1 Identification of substance:

- **Product details:**
  - **Trade name:** EPIKOTE™ Resin 05341 RAL 8017
  - **Article number:** 16-0635400/2
  - **Application of the substance / the preparation** Epoxy resin systems

- **Manufacturer/Supplier:**
  Hexion Specialty Chemicals B.V.
  Postbus 606
  3190 AN Hoogvliet Rt.
  Netherlands
  Tel.: +31 65 25 11 07 9

- **Information:**
  - see: Section 16 (Contact)
  - E-Mail: ulrich.busch@hexion.com

- **Emergency information:**
  - Emergency telephone number:
    CARECHEM24
    +44 (0) 2087 628322

2 Hazards identification

- **Hazard designation:**
  - Xi Irritant
  - N Dangerous for the environment

- **Information pertaining to particular dangers for man and environment**
  R 36/38 Irritating to eyes and skin.
  R 43 May cause sensitisation by skin contact.
  R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  Contains epoxy constituents. See information supplied by the manufacturer.

3 Composition/information on ingredients

- **Chemical characterization:**
  - **Identification number(s):**
    - EINECS Number: Not applicable (preparation)

- **Chemical characterization**
  - **Description:** Modified epoxy resin

- **Dangerous components:**
  - **CAS:** 9003-36-5
    - Bisphenol F-epichlorohydrin resin, mw \(\leq 700\)
    - Xi, N; R 36/38-43-51/53 > 50%
  - **CAS:** 26444-49-5
    - Diphenyl cresyl phosphate
    - N; R 51/53 < 20%

- **Additional information**
  For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **General information** Instantly remove any clothing soiled by the product.

- **After inhalation**
  Supply fresh air and call for doctor for safety reasons.
  In case of unconsciousness bring patient into stable side position for transport.
Safety Data Sheet
according to 1907/2006/EC, Article 31

Trade name: EPIKOTE™ Resin 05341 RAL 8017

(Contd. of page 1)

- After skin contact
  Instantly wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
- After eye contact
  Rinse opened eye for several minutes under running water. Seek immediate medical advice.
- After swallowing
  Rinse out mouth and then drink plenty of water. Seek medical treatment.

5 Fire fighting measures

- Suitable extinguishing agents
  CO2, extinguishing powder or water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.
- For safety reasons unsuitable extinguishing agents
  Water with a full water jet.
- Special hazards caused by the material, its products of combustion or resulting gases:
  Can be released in case of fire
  Carbon monoxide (CO)
  Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
  Hydrogen chloride (HCl)
- Protective equipment:
  Wear full protective suit.
  Wear self-contained breathing apparatus.
- Additional information
  Collect contaminated fire fighting water separately. It must not enter drains.
  Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- Person-related safety precautions:
  Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection:
  Do not allow to enter drainage system, surface or ground water.
  Do not allow to enter the ground/soil.
- Measures for cleaning/collecting:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose of contaminated material as waste according to item 13.

7 Handling and storage

- Handling
  Information for safe handling:
  Ensure good ventilation/exhaustion at the workplace.
  Information about protection against explosions and fires:
  No special measures required.
- Storage
  Requirements to be met by storerooms and containers:
  Prevent any penetration into the ground.
  Information about storage in one common storage facility: Not required.

(Contd. on page 3)
Trade name: EPIKOTE™ Resin 05341 RAL 8017

• Further information about storage conditions:
  Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

• Additional information about design of technical systems:
  No further data; see item 7.

• Personal protective equipment
  • General protective and hygienic measures
    Take off immediately all contaminated clothing
    Wash hands during breaks and at the end of the work.
    Do not inhale gases / fumes / aerosols.
    Avoid contact with the eyes and skin.
  • Breathing equipment: Not necessary if room is well-ventilated.
  • Protection of hands: Plastic gloves (EN 374)
  • Material of gloves
    Butyl rubber, BR
    Nitrile rubber, NBR
  • 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 safety glasses (EN 166).
  • Body protection: Protective work clothing (EN 340).

9 Physical and chemical properties:

• General Information
  Form: Fluid
  Colour: Brown
  Odour: Weak, characteristic

• Change in condition
  Melting point/Melting range: -

• Flash point: > 200°C (ISO 2719)

• Vapour pressure at 20°C: < 0.1 hPa

• Density at 20°C: 1.20 - 1.30 g/cm³ (DIN 53217)

• Solubility in / Miscibility with
  Water: Not miscible or difficult to mix

• Viscosity:
  dynamic at 25°C: 12000 - 15000 mPa*s (ISO 3219)

10 Stability and reactivity

• Thermal decomposition / conditions to be avoided:
  No decomposition if used and stored according to specifications.

• Dangerous reactions
  May produce violent reactions with bases and numerous organic substances
  including alcohols and amines
  Exothermic polymerisation

• Dangerous products of decomposition: Irritant gases/vapours
11 Toxicological information

- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
  
<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>23800 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt; 2000 mg/kg (rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritant effect.
  - Sensitization: Sensitization possible by skin contact.

12 Ecological information:

- Information about elimination (persistence and degradability):
- Other information: The product is slightly biodegradable.
- General notes: Do not allow product to reach underground or surface water or sewage system.

13 Disposal considerations

- Product:
  - Recommendation: Remove according to local authority recommendations, e.g. convey to a suitable incinerator.
  - European waste catalogue
    The waste code classification is to be carried out according to the European Waste Catalogue (EWC) specifically for each branch of industry and each type of process.
  - Uncleaned packagings:
    - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- Land transport ADR/RID (cross-border)
  - ADR/RID Class: 9 Miscellaneous dangerous substances and articles.
  - Hazard Index Number: 90
  - Substance Index Number: 3082
  - Packaging group: III
  - Label: 9
  - Designation of goods: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXIDE DERIVATIVES, cresyl diphenyl phosphate)

- Maritime transport IMDG:
  - IMDG Class: 9
  - UN Number: 3082
  - Label: 9 + MP
  - Packaging group: III
  - EMS Number: F-A,S-F
  - Marine pollutant: yes
  - Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy derivatives, cresyl diphenyl phosphate)

- Air transport ICAO-TI and IATA-DGR:
  - ICAO/IATA Class: 9
15 Regulatory information

- **Designation according to EC guidelines:**
  The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

- **Code letter and hazard designation of product:**
  Xi Irritant
  N Dangerous for the environment

- **Hazard-determining components of labelling:**
  Bisphenol F-epichlorohydrin resin, mw ≤ 700

- **Risk phrases:**
  36/38 Irritating to eyes and skin.
  43 May cause sensitisation by skin contact.
  51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**
  24 Avoid contact with skin.
  28 After contact with skin, wash immediately with plenty of soap and water.
  37/39 Wear suitable gloves and eye/face protection.
  60 This material and its container must be disposed of as hazardous waste.
  61 Avoid release to the environment. Refer to special instructions/safety data sheets.

- **Special designation of certain preparations:**
  Contains epoxy constituents. See information supplied by the manufacturer.

- **National regulations**

- **Other regulations, limitations and prohibitive regulations**
  Document of PlasticsEurope (ERC): "Epoxy resins and curing agents (Toxicology, Health, Safety and Environmental Aspects)"

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**
  These R-phrases refer to section 3: "Dangerous Components"
  36/38 Irritating to eyes and skin.
  43 May cause sensitisation by skin contact.
  51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Department issuing data specification sheet:** Product Safety Department
- **Contact:** Product Safety Department Tel.: **49/203/4296-206
- *** Data compared to the previous version altered.**