Safety Data Sheet

ACTEMRA® Vials 80 mg/4 ml

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

1.1. Product identifier

Product name	ACTEMRA® Vials 80 mg/4 ml
Product code	SAP-10123584

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

Use	- for intravenous infusion after dilution

1.3. Details of the supplier of the safety data sheet

Company information	Enquiries: Roche Products Pty Limited P.O. Box 255 Dee Why, N.S.W. 2099 AUS-Australia Australia Phone 0061-2-9454-9624 Fax 0061-2-9971-7401 E-Mail info.sds@roche.com	Local representation:

1.4. Emergency telephone number

Emergency telephone number	Phone	0061-2-9454-9624

SECTION 2: Hazards identification

2.1. / 2.2. Classification of the substance or mixture / Label elements

GHS Classification	no classification and labelling according to GHS
Australian Remark	- Not classified as hazardous according to the Criteria of Worksafe Australia - Poisons Schedule - Schedule 4 *1 - Not listed on the Australian Inventory of Chemical Substances (AICS) *1

2.3. Other hazards

Note	- no information available

1 referring to: Tocilizumab

SECTION 3: Composition/information on ingredients

Characterization	tocilizumab with other inactive ingredients 1 vial contains 80 mg tocilizumab		
Synonyms	- Actemra 20 mg/ml concentrate for solution for infusion - Actemra, sterile injection solution containing excipients		
Ingredient		**Concentration**	**GHS-Classification (pure ingredient)**
Tocilizumab 375823-41-9		20 mg/ml	
Sucrose 57-50-1			
Disodium phosphate dodecahydrate 10039-32-4			
Sodium dihydrogenphosphate-dihydrate 13472-35-0 01-2119489796-13			
water solution suitable for injection			

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
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 - in the event of symptoms 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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	- adapt extinguishing media to surrounding fire conditions

5.2. Special hazards arising from the substance or mixture

Specific hazards	- no particular hazards known

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	- no special precautions required

6.2. Environmental precautions

Environmental protection	- no special environmental precautions required

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	- rinse with plenty of water

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Suitable materials	- glass

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	- 2 - 8 °C - do not freeze - protected from light
Validity	- see "best use before" date stated on the label, after opening the content should be used within a short period
Packaging materials	- vials - keep it in the outer carton in order to protect from light

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Threshold value (Roche) air	-	IOEL (Internal Occupational Exposure Limit): 0.4 mg/m3	*1

8.2. Exposure controls

Respiratory protection	-	respiratory protection not necessary during normal operations
Hand protection	-	protective gloves (eg made of neoprene, nitrile or butyl rubber)
Eye protection	-	safety glasses

1 referring to: Tocilizumab

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Colour	colourless to slightly yellow clear to opalescent
Form	clear solution sterile liquid

9.2. Other information

Note	-	no information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Note	-	no information available

10.2. Chemical stability

Stability	-	does not contain any antimicrobial preservative; therefore, care must be taken to ensure the sterility of the prepared solution
	-	as for all other proteins, monoclonal antibodies are temperature-sensitive; the thermal denaturation has an impact on quality but does not affect Plant and Process Safety; during decomposition no flammable gas, no organic peroxide and no oxidising substances are created

10.3. Possibility of hazardous reactions

Note	-	no information available

10.4. Conditions to avoid

Conditions to avoid	- warming - light - heavy mechanical loads (shock, impact)	

10.5. Incompatible materials

Note	- no information available	

10.6. Hazardous decomposition products

Note	- no information available	

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	- NOEL ≥ 150 mg/kg (i.v., rat) - not bioavailable by oral administration	*1 *1
Subacute toxicity	- NOAEL 10 mg/kg/d (i.v., rat, 28 d)	*1
Chronic toxicity	- NOAEL > 100 mg/kg/w (i.v., monkey; 6 months)	*1
Local effects	- no information available	
Sensitization	anaphylactic reactions may occur following the intravenous application of proteins; after inhalative exposure no cases of hypersensitivity have been described	
Mutagenicity	- not mutagenic (various in vitro test systems)	*1
Carcinogenicity	- no information available	
Reproductive toxicity	- no information available	
STOT-single exposure	- no information available	
STOT-repeated exposure	- no information available	
Aspiration hazard	- no information available	
Note	- immunosuppressive agent - therapeutic dose: 4 to 8 mg/kg/month - elimination half-life: 6 to 9 d - side effect(s) during therapy: liver damages, infectious episodes	*1 *1 *1 *1

1 referring to: Tocilizumab

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

- barely toxic for planktonic crustaceans (nominal concentration = 100 mg/l) (Daphnia magna)
  EC_{50} (48 h) > 100 mg active substance/l
  NOEC (48 h) 100 mg active substance/l
  (OECD No. 202) *2
- barely toxic for fish (nominal concentration = 100 mg/l) (zebrafish)
  LC_{50} (96 h) > 100 mg active substance/l
  NOEC (96 h) 100 mg active substance/l
  (OECD No. 203) *2
- no adverse influence on substrate biodegradation (activated sludge)
  concentration (14 d) 100 mg active substance/l
  (Manometric Respirometry Test, OECD No. 301 F) *2
- barely toxic for algae (nominal concentration = 100 mg/l) (Scenedesmus (=Desmodesmus) subspicatus)
  EC_{50} (72 h) > 100 mg active substance/l
  NOEC (72 h) 100 mg active substance/l
  (OECD No. 201) *2

12.2. Persistence and degradability

Ready biodegradability

- readily biodegradable
  89 % BOD/ThOD, 28 d
  ≥ 76 % active substance, 28 d
  (Manometric Respirometry Test, OECD No. 301 F) *2

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

2 referring to: Actemra, sterile injection solution containing excipients

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues	- observe local/national regulations regarding waste disposal - drain very small quantities into wastewater treatment plant

SECTION 14: Transport information

Australian Remark	- ADG Code: This product is not classified as a dangerous good. No special transport conditions are necessary unless required by other regulations.

SECTION 15: Regulatory information

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

Water hazard class (Germany)	1: weakly hazardous for water (own classification according to directive VwVwS of 27.07.2005)

SECTION 16: Other information

Note	- Please note this Safety Data Sheet for the bulk product does not apply for the finished, packaged medicinal product intended for the final user.
Edition documentation	- changes from previous version in sections 1

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.

Safety Data Sheet

ACTEMRA® s.c. 162 mg/0.9 ml

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

1.1. Product identifier

Product name	ACTEMRA® s.c. 162 mg/0.9 ml
Product code	SAP-10141792

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

Use

- ACTEMRA is a prescription medicine called an Interleukin-6 (IL-6) receptor antagonist. ACTEMRA SC is used to treat adults with moderately to severely active rheumatoid arthritis (RA).

1.3. Details of the supplier of the safety data sheet

Company information

Enquiries:
Roche Products Pty Limited
P.O. Box 255
Dee Why, N.S.W. 2099
AUS-Australia
Australia

Phone 0061-2-9454-9624
Fax 0061-2-9971-7401
E-Mail info.sds@roche.com

Local representation:

1.4. Emergency telephone number

Emergency telephone number Phone 0061-2-9454-9624

SECTION 2: Hazards identification

2.1. / 2.2. Classification of the substance or mixture / Label elements

GHS Classification: no classification and labelling according to GHS

Australian Remark

- Not classified as hazardous according to the Criteria of Worksafe Australia
- Poisons Schedule - Schedule 4 *1
- Not listed on the Australian Inventory of Chemical Substances (AICS) *1

2.3. Other hazards

Note - no information available

1 referring to: Tocilizumab

SECTION 3: Composition/information on ingredients

Synonyms
- Actemra SC
- Actemra s.c. 180 mg/ml

Ingredient	Concentration	GHS-Classification (pure ingredient)
Tocilizumab 375823-41-9	180 mg/ml	
Polysorbate 80 9005-65-6	< 0.1 %	
L-Arginine 74-79-3	< 0.1 %	
L-Arginine hydrochloride 1119-34-2	2.1 %	
L-Methionine 63-68-3	0.45 %	
L-Histidine 71-00-1	0.16 %	
L-Histidine hydrochloride 5934-29-2	0.21 %	

water solution suitable for injection

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact - rinse with tap water for 20 minutes - open eyelids forcibly

Skin contact - drench affected skin with water

Inhalation - in the event of symptoms 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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	-	adapt extinguishing media to surrounding fire conditions

5.2. Special hazards arising from the substance or mixture

Specific hazards	-	no particular hazards known

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	-	no special precautions required

6.2. Environmental precautions

Environmental protection	-	no special environmental precautions required

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	-	mop or flush the contaminated area with water

SECTION 7: Handling and storage

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	-	2 - 8 °C
Validity	-	2 years, see "best use before" date stated on the label, in the unopened original container
Packaging materials	-	prefilled syringes

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Threshold value (Roche) air	-	IOEL (Internal Occupational Exposure Limit): 0.4 mg/m3	*1

8.2. Exposure controls

Respiratory protection	-	respiratory protection not necessary during normal operations
Hand protection	-	protective gloves (eg made of neoprene, nitrile or butyl rubber)
Eye protection	-	safety glasses

1 referring to: Tocilizumab

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Colour	colourless to slightly yellow
Form	sterile liquid
pH value	5.5 to 6.5

9.2. Other information

Note	-	no information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Note	-	no information available

10.2. Chemical stability

Stability	-	does not contain any antimicrobial preservative; therefore, care must be taken to ensure the sterility of the prepared solution
	-	as for all other proteins, monoclonal antibodies are temperature-sensitive; the thermal denaturation has an impact on quality but does not affect Plant and Process Safety; during decomposition no flammable gas, no organic peroxide and no oxidising substances are created

10.3. Possibility of hazardous reactions

Note	-	no information available

10.4. Conditions to avoid

Conditions to avoid	- warming - light	

10.5. Incompatible materials

Note	- no information available	

10.6. Hazardous decomposition products

Note	- no information available	

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	- NOEL ≥ 150 mg/kg (i.v., rat) - not bioavailable by oral administration	*1 *1
Subacute toxicity	- NOAEL 10 mg/kg/d (i.v., rat, 28 d)	*1
Chronic toxicity	- NOAEL > 100 mg/kg/w (i.v., monkey; 6 months)	*1
Local effects	- no information available	
Sensitization	- no information available	
Mutagenicity	- not mutagenic (various in vitro test systems)	*1
Carcinogenicity	- no information available	
Reproductive toxicity	- no information available	
STOT-single exposure	- no information available	
STOT-repeated exposure	- no information available	
Aspiration hazard	- no information available	
Note	- immunosuppressive agent - therapeutic dose: 4 to 8 mg/kg/month - elimination half-life: 6 to 9 d - side effect(s) during therapy: liver damages, infectious episodes	*1 *1 *1 *1

1 referring to: Tocilizumab

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

- barely toxic for algae (nominal concentration = 100 mg/l)
  (Scenedesmus (=Desmodesmus) subspicatus)
  EC_{50} (72 h) > 100 mg active substance/l
  NOEC (72 h) 100 mg active substance/l
  (OECD No. 201) *2
- barely toxic for planktonic crustaceans (nominal concentration = 100 mg/l) (Daphnia magna)
  EC_{50} (48 h) > 100 mg active substance/l
  NOEC (48 h) 100 mg active substance/l
  (OECD No. 202) *2
- barely toxic for fish (nominal concentration = 100 mg/l) (zebrafish)
  LC_{50} (96 h) > 100 mg active substance/l
  NOEC (96 h) 100 mg active substance/l
  (OECD No. 203) *2
- no adverse influence on substrate biodegradation (activated sludge)
  concentration (14 d) 100 mg active substance/l
  (Manometric Respirometry Test, OECD No. 301 F) *2

12.2. Persistence and degradability

Ready biodegradability

- readily biodegradable
  89 % BOD/ThOD, 28 d
  ≥ 76 % active substance, 28 d
  (Manometric Respirometry Test, OECD No. 301 F) *2

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

2 referring to: Actemra, sterile injection solution containing excipients

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues	-	observe local/national regulations regarding waste disposal

SECTION 14: Transport information

Australian Remark	-	ADG Code: This product is not classified as a dangerous good. No special transport conditions are necessary unless required by other regulations.

SECTION 15: Regulatory information

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

Water hazard class (Germany)	1: weakly hazardous for water (own classification according to directive VwVwS of 27.07.2005)

SECTION 16: Other information

Note	-	Please note this Safety Data Sheet for the bulk product does not apply for the finished, packaged medicinal product intended for the final user.
Edition documentation	-	changes from previous version in sections 1

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.

Safety Data Sheet

ACTEMRA® Vials 200 mg/10 ml

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

1.1. Product identifier

Product name	ACTEMRA® Vials 200 mg/10 ml
Product code	SAP-10123524

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

Use	- for intravenous infusion after dilution

1.3. Details of the supplier of the safety data sheet

Company information	Enquiries: Roche Products Pty Limited P.O. Box 255 Dee Why, N.S.W. 2099 AUS-Australia Australia Phone 0061-2-9454-9624 Fax 0061-2-9971-7401 E-Mail info.sds@roche.com	Local representation:

1.4. Emergency telephone number

Emergency telephone number	Phone	0061-2-9454-9624

SECTION 2: Hazards identification

2.1. / 2.2. Classification of the substance or mixture / Label elements

GHS Classification	no classification and labelling according to GHS
Australian Remark	- Not classified as hazardous according to the Criteria of Worksafe Australia - Poisons Schedule - Schedule 4 *1 - Not listed on the Australian Inventory of Chemical Substances (AICS) *1

2.3. Other hazards

Note	- no information available

1 referring to: Tocilizumab

SECTION 3: Composition/information on ingredients

Characterization	tocilizumab with other inactive ingredients 1 vial contains 200 mg tocilizumab
Synonyms	- Actemra 20 mg/ml concentrate for solution for infusion - Actemra, sterile injection solution containing excipients

Ingredient	Concentration	GHS-Classification (pure ingredient)
Tocilizumab 375823-41-9	20 mg/ml	
Sucrose 57-50-1		
Disodium phosphate dodecahydrate 10039-32-4		
Sodium dihydrogenphosphate-dihydrate 13472-35-0 01-2119489796-13		
water solution suitable for injection		

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
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 - in the event of symptoms 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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	- adapt extinguishing media to surrounding fire conditions

5.2. Special hazards arising from the substance or mixture

Specific hazards	- no particular hazards known

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	- no special precautions required

6.2. Environmental precautions

Environmental protection	- no special environmental precautions required

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	- rinse with plenty of water

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Suitable materials	- glass

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	- 2 - 8 °C - do not freeze - protected from light
Validity	- see "best use before" date stated on the label, after opening the content should be used within a short period
Packaging materials	- vials - keep it in the outer carton in order to protect from light

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Threshold value (Roche) air	-	IOEL (Internal Occupational Exposure Limit): 0.4 mg/m3	*1

8.2. Exposure controls

Respiratory protection	-	respiratory protection not necessary during normal operations
Hand protection	-	protective gloves (eg made of neoprene, nitrile or butyl rubber)
Eye protection	-	safety glasses

1 referring to: Tocilizumab

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Colour	colourless to slightly yellow clear to opalescent
Form	clear solution sterile liquid

9.2. Other information

Note	-	no information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Note	-	no information available

10.2. Chemical stability

Stability	-	does not contain any antimicrobial preservative; therefore, care must be taken to ensure the sterility of the prepared solution
	-	as for all other proteins, monoclonal antibodies are temperature-sensitive; the thermal denaturation has an impact on quality but does not affect Plant and Process Safety; during decomposition no flammable gas, no organic peroxide and no oxidising substances are created

10.3. Possibility of hazardous reactions

Note	-	no information available

10.4. Conditions to avoid

Conditions to avoid	- warming - light - heavy mechanical loads (shock, impact)	

10.5. Incompatible materials

Note	- no information available	

10.6. Hazardous decomposition products

Note	- no information available	

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	- NOEL ≥ 150 mg/kg (i.v., rat) - not bioavailable by oral administration	*1 *1
Subacute toxicity	- NOAEL 10 mg/kg/d (i.v., rat, 28 d)	*1
Chronic toxicity	- NOAEL > 100 mg/kg/w (i.v., monkey; 6 months)	*1
Local effects	- no information available	
Sensitization	anaphylactic reactions may occur following the intravenous application of proteins; after inhalative exposure no cases of hypersensitivity have been described	
Mutagenicity	- not mutagenic (various in vitro test systems)	*1
Carcinogenicity	- no information available	
Reproductive toxicity	- no information available	
STOT-single exposure	- no information available	
STOT-repeated exposure	- no information available	
Aspiration hazard	- no information available	
Note	- immunosuppressive agent - therapeutic dose: 4 to 8 mg/kg/month - elimination half-life: 6 to 9 d - side effect(s) during therapy: liver damages, infectious episodes	*1 *1 *1 *1

1 referring to: Tocilizumab

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

- barely toxic for planktonic crustaceans (nominal concentration = 100 mg/l) (Daphnia magna)
  EC_{50} (48 h) > 100 mg active substance/l
  NOEC (48 h) 100 mg active substance/l
  (OECD No. 202) *2
- barely toxic for fish (nominal concentration = 100 mg/l) (zebrafish)
  LC_{50} (96 h) > 100 mg active substance/l
  NOEC (96 h) 100 mg active substance/l
  (OECD No. 203) *2
- no adverse influence on substrate biodegradation (activated sludge)
  concentration (14 d) 100 mg active substance/l
  (Manometric Respirometry Test, OECD No. 301 F) *2
- barely toxic for algae (nominal concentration = 100 mg/l) (Scenedesmus (=Desmodesmus) subspicatus)
  EC_{50} (72 h) > 100 mg active substance/l
  NOEC (72 h) 100 mg active substance/l
  (OECD No. 201) *2

12.2. Persistence and degradability

Ready biodegradability

- readily biodegradable
  89 % BOD/ThOD, 28 d
  ≥ 76 % active substance, 28 d
  (Manometric Respirometry Test, OECD No. 301 F) *2

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

2 referring to: Actemra, sterile injection solution containing excipients

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues	- observe local/national regulations regarding waste disposal - drain very small quantities into wastewater treatment plant

SECTION 14: Transport information

Australian Remark	- ADG Code: This product is not classified as a dangerous good. No special transport conditions are necessary unless required by other regulations.

SECTION 15: Regulatory information

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

Water hazard class (Germany)	1: weakly hazardous for water (own classification according to directive VwVwS of 27.07.2005)

SECTION 16: Other information

Note	- Please note this Safety Data Sheet for the bulk product does not apply for the finished, packaged medicinal product intended for the final user.
Edition documentation	- changes from previous version in sections 1

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.

Safety Data Sheet

ACTEMRA® Vials 400 mg/20 ml

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

1.1. Product identifier

Product name: ACTEMRA® Vials 400 mg/20 ml

Product code: SAP-10123557

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

Use: - for intravenous infusion after dilution

1.3. Details of the supplier of the safety data sheet

Company information

Enquiries:
Roche Products Pty Limited
P.O. Box 255
Dee Why, N.S.W. 2099
AUS-Australia
Australia

Phone 0061-2-9454-9624
Fax 0061-2-9971-7401
E-Mail info.sds@roche.com

Local representation:

1.4. Emergency telephone number

Emergency telephone number: Phone 0061-2-9454-9624

SECTION 2: Hazards identification

2.1. / 2.2. Classification of the substance or mixture / Label elements

GHS Classification: no classification and labelling according to GHS

Australian Remark:
- Not classified as hazardous according to the Criteria of Worksafe Australia
- Poisons Schedule - Schedule 4 *1
- Not listed on the Australian Inventory of Chemical Substances (AICS) *1

2.3. Other hazards

Note: - no information available

1 referring to: Tocilizumab

SECTION 3: Composition/information on ingredients

Characterization	tocilizumab with other inactive ingredients 1 vial contains 400 mg tocilizumab
Synonyms	- Actemra 20 mg/ml concentrate for solution for infusion - Actemra, sterile injection solution containing excipients

Ingredient	**Concentration**	**GHS-Classification (pure ingredient)**
Tocilizumab 375823-41-9	20 mg/ml	
Sucrose 57-50-1		
Disodium phosphate dodecahydrate 10039-32-4		
Sodium dihydrogenphosphate-dihydrate 13472-35-0 01-2119489796-13		
water solution suitable for injection		

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
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 - in the event of symptoms 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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	- adapt extinguishing media to surrounding fire conditions

5.2. Special hazards arising from the substance or mixture

Specific hazards	- no particular hazards known

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	- no special precautions required

6.2. Environmental precautions

Environmental protection	- no special environmental precautions required

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	- rinse with plenty of water

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Suitable materials	- glass

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	- 2 - 8 °C - do not freeze - protected from light
Validity	- see "best use before" date stated on the label, after opening the content should be used within a short period
Packaging materials	- vials - keep it in the outer carton in order to protect from light

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Threshold value (Roche) air	-	IOEL (Internal Occupational Exposure Limit): 0.4 mg/m3	*1

8.2. Exposure controls

Respiratory protection	-	respiratory protection not necessary during normal operations
Hand protection	-	protective gloves (eg made of neoprene, nitrile or butyl rubber)
Eye protection	-	safety glasses

1 referring to: Tocilizumab

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Colour	colourless to slightly yellow clear to opalescent
Form	clear solution sterile liquid

9.2. Other information

Note	-	no information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Note	-	no information available

10.2. Chemical stability

Stability	-	does not contain any antimicrobial preservative; therefore, care must be taken to ensure the sterility of the prepared solution
	-	as for all other proteins, monoclonal antibodies are temperature-sensitive; the thermal denaturation has an impact on quality but does not affect Plant and Process Safety; during decomposition no flammable gas, no organic peroxide and no oxidising substances are created

10.3. Possibility of hazardous reactions

Note	-	no information available

10.4. Conditions to avoid

Conditions to avoid	- warming - light - heavy mechanical loads (shock, impact)	

10.5. Incompatible materials

Note	- no information available	

10.6. Hazardous decomposition products

Note	- no information available	

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	- NOEL ≥ 150 mg/kg (i.v., rat) - not bioavailable by oral administration	*1 *1
Subacute toxicity	- NOAEL 10 mg/kg/d (i.v., rat, 28 d)	*1
Chronic toxicity	- NOAEL > 100 mg/kg/w (i.v., monkey; 6 months)	*1
Local effects	- no information available	
Sensitization	anaphylactic reactions may occur following the intravenous application of proteins; after inhalative exposure no cases of hypersensitivity have been described	
Mutagenicity	- not mutagenic (various in vitro test systems)	*1
Carcinogenicity	- no information available	
Reproductive toxicity	- no information available	
STOT-single exposure	- no information available	
STOT-repeated exposure	- no information available	
Aspiration hazard	- no information available	
Note	- immunosuppressive agent - therapeutic dose: 4 to 8 mg/kg/month - elimination half-life: 6 to 9 d - side effect(s) during therapy: liver damages, infectious episodes	*1 *1 *1 *1

1 referring to: Tocilizumab

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

- barely toxic for planktonic crustaceans (nominal concentration = 100 mg/l) (Daphnia magna)
  EC_{50} (48 h) > 100 mg active substance/l
  NOEC (48 h) 100 mg active substance/l
  (OECD No. 202) *2
- barely toxic for fish (nominal concentration = 100 mg/l) (zebrafish)
  LC_{50} (96 h) > 100 mg active substance/l
  NOEC (96 h) 100 mg active substance/l
  (OECD No. 203) *2
- no adverse influence on substrate biodegradation (activated sludge)
  concentration (14 d) 100 mg active substance/l
  (Manometric Respirometry Test, OECD No. 301 F) *2
- barely toxic for algae (nominal concentration = 100 mg/l) (Scenedesmus (=Desmodesmus) subspicatus)
  EC_{50} (72 h) > 100 mg active substance/l
  NOEC (72 h) 100 mg active substance/l
  (OECD No. 201) *2

12.2. Persistence and degradability

Ready biodegradability

- readily biodegradable
  89 % BOD/ThOD, 28 d
  ≥ 76 % active substance, 28 d
  (Manometric Respirometry Test, OECD No. 301 F) *2

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

2 referring to: Actemra, sterile injection solution containing excipients

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues	- observe local/national regulations regarding waste disposal - drain very small quantities into wastewater treatment plant

SECTION 14: Transport information

Australian Remark	- ADG Code: This product is not classified as a dangerous good. No special transport conditions are necessary unless required by other regulations.

SECTION 15: Regulatory information

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

Water hazard class (Germany)	1: weakly hazardous for water (own classification according to directive VwVwS of 27.07.2005)

SECTION 16: Other information

Note	- Please note this Safety Data Sheet for the bulk product does not apply for the finished, packaged medicinal product intended for the final user.
Edition documentation	- changes from previous version in sections 1, 3

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.