

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version 1.0	Revision Date: 05.10.2016	SDS Number: S00026909587	This version replaces all previous versions.
----------------	------------------------------	-----------------------------	--

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

1.1 Product identifier

Trade name : FUSILADE II

Design code : A12460A

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

Use of the Substance/Mixture : Herbicide

1.3 Details of the supplier of the safety data sheet

Company : Syngenta Asia Pacific Pte. Ltd.
No. 1 HarbourFront Avenue
#03-03 Keppel Bay Tower
Singapore 098632

Telephone : +65 6333 6400

Telefax : +65 6338 1594

1.4 Emergency telephone number

Emergency telephone number : +65 6334 4366

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 2	H330: Fatal if inhaled.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Reproductive toxicity, Category 2	H361d: Suspected of damaging the unborn child.
Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters airways.
Chronic aquatic toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version	Revision Date:	SDS Number:	This version replaces all previous ver-
1.0	05.10.2016	S00026909587	sions.

Signal word : Danger

Hazard statements : H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H330 Fatal if inhaled.
H361d Suspected of damaging the unborn child.
H411 Toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements : **Prevention:**
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Hazardous components which must be listed on the label:
white mineral oil (petroleum)

fluazifop-P-butyl (ISO)

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
white mineral oil (petroleum)	8042-47-5 232-455-8	Asp. Tox. 1; H304	>= 30 - < 50
fluazifop-P-butyl (ISO)	79241-46-6	Skin Sens. 1; H317 Repr. 2; H361d Aquatic Acute 1; H400	>= 20 - < 25

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version 1.0	Revision Date: 05.10.2016	SDS Number: S00026909587	This version replaces all previous versions.
----------------	------------------------------	-----------------------------	--

		Aquatic Chronic 1; H410	
solvent naphtha (petroleum), heavy arom.	64742-94-5 265-198-5 01-2119451151-53	Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 20 - < 25

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control centre or physician, or going for treatment.
- If inhaled : Move the victim to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with plenty of water.
If skin irritation persists, call a physician.
Wash contaminated clothing before re-use.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses.
Immediate medical attention is required.
- If swallowed : If swallowed, seek medical advice immediately and show this container or label.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : There is no specific antidote available.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Alcohol-resistant foam
or

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version	Revision Date:	SDS Number:	This version replaces all previous ver-
1.0	05.10.2016	S00026909587	sions.

Water spray

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).
Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

Further information : Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : No special protective measures against fire required.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
For personal protection see section 8.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version	Revision Date:	SDS Number:	This version replaces all previous ver-
1.0	05.10.2016	S00026909587	sions.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

Specific use(s) : For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
white mineral oil (petroleum)	8042-47-5	TWA (inhalable dust)	5 mg/m ³	CH SUVA
Further information	See 1.9.6: Lubricants and mineral oil, National Institute for Occupational Safety and Health, Deutsche Forschungsgemeinschaft, Harm to the unborn child is not to be expected when the OEL-value is respected			
	8042-47-5		5 mg/m ³	
	8042-47-5		10 mg/m ³	
fluazifop-P-butyl (ISO)	79241-46-6	TWA	0.5 mg/m ³	Syngenta
solvent naphtha (petroleum), heavy arom.	64742-94-5	TWA	20 ppm 100 mg/m ³	Supplier

8.2 Exposure controls

Engineering measures

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.

Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection

Material : Nitrile rubber
Break through time : > 480 min
Glove thickness : 0.5 mm

Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version	Revision Date:	SDS Number:	This version replaces all previous ver-
1.0	05.10.2016	S00026909587	sions.

provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Remove and wash contaminated clothing before re-use.
Wear as appropriate:
Impervious clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Suitable respiratory equipment:
Respirator with a half face mask
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Use only respiratory protection equipment with CE-symbol including four digit test number.

Filter type : Particulates type (P)

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Flash point : > 61 °C
100 °C

Density : 981 g/cm³

9.2 Other information

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version	Revision Date:	SDS Number:	This version replaces all previous ver-
1.0	05.10.2016	S00026909587	sions.

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3 "Possibility of hazardous reactions".

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity	: LD50 (Rat, male and female): > 5,000 mg/kg Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	: LC50 (Rat): 0.54 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	: (Rat, male and female): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

Components:

fluazifop-P-butyl (ISO):

Acute oral toxicity	: LD50 (Rat, female): 2,451 mg/kg Assessment: The component/mixture is low toxic after single ingestion. LD50 (Rat, male): 3,680 mg/kg Assessment: The component/mixture is low toxic after single ingestion.
Acute inhalation toxicity	: LC50 (Rat, male and female): > 5.2 mg/l

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version 1.0	Revision Date: 05.10.2016	SDS Number: S00026909587	This version replaces all previous versions.
----------------	------------------------------	-----------------------------	--

Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,110 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product:

Result: No skin irritation

Components:

fluazifop-P-butyl (ISO):

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Product:

Result: No eye irritation

Components:

fluazifop-P-butyl (ISO):

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Product:

Species: Guinea pig

Result: May cause sensitisation by skin contact.

Components:

fluazifop-P-butyl (ISO):

Species: Mouse

Result: May cause sensitisation by skin contact.

Germ cell mutagenicity

Components:

fluazifop-P-butyl (ISO):

Germ cell mutagenicity- Assessment : Animal testing did not show any mutagenic effects.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version 1.0	Revision Date: 05.10.2016	SDS Number: S00026909587	This version replaces all previous versions.
----------------	------------------------------	-----------------------------	--

Carcinogenicity

Components:

fluazifop-P-butyl (ISO):

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Components:

fluazifop-P-butyl (ISO):

Reproductive toxicity - Assessment : Embryo/foetoxic effects have been reported in rats., Developmental neurotoxicity has been observed in the absence of maternal toxicity., Some evidence of adverse effects on development, based on animal experiments.

Repeated dose toxicity

Components:

fluazifop-P-butyl (ISO):

Remarks: No adverse effect has been observed in chronic toxicity tests.

Aspiration toxicity

Components:

white mineral oil (petroleum):

May be fatal if swallowed and enters airways.

solvent naphtha (petroleum), heavy arom.:

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Components:

white mineral oil (petroleum):

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l
Exposure time: 96 h

Toxicity to algae : EC50 (Green algae): > 1,000 mg/l
Exposure time: 72 h

fluazifop-P-butyl (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.41 mg/l
Exposure time: 96 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version	Revision Date:	SDS Number:	This version replaces all previous ver-
1.0	05.10.2016	S00026909587	sions.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 mg/l
Exposure time: 48 h

EC50 (Americamysis bahia (Mysid shrimp)): 0.54 mg/l
Exposure time: 96 h

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (algae)): > 1.8 mg/l
Exposure time: 96 h

NOEC (Pseudokirchneriella subcapitata (algae)): 1.8 mg/l
End point: Growth rate
Exposure time: 96 h

ErC50 (Navicula pelliculosa (Freshwater diatom)): 1.4 mg/l
Exposure time: 72 h

NOEC (Navicula pelliculosa (Freshwater diatom)): 0.34 mg/l
End point: Growth rate
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC: 0.077 mg/l
Exposure time: 32 d
Species: Pimephales promelas (fathead minnow)
Test Type: Early-life Stage

M-Factor (Chronic aquatic toxicity) : 1

solvent naphtha (petroleum), heavy arom.:

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Components:

fluazifop-P-butyl (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 1.5 - 1.7 h
Remarks: Product is not persistent.

12.3 Bioaccumulative potential

Components:

fluazifop-P-butyl (ISO):

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n- : log Pow: > 5.3 (25 °C)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version 1.0	Revision Date: 05.10.2016	SDS Number: S00026909587	This version replaces all previous versions.
----------------	------------------------------	-----------------------------	--

octanol/water

12.4 Mobility in soil

Components:

fluazifop-P-butyl (ISO):

Distribution among environmental compartments : Remarks: immobile

Stability in soil : Percentage dissipation: 50 % (DT50: < 2 d)
Remarks: Product is not persistent.

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

Components:

fluazifop-P-butyl (ISO):

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB)..

12.6 Other adverse effects

Product:

Additional ecological information : Classification of the product is based on the summation of the concentrations of classified components.

Components:

white mineral oil (petroleum):

Additional ecological information : No data available

fluazifop-P-butyl (ISO):

Additional ecological information : No data available

solvent naphtha (petroleum), heavy arom.:

Additional ecological information : No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version 1.0	Revision Date: 05.10.2016	SDS Number: S00026909587	This version replaces all previous versions.
----------------	------------------------------	-----------------------------	--

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- | | |
|------------------------|---|
| Product | : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations. |
| Contaminated packaging | : Empty remaining contents.
Triple rinse containers.
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

14.1 UN number

- | | |
|------|-----------|
| ADN | : UN 3082 |
| ADR | : UN 3082 |
| RID | : UN 3082 |
| IMDG | : UN 3082 |
| IATA | : UN 3082 |

14.2 UN proper shipping name

- | | |
|------|--|
| ADN | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(FLUAZIFOP-P-BUTYL AND SOLVENT NAPHTHA) |
| ADR | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(FLUAZIFOP-P-BUTYL AND SOLVENT NAPHTHA) |
| RID | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(FLUAZIFOP-P-BUTYL AND SOLVENT NAPHTHA) |
| IMDG | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(FLUAZIFOP-P-BUTYL AND SOLVENT NAPHTHA) |
| IATA | : Environmentally hazardous substance, liquid, n.o.s.
(FLUAZIFOP-P-BUTYL AND SOLVENT NAPHTHA) |

14.3 Transport hazard class(es)

- | | |
|-----|-----|
| ADN | : 9 |
| ADR | : 9 |
| RID | : 9 |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version 1.0	Revision Date: 05.10.2016	SDS Number: S00026909587	This version replaces all previous versions.
----------------	------------------------------	-----------------------------	--

IMDG : 9

IATA : 9

14.4 Packing group

ADN

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

ADR

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (E)

RID

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

IMDG

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passenger aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Marine pollutant : yes

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version 1.0	Revision Date: 05.10.2016	SDS Number: S00026909587	This version replaces all previous versions.
----------------	------------------------------	-----------------------------	--

IATA (Cargo)

Marine pollutant : yes

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
H2	ACUTE TOXIC	50 t	200 t
E2	ENVIRONMENTAL HAZARDS	200 t	500 t
34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams), (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)	2,500 t	25,000 t

Other regulations : Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

SECTION 16: Other information

Full text of H-Statements

H304	: May be fatal if swallowed and enters airways.
H317	: May cause an allergic skin reaction.
H361d	: Suspected of damaging the unborn child.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



FUSILADE II

Version	Revision Date:	SDS Number:	This version replaces all previous ver-
1.0	05.10.2016	S00026909587	sions.

H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute	: Acute aquatic toxicity
Aquatic Chronic	: Chronic aquatic toxicity
Asp. Tox.	: Aspiration hazard
Repr.	: Reproductive toxicity
Skin Sens.	: Skin sensitisation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; 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; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; 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

Further information

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.

CH / EN