SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: CellCept(R) Oral Suspension
Product code: CSE-3173
Synonyms: - CELLCEPT Reconstituted Suspension (200mg/ml)
- CELLCEPT Oral Suspension (200mg/ml)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: - pharmaceutical active substance (immunosuppressant) *1

1.3. Details of the supplier of the safety data sheet

Company information: Enquiries:
Genentech, Inc.
1 DNA Way
South San Francisco
USA-CA 94080
United States of America

Phone: 001-(650) 225-1000
E-Mail: info.sds@roche.com
US Chemtrec phone:
(800)-424-9300

Local representation:

1.4. Emergency telephone number

Emergency telephone number: US Chemtrec phone: (800)-424-9300

*1 referring to: Mycophenolate mofetil
SECTION 2: Hazards identification

Classification of the substance or mixture / Label elements

GHS Classification

Health Hazards:

3.5 Germ cell mutagenicity (Category 2)
   H341 Suspected of causing genetic defects.
3.7 Reproductive toxicity (Category 1B)
   H360D May damage the unborn child.
3.9 Specific target organ toxicity - Repeated exposure (Category 1)
   H372 Causes damage to organs through prolonged or repeated exposure.

Signalword: Danger

Label:

Precautionary statements:
- P201 Obtain special instructions before use.
- P273 Avoid release to the environment.
- P281 Use personal protective equipment as required.
- P309 + P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.

Other hazards

Note
- no information available

SECTION 3: Composition/information on ingredients

Characterization

Mycophenolate mofetil and other inactive ingredients

Ingredients

<table>
<thead>
<tr>
<th>Concentration</th>
<th>GHS-Classification (pure ingredient)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mycophenolate mofetil 128794-94-5</td>
<td>17.2 %</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the 'Hazard statements' mentioned in this Section, see Section 16.
SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact - rinse immediately with tap water for at least 20 minutes - open eyelids forcibly
- consult a physician

Skin contact - remove immediately contaminated clothes, wash affected skin with water and soap - do not use any solvents

Inhalation - remove the casualty to fresh air and keep him/her calm
- get medical treatment

4.2. Most important symptoms and effects, both acute and delayed

Note - no information available

4.3. Indication of any immediate medical attention and special treatment needed

Note to physician - treat symptomatically
- after accidental exposure women should get medical advice from a physician

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media - water spray jet, dry powder, foam, carbon dioxide

Flash point (liquid) not applicable

5.2. Special hazards arising from the substance or mixture

Specific hazards - formation of toxic and corrosive combustion gases (nitrogen oxides (NOx)) possible
- consider danger for the environment: dike spilled liquid

5.3. Advice for firefighters

Protection of fire-fighters - precipitate gases/vapours/mists with water spray

Special method of fire-fighting - for reasons of environmental protection hold the extinguishing agent back

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions - ensure adequate ventilation
6.2. Environmental precautions

Environmental protection - if the substance reaches waters or the sewer system, inform the competent authority
- dilute the leaked substance by a water spray jet as far as necessary in order to minimize the hazard; hold the draining water/mixture of substances back by all means available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up - collect spilled solutions with inert adsorbent and hand over to waste removal

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Suitable materials - high density polyethylene (HDPE), glass

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions - room temperature
- do not freeze
Validity - ≤ 60 days, 25 °C
Packaging materials - high density polyethylene (HDPE) bottles with a child-resistant polypropylene screw cap

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Threshold value (Roche) air
- IOEL (Internal Occupational Exposure Limit): 0.01 mg/m³

PNEC
- 0.068 µg/l, based on acute data, surface waters
- 312.5 µg/l, based on chronic data, provisional antibiotic resistance PNEC

8.2. Exposure controls

General protective and hygiene measures - instruction of employees mandatory

Respiratory protection
- Respiratory protection is recommended as a precaution to minimize exposure. Effective engineering controls are considered to be the primary means to control worker exposure. Respiratory protection should not substitute for feasible engineering controls.
- in case of open handling or accidental release: particle mask or respirator with independent air supply

Hand protection - protective gloves (neoprene, nitrile or butyl rubber)
# CellCept(R) Oral Suspension

| Eye protection | - safety glasses |
| Body protection | - protective clothing |

*1 referring to: Mycophenolate mofetil
*2 referring to: Mycophenolic acid

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- **Color**: white to off-white
- **Form**: aqueous suspension
- **Solubility**: ≤ 22 mg/l, water (~ 22 °C, pH 6.3, HPLC, 24 h) ≤ 36 mg/l, aquatic ecotoxicity media (~ 22 °C, HPLC, 24 h) *1
- **Partition coefficient**: log $P_{ow}$ 2.38 (n-octanol/water) pH 7.4 *1

### 9.2. Other information

- **Note**: no information available

*1 referring to: Mycophenolate mofetil

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

- **Note**: no information available

### 10.2. Chemical stability

- **Stability**: stable under the conditions mentioned in chapter 7

### 10.3. Possibility of hazardous reactions

- **Note**: no information available

### 10.4. Conditions to avoid

- **Note**: no information available

### 10.5. Incompatible materials

- **Materials to avoid**: strong oxidizing agents *1
10.6. Hazardous decomposition products

Note - no information available

*1 referring to: Mycophenolate mofetil

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
- LD_{50} 353 mg/kg (oral, rat); females, "trimmed Spearman-Karber method" *1
- LD_{50} 500 mg/kg (oral, rat); males, "trimmed Spearman-Karber method" *1
- LD_{0} 250 mg/kg (oral, rat) *1
- LD_{50} > 4'000 mg/kg (oral, mouse) *1

Local effects
- skin: non-irritant *1
- eye: non-irritant *1

Sensitization
- non-sensitizing *1

Mutagenicity
- mutagenic (OECD No. 474 (Micronucleus Test)); threshold dose response *2
- mutagenic (mouse lymphoma cell mutation test; OECD No. 476 (Mammalian Cell Gene Mutation Test)) *2
- does not induce chromosomal aberrations in vitro (OECD No. 473 (Mammalian Cytogenic Test)) *2
- not mutagenic (Ames test) *2

Carcinogenicity
- not carcinogenic (several species) *1

Reproductive toxicity
- teratogenic (several species) *1

STOT-single exposure
- no information available

STOT-repeated exposure
- no information available

Aspiration hazard
- no information available

Note
- immunosuppressive agent *1
- average therapeutic dose 1 g twice daily *1
- elimination half-life: 16-18 h *1
- adverse effects at therapeutic dose: diarrhea, drop in white blood cell count, susceptibility to infections, vomiting *1
- high doses may irritate the digestive tract *1
- excretion predominantly renal *1
# CellCept(R) Oral Suspension

## Potential Health Effects
- **Exposure:** Inhalation, Ingestion, Skin contact, Eye contact
- **Carcinogenicity:** not listed by NTP, IARC or OSHA

*1 referring to: Mycophenolate mofetil
*2 referring to: Mycophenolic acid

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity**
- barely toxic for planktonic crustaceans (nominal concentration = 100 mg/l), test performed with water accommodated fractions (Daphnia magna)
  - EC$_{50}$ (48 h) > 100 mg/l (nominal concentration)
  - NOEC (48 h) 27.7 mg/l (average measured concentration) (OECD No. 202) *1
- highly toxic for algae (Scenedesmus (=Desmodesmus) subspicatus)
  - ErC$_{50}$ (72 h) 0.6 mg/l (average measured concentration)
  - EbC$_{50}$ (72 h) 0.2 mg/l (average measured concentration)
  - NOEC (72 h) 0.1 mg/l (nominal concentration) (OECD No. 201) *1
- adaptation/recovery of organisms upon prolongation of test duration (Scenedesmus (=Desmodesmus) subspicatus)
  - LOEC (14 d) 1.6 mg/l (nominal concentration) (OECD No. 201, prolonged) *1
- acute fish toxicity in a limit test is lower than daphnid or algal toxicity, hence not relevant for classification (guppy)
  - NOEC (96 h) 1.7 mg/l (highest tested concentration) (OECD No. 203) *1
- no adverse influence on substrate biodegradation (activated sludge)
  - concentration (14 d) 100 mg/l (nominal concentration) (Manometric Respirometry Test, OECD No. 301 F) *1

### 12.2. Persistence and degradability

**Ready biodegradability**
- not readily biodegradable
  - ~ 14 %, 64 d
    (FDA Technical Assistance Document No. 3.11) *1
- not readily biodegradable
  - primary degradation evidenced by HPLC
    - < 6 %, 28 d
      (Manometric Respirometry Test, OECD No. 301 F) *1

**Inherent biodegradability**
- evidence for medium-term biodegradation in surface waters
  - analogous to OECD 308, Transformation in natural water/sediment systems *1

**Abiotic degradation**
- rapid degradation, photodegradation, hydrolysis
  - 22.3 mg/l, water; HPLC
    - ~ 37 %, 120 h, ~ 22 °C, dark
    - ~ 67 %, 120 h, ~ 22 °C, under illumination *1
CellCept(R) Oral Suspension

12.3. Bioaccumulative potential

Note - no information available

12.4. Mobility in soil

Note - no information available

12.5. Results of PBT and vPvB assessment

Note - no information available

12.6. Other adverse effects

Note - no information available

*M1 referring to: Mycophenolate mofetil

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues
- return to supplier or hand over to authorized disposal company
- observe local/national regulations regarding waste disposal
- incinerate in qualified installation with flue gas scrubbing
- DO NOT FLUSH unused medications or POUR them down a sink or drain. If available in your area, use takeback programs run by household hazardous waste collection programs or community pharmacies to dispose of unused and expired medicines. If you don’t have access to a takeback program, dispose of these medicines in the household trash by removing them from their original containers and mixing them with an undesirable substance, such as used coffee grounds or kitty litter.

SECTION 14: Transport information

<table>
<thead>
<tr>
<th>IATA</th>
<th>Class</th>
<th>UN/ID</th>
<th>PG</th>
<th>PI</th>
<th>Label</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>3082</td>
<td>III</td>
<td>964/964</td>
<td>9</td>
<td>EHS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMDG</th>
<th>Class</th>
<th>UN</th>
<th>PG</th>
<th>EmS</th>
<th>PI</th>
<th>Label</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>3082</td>
<td>III</td>
<td>F-A S-F</td>
<td>P001/IBC03</td>
<td>9</td>
<td>marine pollutant</td>
<td></td>
</tr>
</tbody>
</table>
CellCept(R) Oral Suspension

RID/ADR   Class   UN       PG   Haz.no   PI       Label   Mark   Classif. code
9         3082     III      90   P001/IBC03 9       EHS     M6

DOT      Class   UN/ID   PG   PI   RQ   Label   Haz.no
9       3082     III    -   9

DOT Remark:
- NON-REGULATED IN NON-BULK PACKAGINGS TRANSPORTED BY MOTOR VEHICLES, RAIL CARS OR AIRCRAFT (49CFR 171.4(c)).

Proper shipping name  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical name  Mycophenolate mofetil

SECTION 15: Regulatory information

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

TSCA Status   - FDA Exemption - not on inventory

Reporting Requirements   - The United States Environmental Protection Agency (USEPA) has not established a Reportable Quantity (RQ) for releases of this material.
- In New Jersey, report all releases, which are likely to endanger the public health, harm the environment or cause a complaint, to the NJDEPE Hotline and to local officials.
- State and local regulations vary and may impose additional reporting requirements.

SECTION 16: Other information

Full text of H-Statements referred to under section 3

H302  Harmful if swallowed.
H341  Suspected of causing genetic defects.
H360D  May damage the unborn child.
H372  Causes damage to organs through prolonged or repeated exposure.
USH003  May form combustible dust concentrations in the air

Note
Edition documentation   - changes from previous version in sections 8, 15

The information in this safety data sheet is based on current scientific knowledge. It should not be taken as expressing or implying any warranty concerning product characteristics.