SAFETY DATA SHEET



1. Identification

1. Identification			
Product identifier	Excede Sterile Suspension		
Other means of identification			
Synonyms	Excede * Naxcel * Ceftiofur Crystalline Free Acid Sterile Suspension * Excede 100 * Excede 200		
Recommended use	Veterinary antibiotic agent		
Recommended restrictions	Not for human use		
	anufacturer/Importer/Supplier/Distributor information		
Company Name (USA)	Zoetis Inc.		
	10 Sylvan Way		
	Parsippany, New Jersey 07054 (USA)		
Rocky Mountain Poison and Drug Center	1-866-531-8896		
Product Support/Technical Services	1-888-963-8471		
Emergency telephone numbers	CHEMTREC (24 hours): 1-800-424-9300		
	International CHEMTREC (24 hours): +1-703-527-3887		
Company Name (CA)	Zoetis Canada Inc.		
	16740 Trans-Canada Highway		
	Kirkland, Quebec, H9H 4M7		
Emergency telephone	International CHEMTREC (24 hours): +1-703-527-3887		
number Contact E-Mail	productsupport@zoetis.com		
Product Support	1-800-461-0917		
	All Safety Data Sheets are available via our Zoetis Canada website at https://www.zoetis.ca/sds/sds.aspx		
Supplier	Not available.		
2. Hazard identification			
Physical hazards	Not classified.		
Health hazards	Sensitization, respiratory Category 1		
	Sensitization, skin Category 1		
Environmental hazards	Not classified.		
Label elements			
Signal word	Danger		
Hazard statement	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.		
Precautionary statement			
Prevention	Avoid breathing mist or vapour. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. In case of inadequate ventilation wear respiratory protection.		
Response	IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE/doctor. Take off contaminated clothing and wash it before reuse.		

Storage Disposal	Store away from incompatible materials. Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental information	Direct contact with eyes may cause temporary irritation. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May cause effects similar to those generally seen in clinical use of antibiotics including gastrointestinal irritation, vomiting, transient diarrhea, nausea, and abdominal pain. Individuals who are sensitive to beta lactam antibiotics, both penicillins and cephalosporins, may experience contact or systemic hypersensitivity and anaphylaxis upon exposure to this drug. Effects on blood and blood-forming organs have also occurred.
Other hazards	None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Ceftiofur Crystalline Free Acid		80370-57-6	20
Non-hazardous ingredients		Proprietary	*

All concentrations are in percent by weight (kg) unless ingredient is a gas. Gas concentrations are in percent by volume (I).

Composition comments * Non-hazardous Ingredients

Inhalation	Move to fresh air. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. If breathing is difficult, trained personnel should give oxygen.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation develops and persists. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Call a physician or poison control centre immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconsious person.
Most important symptoms/effects, acute and delayed	Difficulty in breathing. May cause an allergic skin reaction. Dermatitis. Rash. Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness, and discomfort. Prolonged skin contact may cause temporary irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
5. Fire-fighting measures	

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions,	Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate protective
protective equipment and	equipment and clothing during clean-up. Do not breathe mist or vapour. Avoid contact with eyes,
emergency procedures	skin, and clothing. Ventilate closed spaces before entering them. Do not touch damaged
• • • •	containers or spilled material unless wearing appropriate protective clothing. Local authorities
	should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up	Ensure adequate ventilation. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Avoid release to the environment. Prevent product from entering drains.
	Large Spills: Stop the flow of material, if this is without risk. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Observe good industrial hygiene practices. Provide adequate ventilation. Do not breathe mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Avoid accidental injection. Avoid release to the environment. When using, do not eat, drink or smoke. Wash thoroughly after handling. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse.
Conditions for safe storage, including any incompatibilities	Store in a well-ventilated place. Protect from sunlight. Keep away from heat, sparks and open flame. Store in original tightly closed container. @ 15 - 25°C (59 - 77°F). Do not allow material to freeze. Keep away from food, drink and animal feeding stuffs. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

Zoetis Components	Туре	Value
Ceftiofur Crystalline Free Acid (CAS 80370-57-6)	TWA	200 µg/m³
Biological limit values	No biological exposure limits noted	for the ingredient(s).
Exposure guidelines	OEL Additional Information: Sensitiz	rer
Control banding approach	Not available.	
Appropriate engineering controls	Ensure adequate ventilation, especially in confined areas. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.	
Individual protection measures	s, such as personal protective equipr	nent
Eye/face protection	If contact is likely, safety glasses wit	h side shields are recommended.
Skin protection		
Hand protection	Wear appropriate chemical resistant supplier.	t gloves. Suitable gloves can be recommended by the glove
Other	Wear suitable protective clothing. Us coveralls, etc.) in both production ar	se protective clothing (uniforms, lab coats, disposable nd laboratory areas.
Respiratory protection	should be provided in instances whe engineering controls do not maintair (where applicable) or to an acceptat	ar suitable respiratory equipment. Respiratory protection ere exposure to dust, mists, aerosols or vapors are likely. If a airborne concentrations below recommended exposure limits ble level (in countries where exposure limits have not been r must be worn. Chemical respirator with organic vapour ist filter.
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.
General hygiene considerations	and before eating, drinking, and/or s	ene measures, such as washing after handling the material smoking. Routinely wash work clothing and protective Contaminated work clothing should not be allowed out of the

9. Physical and chemical properties

Physical state	Liquid.
Form	Liquid.
Colour	Opaque.
Odour	Not available.
Odour threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition	No dangerous reaction known under conditions of normal use.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Ceftiofur Crystalline Free Acid	Species: Rabbit Severity: Minimal
Eye contact	Direct contact with eyes may cause temporary irritation.
Ceftiofur Crystalline Free Acid	Species: Rabbit

Species: Rabbit Severity: Minimal

Ingestion

products

May cause discomfort if swallowed.

Symptoms related to the
physical, chemical and
toxicological characteristics

Acute toxicity

Difficulty in breathing. May cause an allergic skin reaction. Dermatitis. Rash. Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged skin contact may cause temporary irritation. May cause redness and pain.

Information on toxicological effects

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Common ont-			
Components	Species	Test Results	
Ceftiofur Crystalline Free Acid (C	AS 80370-57-6)		
<u>Acute</u>			
Inhalation LC50	Rat		
	Ral	> 8.3 mg/l, 4 Hours	
Oral	Det		
LD50	Rat	> 7760 mg/kg	
Other	Det	$0.07 \text{ me} \left[(2.16 \text{ tensor injection } (2.16) \right]$	
LD50	Rat	927 mg/kg [Sub-tenon injection (eye)]	
<u>Subacute</u>			
Oral	Det		
NOEL	Rat	< 1500 mg/kg/day, 30 days [Target organ(s): Gastrointestinal System]	
Subchronic			
Oral			
LOAEL	Dog	300 mg/kg/day, 51 days [Target organ(s):	
		Blood forming organs]	
NOEL	Dog	30 mg/kg/day, 90 days [Target organ(s): Blood forming organs]	
	Rat	30 mg/kg/day, 90 days [Target organ(s): Gastrointestinal system]	
Non-hazardous ingredients			
Acute			
Oral			
LD50	Rat	> 5000 mg/kg	
Skin corrosion/irritation	Prolonged skin contact r	nay cause temporary irritation.	
Corrosivity			
Ceftiofur Crystalline Free Acid		Species: Rabbit Severity: Minimal	
Serious eye damage/eye rritation	Direct contact with eyes may cause temporary irritation.		
Eye contact			
Ceftiofur Crystalline Free	e Acid	Species: Rabbit Severity: Minimal	
Respiratory or skin sensitisatio			
Respiratory sensitisation	May cause allergy or as	thma symptoms or breathing difficulties if inhaled.	
Skin sensitisation	May cause an allergic sl	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Mutagenicity	A		
Ceftiofur Crystalline Free Acid		In Vitro Bacterial Mutagenicity (Ames) Result: Negative Species: Salmonella,E. coli	
		In Vitro Mammalian Cell Mutagenicity Result: Negative	
		Species: Chinese Hamster Ovary (CHO) cells	
Material name: Excede Sterile Susn	onsion	SDS CANA	

Mutagonicity		
Mutagenicity Ceftiofur Crystalline Free Acid		In Vivo Micronucleus Result: Negative Species: Rat
		Unscheduled DNA Synthesis Result: Negative Species: Rat Hepatocyte
Carcinogenicity	Not classifiable as to carcinogenicity to humans. Due to partial or complete lack of data the classification is not possible.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects. Based on available data, the classification criteria are not met.	
Developmental effects Ceftiofur Crystalline Free	Acid	3200 mg/kg/day Embryo / Fetal Development, Not Teratogenic, Fetotoxicity, Maternal Toxicity Result: NOAEL Species: Rat Organ: Oral
Reproductivity Ceftiofur Crystalline Free	Acid	1000 mg/kg/day 2 Generation Reproductive Toxicity, No effects at maximum dose Result: NOEL Species: Rat Organ: Oral
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may be	harmful.
12. Ecological information	1	
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Avoid release to the environment.	
Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential	See below	
Partition coefficient n-octan Ceftiofur Crystalline Free Acio		0.1
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	
13. Disposal consideration	ns	
Disposal instructions	Avoid release to the environment. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. Dispose of contents/container in accordance with local/regional/national/international regulations.	
Local disposal regulations	Dispose in accordance with a	Il applicable regulations.
Hazardous waste code	None known.	
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.	
Contaminated packaging	Since emptied containers may emptied.	y retain product residue, follow label warnings even after container is

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

	contains all the information required by the HPR.	
Controlled Drugs and Substa	ances Act	
Not regulated.		
Export Control List (CEPA 19	999, Schedule 3)	
Not listed.		
Greenhouse Gases		
Not listed.		
Precursor Control Regulatio	ns	
Not regulated.		
rnational regulations		
Stockholm Convention		
Not applicable.		
Rotterdam Convention		
Not applicable.		
Kyoto Protocol		
Not applicable. Montreal Protocol		
Not applicable.		
Basel Convention		
Not applicable.		
rnational Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date	05-April-2017
Revision date	04-May-2022

Version No.	02
List of abbreviations	AICIS: Australian Inventory of Industrial Chemicals.
Disclaimer	Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time. The information in the sheet was written based on the best knowledge and experience currently available.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.