Safety Data Sheet

ACTEMRA(R) Sterile Concentrate for Injection (400 mg)

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

1.1. Product identifier

Product name	ACTEMRA(R) Sterile Concentrate for Injection (400 mg)
Product code	SAP-10129601
Synonyms	- Actemra 20 mg/ml concentrate for solution for infusion - ACTEMRA(R) Vials (400 mg)

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

Use	- pharmaceutical active substance (antirheumatic) - for intravenous infusion after dilution	*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: Tocilizumab

SECTION 2: Hazards identification

Classification of the substance or mixture / Label elements

GHS Classification: no classification and labelling according to GHS

Other hazards

Note: - no information available

SECTION 3: Composition/information on ingredients

Characterization	tocilizumab with other inactive ingredients 1 vial contains 400 mg tocilizumab

Ingredients	**Concentration**
Tocilizumab CAS: 375823-41-9	2 %

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact	- rinse immediately with tap water for 10 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
Flash point (liquid)	not applicable

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/m^3	*1

8.2. Exposure controls

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.
	-	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

Color	colorless 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)	*1
	-	not bioavailable by oral administration	*1
Subacute toxicity	-	NOAEL 10 mg/kg/d (i.v., rat, 28 d)	*1
Sensitization	-	anaphylactic reactions may occur following the intravenous application of proteins; after inhalative exposure no cases of hypersensitivity have been described	
Chronic toxicity	-	NOAEL > 100 mg/kg/w (i.v., monkey; 6 months)	*1
Mutagenicity	-	not mutagenic (various in vitro test systems)	*1
Note	-	immunosuppressive agent	*1
	-	therapeutic dose: 4 to 8 mg/kg/month	*1
	-	elimination half-life: 6 to 9 d	*1
	-	side effect(s) during therapy: liver damages, infectious episodes	*1
Potential Health Effects	-	Exposure: Inhalation, Ingestion, Skin contact, Eye contact	
	-	Carcinogenicity: formulation not listed by NTP, IARC or OSHA	
Additional Health Information	-	Conditions Aggravated: Hypersensitivity to this material and other materials in its chemical class.	

*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 Concentrate for Injection (80, 200 & 400 mg)

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

Note
- not classified by transport regulations, proper shipping name non-regulated

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 (1-609-292-5560) and to local officials. - State and local regulations vary and may impose additional reporting requirements.

SECTION 16: Other information

Edition documentation	- changes from previous version in sections 8, 10

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.