

# VALCYTE(R) F.C. Tablets (450 mg)

Version Revision Date: Date of last issue: 02-28-2020 1.4 01-20-2021 Date of first issue: 12-10-2015

### **SECTION 1. IDENTIFICATION**

Product name : VALCYTE(R) F.C. Tablets (450 mg)

Product code : 00010069575

Common name(s), syno- : Valganciclovir Film Coated Tablets 450 mg

nym(s) of the substance Valganciclovir F.C. Tablets 450 mg

Manufacturer or supplier's details

Company name of supplier : Genentech, Inc.

Address : DNA Way 1

94080 South San Francisco

CA USA

Telephone : 001-(650) 225-1000 E-mail address : info.sds@roche.com

Emergency telephone

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

ber

Recommended use of the chemical and restrictions on use

Recommended use : Formulated pharmaceutical active substance

Restrictions on use : For professional users only.

### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Germ cell mutagenicity : Category 1B

Carcinogenicity : Category 1A

Reproductive toxicity : Category 1B

Specific target organ toxicity

- repeated exposure

Category 1

**GHS** label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H340 May cause genetic defects.

H350 May cause cancer.

H360FD May damage fertility. May damage the unborn child.



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H372 Causes damage to organs through prolonged or repeated

exposure.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Other hazards

None known.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Valganciclovir	175865-59-5	80.6
Cellulose	9004-34-6	7.8
2-Pyrrolidinone, 1-ethenyl-, homopolymer	9003-39-8	3.9
2-Pyrrolidinone, 1-ethenyl-, homopolymer	9003-39-8	3.9
non hazardous compounds	Not Assigned	2.0
Octadecanoic acid	57-11-4	1.0
Titanium oxide (TiO2)	13463-67-7	< 0.9

# **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Show this material safety data sheet to the doctor in

attendance.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

If unconscious, place in recovery position and seek medical

advice.

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If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

Most important symptoms and effects, both acute and

delayed

May cause genetic defects.

May cause cancer.

May damage fertility. May damage the unborn child.

Causes damage to organs through prolonged or repeated

exposure.

Notes to physician : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod: :

ucts

In case of fire hazardous decomposition products may be

produced such as: Carbon monoxide

Ammonia

Nitrogen oxides (NOx)

Gaseous hydrogen chloride (HCI).

Carbon oxides

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment:

for fire-fighters

Wear self-contained breathing apparatus for firefighting if

necessary.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec- : Use personal protective equipment.



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tive equipment and emer-

gency procedures

Avoid dust formation. Avoid breathing dust. Avoid exposure

**Environmental precautions** 

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

#### **SECTION 7. HANDLING AND STORAGE**

Advice on protection against :

fire and explosion

Avoid dust formation.

Provide appropriate exhaust ventilation at places where dust

is formed.

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapors/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated

place

Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age conditions

See label, package insert or internal guidelines

Storage temperature : Protected from heat and light

Protect from moisture.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

Packaging material : Suitable material: Stainless steel, glass, Polyethylene bag in

metal drum

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

# Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Valganciclovir	175865-59-5	IOEL	0.008 mg/m3	Roche In- dustrial Hy-



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				giene Com- mittee (RIHC)
Cellulose	9004-34-6	TWA	10 mg/m3	ACGIH
		TWA (Res- pirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	15 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
Titanium oxide (TiO2)	13463-67-7	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA	10 mg/m3 (Titanium dioxide)	ACGIH

**Engineering measures** : No data available

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter. Effective dust mask

Hand protection

Material : Protective gloves

Remarks : Wear appropriate protective gloves to prevent skin contact.

Replace torn or punctured gloves promptly.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Skin and body protection : Dust impervious protective suit

Choose body protection according to the amount and

concentration of the dangerous substance at the work place.

Protective measures : Instruction of employees mandatory

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES** 

Appearance : tablet



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Color : light red

Odor : Not applicable

Odor Threshold : Not applicable

pH : Not applicable

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Evaporation rate : No data available

Self-ignition : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : No data available

Relative vapor density : Not applicable

Relative density : No data available

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac- : No decomposition if stored and applied as directed.



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tions

Incompatible materials : No data available

Hazardous decomposition

products

No data available

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 2,960 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 66.92 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

**Components:** 

Valganciclovir:

Acute oral toxicity : LD50 Oral (Mouse): > 2,000 mg/kg

Cellulose:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2,000 mg/kg

Titanium oxide (TiO2):

Acute oral toxicity : LD50 (Rat): > 7,500 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 6.82 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 10,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

**Components:** 

Valganciclovir:

Species : Rabbit

Result : No skin irritation



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## Serious eye damage/eye irritation

Not classified based on available information.

#### Components:

Valganciclovir:

Species : Rabbit

Result : No eye irritation

### Respiratory or skin sensitization

### Skin sensitization

Not classified based on available information.

### Respiratory sensitization

Not classified based on available information.

### **Components:**

Valganciclovir:

Species : Guinea pig

Result : Did not cause sensitization on laboratory animals.

## Germ cell mutagenicity

May cause genetic defects.

### **Components:**

Valganciclovir:

Genotoxicity in vitro : Result: positive

Genotoxicity in vivo : Species: laboratory animal

Result: positive

Germ cell mutagenicity -

Assessment

: In vivo tests showed mutagenic effects

# Carcinogenicity

May cause cancer.

# **Components:**

## Valganciclovir:

Species : laboratory animal

Result : positive

Symptoms : carcinogenic effects

The value is given in analogy to the following substances: Ganciclovir

Carcinogenicity - Assess-

ment

Human carcinogen.

### Cellulose:

Remarks : No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.



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IARC Group 2B: Possibly carcinogenic to humans

Titanium oxide (TiO2) 13463-67-7

**OSHA**No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

### Reproductive toxicity

May damage fertility. May damage the unborn child.

### **Components:**

### Valganciclovir:

Effects on fertility : Species: laboratory animal

Symptoms: Effects on fertility.

The value is given in analogy to the following substances:

Ganciclovir

Effects on fetal development : Species: laboratory animal

Result: Teratogenic effects., Embryotoxic effects.

The value is given in analogy to the following substances:

Ganciclovir

Reproductive toxicity - As-

sessment

Presumed human reproductive toxicant, May damage fertility.

May damage the unborn child.

### STOT-single exposure

Not classified based on available information.

## STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

#### **Components:**

#### Valganciclovir:

Assessment : Causes damage to organs through prolonged or repeated

exposure.

### Repeated dose toxicity

### **Components:**

## Valganciclovir:

Species : Rat

NOAEL : mg/kg bw/day, 2

Application Route : Oral Exposure time : 90 d

Remarks : Subchronic toxicity

## **Aspiration toxicity**

Not classified based on available information.



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### **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

### **Components:**

### Valganciclovir:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1,020 mg/l

Exposure time: 96 h

The value is given in analogy to the following substances:

Ganciclovir

NOEC (Oncorhynchus mykiss (rainbow trout)): 1,020 mg/l

Exposure time: 96 h

The value is given in analogy to the following substances:

Ganciclovir

LC50 (Lepomis macrochirus (Bluegill sunfish)): > 1,020 mg/l

Exposure time: 96 h

The value is given in analogy to the following substances:

Ganciclovir

NOEC (Lepomis macrochirus (Bluegill sunfish)): 1,020 mg/l

Exposure time: 96 h

The value is given in analogy to the following substances:

Ganciclovir

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,010 mg/l

Exposure time: 48 h

The value is given in analogy to the following substances:

Ganciclovir

NOEC (Daphnia magna (Water flea)): 1,010 mg/l

Exposure time: 48 h

The value is given in analogy to the following substances:

Ganciclovir

Toxicity to algae/aquatic

plants

NOEC (blue-green algae): 1,000 mg/l

End point: see user defined free text

Exposure time: 12 d

The value is given in analogy to the following substances:

Ganciclovir

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.012 mg/l

Exposure time: 35 d

Test Type: Fish early-life stage (FELS) toxicity test (OECD

210)

Method: OECD Test Guideline 210

GLP: ves

Remarks: average measured concentration

The value is given in analogy to the following substances:

Ganciclovir

Toxicity to microorganisms : NOEC (Natural microorganism): 1,000 mg/l

Exposure time: 12 d



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Test substance: see user defined free text

The value is given in analogy to the following substances:

Ganciclovir

Cellulose:

**Ecotoxicology Assessment** 

Acute aquatic toxicity This product has no known ecotoxicological effects.

Chronic aquatic toxicity This product has no known ecotoxicological effects.

Titanium oxide (TiO2):

Toxicity to fish LC0 (Leuciscus idus (Golden orfe)): > 1,000 mg/l

Exposure time: 48 h

aquatic invertebrates

Toxicity to daphnia and other : EC0 (Daphnia magna (Water flea)): 3 mg/l

Exposure time: 720 h

**Ecotoxicology Assessment** 

Toxicity Data on Soil Not expected to adsorb on soil.

Other organisms relevant to : No data available

the environment

Persistence and degradability

**Components:** 

Valganciclovir:

Biodegradability Result: Not rapidly biodegradable

> Biodegradation: 2 % Exposure time: 28 d

Remarks: Not inherently biodegradable.

The value is given in analogy to the following substances:

Ganciclovir

Result: Not rapidly biodegradable

Biodegradation: 34 % Exposure time: 28 d

Method: OECD Test Guideline 308 Remarks: Ultimate aerobic biodegradation

The value is given in analogy to the following substances:

Ganciclovir

Bioaccumulative potential

**Components:** 

Valganciclovir:

Partition coefficient: nlog Pow: 0.009 octanol/water pH: 6.9

Cellulose:

11/16



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Partition coefficient: n-

octanol/water

: Remarks: No data available

Titanium oxide (TiO2):

Partition coefficient: n-

octanol/water

: Remarks: No data available

Mobility in soil

No data available

Other adverse effects

**Product:** 

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

### **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

**UNRTDG** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Valganciclovir mixture)

Class : 9
Packing group : III
Labels : 9

**IATA-DGR** 

UN/ID No. : UN 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

(Valganciclovir mixture)

Class : 9
Packing group : III
Labels :



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Packing instruction (cargo : 956

aircraft)

Packing instruction (passen: 956

ger aircraft)

Environmentally hazardous : yes

**IMDG-Code** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Valganciclovir mixture)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### **Domestic regulation**

**49 CFR** 

UN/ID/NA number : UN 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

(Valganciclovir mixture)

Class : 9 Packing group : III

Labels : CLASS 9
ERG Code : 171
Marine pollutant : no

## Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

### **EPCRA - Emergency Planning and Community Right-to-Know**

### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

## SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Germ cell mutagenicity

Carcinogenicity
Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)



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SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

### **US State Regulations**

### **Massachusetts Right To Know**

Cellulose 9004-34-6

### Pennsylvania Right To Know

Valganciclovir 175865-59-5
Cellulose 9004-34-6
2-Pyrrolidinone, 1-ethenyl-, homopolymer 9003-39-8
2-Pyrrolidinone, 1-ethenyl-, homopolymer 9003-39-8

### **Maine Chemicals of High Concern**

Product does not contain any listed chemicals

### **Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

### **Washington Chemicals of High Concern**

Product does not contain any listed chemicals

#### California Prop. 65

WARNING: This product can expose you to chemicals including Titanium oxide (TiO2), which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

### California List of Hazardous Substances

2-Pyrrolidinone, 1-ethenyl-, homopolymer 9003-39-8 2-Pyrrolidinone, 1-ethenyl-, homopolymer 9003-39-8

#### **California Permissible Exposure Limits for Chemical Contaminants**

Cellulose 9004-34-6

## The ingredients of this product are reported in the following inventories:

DSL : This product contains the following components that are not

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on the Canadian DSL nor NDSL.

Valganciclovir

non hazardous compounds

AICS : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

TCSI : Not in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

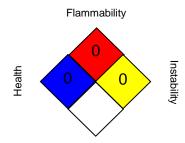
### **TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## **SECTION 16. OTHER INFORMATION**

#### NFPA:



Special hazard

## HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA PO : USA. OSHA - TABLE Z-1 Limits for Air Contaminants -



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1910.1000

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG -Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL -No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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