiO3)4)</td>
<td>A4</td>
</tr>
<tr>
<td>Aluminium oxide</td>
<td>A4</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>A2</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>A4</td>
</tr>
<tr>
<td>Xylene</td>
<td>A4</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>A3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide</td>
</tr>
</tbody>
</table>

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

- Hazard pictograms

GHS02  GHS07  GHS08

- Signal word Danger

- Hazard-determining components of labeling:
  - Extracts (petroleum), heavy paraffinic distillate solvent
  - Ferric oxide
  - bis(4-(1,2-bis(ethoxycarbonyl)ethy-lamino)-3-methylcyclohexyl)methane
  - Talc (Mg3H2(SiO3)4)

- Hazard statements
  - H226 Flammable liquid and vapor.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H317 May cause an allergic skin reaction.
  - H350 May cause cancer.
  - H335 May cause respiratory irritation.
  - H372 Causes damage to organs through prolonged or repeated exposure.

- Precautionary statements

P210   Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241   Use explosion-proof electrical/ventilating/lighting/equipment.
P260   Do not breathe dust/fume/gas/mist/vapors/spray.
P280   Wear protective gloves/protective clothing/eye protection/face protection.
P240   Ground/bond container and receiving equipment.
P242   Use only non-sparking tools.
P243   Take precautionary measures against static discharge.
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.
Trade name: POLYFLEX WP54B RED RAL 3003

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.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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).
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.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
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.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- National regulations:
- Additional classification according to Decree on Hazardous Materials:
  Carcinogenic hazardous material group III (dangerous).
- Information about limitation of use:
  Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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: Product safety department
- Contact: HS REG.DEPART.REG.SS
- Date of preparation / last revision 05/26/2017 / -

- Abbreviations and acronyms:
  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

(Contd. on page 12)
Safety Data Sheet
acc. to OSHA HCS

Trade name: POLYFLEX WP54B RED RAL 3003

TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 1A: Carcinogenicity – Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
1 Identification

· Product identifier
  · Trade name: POLYFLEX 54B RAL 7037 GREY
  · Article number: WP54B.1079

· Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    Wasser Corporation
    4118 B PL NW, Suite B
    Auburn, WA 98001, US
    Phone 253-850-2967
  · Information department: Product safety department
  · Emergency telephone number:
    EMERGENCY PHONE NUMBERS:
    USA and Canada: 1-800 424-9300
    International: 1-703 527-3887

2 Hazard(s) identification

· Classification of the substance or mixture
  Flam. Liq. 3  H226  Flammable liquid and vapor.
  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.
  Carc. 1A  H350  May cause cancer.
  STOT SE 3  H335  May cause respiratory irritation.
  STOT RE 1  H372  Causes damage to organs through prolonged or repeated exposure.

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

  GHS02  GHS07  GHS08

· Signal word Danger

· Hazard-determining components of labeling:
  Extracts (petroleum), heavy paraffinic distillate solvent
  Ferric oxide
  bis(4-(1,2-bis(ethoxycarbonyl)ethy-lamino)-3-methylcyclohexyl)methane
  Talc (Mg3H2(SiO3)4)

· Hazard statements
  H226  Flammable liquid and vapor.
  H315  Causes skin irritation.
  H319  Causes serious eye irritation.
  H317  May cause an allergic skin reaction.
  H350  May cause cancer.
  H335  May cause respiratory irritation.
  H372  Causes damage to organs through prolonged or repeated exposure.

· Precautionary statements
  Keep out of reach from children.

(Contd. on page 2)
Trade name: POLYFLEX 54B RAL 7037 GREY

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P240 Ground/bond container and receiving equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
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.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
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P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
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P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
- NFPA ratings (scale 0 - 4)

Health = 2
Fire = 2
Reactivity = 0

- HMIS-ratings (scale 0 - 4)

Health = *2
Fire = 2
Reactivity = 0

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

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
Trade name: POLYFLEX 54B RAL 7037 GREY

4 First-aid measures

- Description of 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:
  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:
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- 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
  Wear protective equipment. Keep unprotected persons away.
- 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.
7 Handling and storage

- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
- **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 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.

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL Long-term value</th>
<th>REL Long-term value</th>
<th>TLV Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-43-0 methyl amyl ketone</td>
<td>465 mg/m³, 100 ppm</td>
<td>465 mg/m³, 100 ppm</td>
<td>233 mg/m³, 50 ppm</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEL</td>
<td>see Quartz listing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REL</td>
<td>Long-term value: 0.05* mg/m³</td>
<td>*respirable dust; See Pocket Guide App. A</td>
<td></td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 0.025* mg/m³</td>
<td>*as respirable fraction</td>
<td></td>
</tr>
</tbody>
</table>

- **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:**
During mixing, handling and application: Splash goggles. Full protective clothing. Gloves (impervious). When air concentrations are not known (or above the TLV), an air-supplied respirator is required. Refer to OSHA Respiratory Protection Standard (29 CFR 1910.134). In presence of air movement, air-purifying (cartridge type) respirators are not the best protection but can be used, if you replaced them frequently. Change cartridges after 8h max or less due to their low warning properties. When in a confined space wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

- **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

---

**9 Physical and chemical properties**

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

  - **General Information**

    - **Appearance:**

      - Form: Fluid
      - Color: Grey

    - **Odor:**

      - Odor: Aromatic
      - Odor threshold: Not determined.

    - **pH-value:** Not determined.

  - **Change in condition**

    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: 351 °C (664 °F)

  - **Flash point:** 42 °C (108 °F)

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

  - **Ignition temperature:** 450 °C (842 °F)

  - **Decomposition temperature:** Not determined.

  - **Auto igniting:** Product is not selfigniting.
Trade name: POLYFLEX 54B RAL 7037 GREY

<table>
<thead>
<tr>
<th>· Danger of explosion:</th>
<th>Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Vapor pressure:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Density at 20 °C (68 °F):</td>
<td>1.46 g/cm³ (12.184 lbs/gal)</td>
</tr>
<tr>
<td>· Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Vapor density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Solubility in / Miscibility with Water:</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>· Partition coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>· LD/LC50 values that are relevant for classification:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1309-37-1 Ferric oxide</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50</td>
</tr>
<tr>
<td>64742-95-6 Solvent naphtha (petroleum), light arom.</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h</td>
</tr>
</tbody>
</table>

· Primary irritant effect:
· on the skin: Irritant to skin and mucous membranes.
· on the eye: Irritating effect.
· Sensitization: Sensitization possible through skin contact.
· Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations;
Trade name: POLYFLEX 54B RAL 7037 GREY

44.0 Irritant

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    | Chemical | Carcinogenic category |
    |----------|-----------------------|
    | 1309-37-1 Ferric oxide | 3 |
    | 14807-96-6 Talc (Mg₃H₂(SiO₃)₄) | 3 |
    | 13463-67-7 titanium dioxide | 2B |
    | 7631-86-9 silicon dioxide, chemically prepared | 3 |
    | 1330-20-7 xylene | 3 |
    | 14808-60-7 Quartz (SiO₂) | 1 |
    | 100-41-4 ethylbenzene | 2B |
    | 1333-86-4 Carbon black | 2B |
    | 111-76-2 2-butoxyethanol | 3 |
  - NTP (National Toxicology Program)
    | Chemical | Carcinogenic category |
    |----------|-----------------------|
    | 14808-60-7 Quartz (SiO₂) | K |
  - 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 2 (Self-assessment): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Danger to drinking water if even small quantities leak into the ground.
  - 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 | UN1263 |
| · DOT, ADR, IMDG, IATA |

| · UN proper shipping name | Paint |
| · DOT | 1263 Paint |
| · ADR, IMDG, IATA | PAINT |

| · Transport hazard class(es) | 3 Flammable liquids |
| · DOT |

| · Class | 3 |
| · Label | 3 |

| · ADR, IMDG, IATA | 3 Flammable liquids |
| · Class | 3 |
| · Label | 3 |

| · Packing group | III |
| · DOT, ADR, IMDG, IATA |

| · Environmental hazards: | Not applicable. |

| · Special precautions for user | Warning: Flammable liquids |
| · Danger code (Kemler): | 30 |
| · EMS Number: | F-E,S-E |
| · Stowage Category | A |

| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

| · Transport/Additional information: | On passenger aircraft/rail: 60 L |
| · DOT |

| · Quantity limitations | On cargo aircraft only: 220 L |

| · ADR | Code: E1 |

| · Excepted quantities (EQ) | Maximum net quantity per inner packaging: 30 ml |
| · Limited quantities (LQ) | Maximum net quantity per outer packaging: 1000 ml |
| · IMDG | Code: E1 |

| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Maximum net quantity per inner packaging: 30 ml |
| · IMDG |

| · Limited quantities (LQ) |
| · Excepted quantities (EQ) | Maximum net quantity per outer packaging: 1000 ml |
Trade name: POLYFLEX 54B RAL 7037 GREY

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

  - Section 355 (extremely hazardous substances):
    None of the ingredients is listed.

  - Section 313 (Specific toxic chemical listings):
    1344-28-1 aluminium oxide
    1330-20-7 xylene
    7727-43-7 barium sulphate, natural
    100-41-4 ethylbenzene
    111-76-2 2-butoxyethanol

- TSCA (Toxic Substances Control Act):
  All ingredients are listed.

- Proposition 65

  - Chemicals known to cause cancer:
    13463-67-7 titanium dioxide
    14808-60-7 Quartz (SiO2)
    100-41-4 ethylbenzene
    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.

- Carcinogenic categories

  - EPA (Environmental Protection Agency)
    1330-20-7 xylene I
    7727-43-7 barium sulphate, natural D, CBD(inh), NL(oral)
    100-41-4 ethylbenzene D
    111-76-2 2-butoxyethanol NL

  - TLV (Threshold Limit Value established by ACGIH)
    Ferric oxide A4
    Talc (Mg3H2(SiO3)4) A4
    titanium dioxide A4
    aluminium oxide A4
    xylene A4
    Quartz (SiO2) A2
Trade name: POLYFLEX 54B RAL 7037 GREY

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  13463-67-7 titanium dioxide
  14808-60-7 Quartz (SiO2)
  1333-86-4 Carbon black

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

- Hazard pictograms
  ![GHS02](image)
  ![GHS07](image)
  ![GHS08](image)

- Signal word Danger

- Hazard-determining components of labeling:
  Extracts (petroleum), heavy paraffinic distillate solvent
  Ferric oxide
  bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane
  Talc (Mg₃H₂(SiO₃)₄)

- Hazard statements
  H226 Flammable liquid and vapor.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H317 May cause an allergic skin reaction.
  H350 May cause cancer.
  H335 May cause respiratory irritation.
  H372 Causes damage to organs through prolonged or repeated exposure.

- Precautionary statements
  P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  P260 Do not breathe dust/fume/gas/mist/vapors/spray.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P240 Ground/bond container and receiving equipment.
  P242 Use only non-sparking tools.
  P243 Take precautionary measures against static discharge.
  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.
  P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  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).
  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.
Trade name: POLYFLEX 54B RAL 7037 GREY

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
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.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:
· Additional classification according to Decree on Hazardous Materials:
  Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:
  Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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: Product safety department
· Contact: HS REG.DEPART.REG.SS
· Date of preparation / last revision 10/17/2017 / -
· Abbreviations and acronyms:
  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
  Flam. Liq. 3: Flammable liquids – Category 3
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  Skin Sens. 1: Skin sensitisation – Category 1
  Carc. 1A: Carcinogenicity – Category 1A
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1