Kohrsolin FF

Version	Revision Date:	SDS Number:	Date of last issue: 26.10.2018
2.2	30.11.2018	R11826	Date of first issue: 08.02.2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Kohrsolin FF

Product code : R11826

Manufacturer or supplier's details

Manufacturer : BODE Chemie GmbH
Melanchthonstraße 27
22525 Hamburg
Tel.: +49 (0)40 / 54 00 60

Supplier :

Responsible Department : Scientific Affairs
Kundenservice@SIDA-BODE-CHEMIE.de

Emergency telephone number : Giftnotruf Göttingen
24h-Phone +49 (0)551 / 1 92 40

Recommended use of the chemical and restrictions on use

Recommended use : In-door use
Disinfectants and general biocidal products
For further information, refer to the product technical data sheet.

Restrictions on use : Restricted to professional users.

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 1

Respiratory sensitisation : Category 1

Skin sensitisation : Category 1

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 2

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled.
H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ eye protection/ face protection.
P284 Wear respiratory protection.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant. Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
Glutaral	111-30-8	>= 1 - < 10
Tridecanol, branched, ethoxylated	69011-36-5	>= 1 - < 10
Alcohols, C12-14. ethoxylated	68439-50-9	>= 1 - < 10
Didecyldimethylammonium chloride	7173-51-5	>= 1 - < 10
Benzyl-C12-18-alkyldimethylammonium chlorides	68391-01-5	>= 1 - < 10
Propan-2-ol	67-63-0	>= 1 - < 10

4. FIRST AID MEASURES

General advice : Call a physician immediately.

If inhaled : If breathed in, move person into fresh air.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If swallowed : Rinse mouth.
Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed : None known.

Notes to physician : Keep under medical supervision for at least 48 hours.
For specialist advice physicians should contact the Poisons Information Service.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	none
Specific hazards during fire-fighting	:	Cool closed containers exposed to fire with water spray.
Hazardous combustion products	:	No hazardous combustion products are known
Specific extinguishing methods	:	Standard procedure for chemical fires.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation.
Environmental precautions	:	Should not be released into the environment.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on safe handling	:	Use only with adequate ventilation. Avoid exceeding the given occupational exposure limits (see section 8). For personal protection see section 8.
Conditions for safe storage	:	Keep tightly closed. Store at room temperature in the original container.
Materials to avoid	:	Keep away from food and drink.
Further information on storage stability	:	Protect from frost.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Propan-2-ol	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection	:	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

In case of full contact: Nitrile rubber

Material	:	Protective gloves complying with EN 374.
Break through time	:	> 480 min
Glove thickness	:	0,1 mm
Protective index	:	Class 6
	:	Peha-soft nitrile guard

Remarks	:	In case of full contact: Nitrile rubber
Eye protection	:	Tightly fitting safety goggles
Skin and body protection	:	Lightweight protective clothing
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with the skin and the eyes. Keep away from food and drink.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	light yellow
Odour	:	characteristic
pH	:	3,2 (20 °C)
Melting point/range	:	not determined
Boiling point/boiling range	:	not determined
Flash point	:	71 °C
Flammability (solid, gas)	:	not auto-flammable
Vapour pressure	:	No data available
Density	:	1,01 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	soluble

10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	None reasonably foreseeable.
Conditions to avoid	:	Protect from frost, heat and sunlight.
Incompatible materials	:	Bases

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate: 1.336 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: 2,8 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:

Glutaral (CAS: 111-30-8)**:**

Acute inhalation toxicity	:	LC50 (Rat, female): 0,28 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: Corrosive to the respiratory tract.

Tridecanol, branched, ethoxylated (CAS: 69011-36-5)**:**

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg Method: Expert judgement
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 2.000 mg/kg Method: Expert judgement

Alcohols, C12-14. ethoxylated (CAS: 68439-50-9)**:**

Acute oral toxicity	:	LD50 Oral (Rat): 2.000 mg/kg

Didecyldimethylammonium chloride (CAS: 7173-51-5)**:**

Acute oral toxicity	:	LD50 Oral (Rat): 238 mg/kg Method: OECD Test Guideline 401
Acute dermal toxicity	:	LD50 Dermal (Rabbit): 3.342 mg/kg

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5)**:**

Acute oral toxicity	:	LD50 (Rat): 344 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): 3.340 mg/kg

Propan-2-ol (CAS: 67-63-0)**:**

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 5.000 mg/kg

Skin corrosion/irritation

Product:

Species: Rabbit
Method: OECD Test Guideline 404
Result: Skin irritation

Components:

Glutaral (CAS: 111-30-8)**:**

Species: Rabbit

Method: OECD Test Guideline 404
Result: Corrosive

Tridecanol, branched, ethoxylated (CAS: 69011-36-5)**:**

Species: Rabbit
Result: No skin irritation

Alcohols, C12-14. ethoxylated (CAS: 68439-50-9)**:**

Result: Repeated exposure may cause skin dryness or cracking.

Didecyldimethylammonium chloride (CAS: 7173-51-5)**:**

Species: Rabbit
Exposure time: 3 min
Method: OECD Test Guideline 404
Result: Corrosive after 3 minutes or less of exposure

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5)**:**

Species: Rabbit
Result: Corrosive after 3 minutes to 1 hour of exposure

Propan-2-ol (CAS: 67-63-0)**:**

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Product:

Result: Risk of serious damage to eyes.

Components:

Tridecanol, branched, ethoxylated (CAS: 69011-36-5)**:**

Species: Rabbit
Method: OECD Test Guideline 437
Result: Risk of serious damage to eyes.

Alcohols, C12-14. ethoxylated (CAS: 68439-50-9)**:**

Result: Irreversible effects on the eye

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5)**:**

Species: Rabbit
Result: Corrosive

Propan-2-ol (CAS: 67-63-0)**:**

Species: Rabbit
Result: Eye irritation

Respiratory or skin sensitisation

Components:

Glutaral (CAS: 111-30-8)**:**

Species: Guinea pig
Result: The product is a skin sensitiser, sub-category 1A.

Result: May cause sensitisation by inhalation.

Tridecanol, branched, ethoxylated (CAS: 69011-36-5)**:**

Test Type: Maximisation Test
Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5)**:**

Test Type: Maximisation Test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Did not cause sensitisation on laboratory animals.

Propan-2-ol (CAS: 67-63-0)**:**

Test Type: Buehler Test
Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Product:

Genotoxicity in vitro	:	Remarks: No data available
Genotoxicity in vivo	:	Remarks: No data available

Components:

Propan-2-ol (CAS: 67-63-0)**:**

Genotoxicity in vitro	:	Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative

Carcinogenicity

Product:

Remarks: This information is not available.

Reproductive toxicity

No data available

STOT - single exposure

Product:

Remarks: No data available

Components:

Glutaral (CAS: 111-30-8)**:**

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Product:

Remarks: No data available

Repeated dose toxicity

Product:

Remarks: This information is not available.

Aspiration toxicity

No data available

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available
Toxicity to algae	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	Remarks: No data available
Toxicity to microorganisms	:	Remarks: No data available

Components:

Glutaral (CAS: 111-30-8)**:**

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0,8 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2,1 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): 0,6 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 NOEC (Desmodesmus subspicatus (green algae)): 0,025 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC: 1,6 mg/l Exposure time: 97 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 5 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1

Tridecanol, branched, ethoxylated (CAS: 69011-36-5)**:**

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): > 1 mg/l Exposure time: 96 h Test Type: flow-through test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): > 1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	IC50 (Pseudomonas putida): > 1.000 mg/l Exposure time: 16 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: > 1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)

Alcohols, C12-14. ethoxylated (CAS: 68439-50-9)**:**

Toxicity to fish	:	LC50 (Fish): > 1 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1 mg/l Exposure time: 48 h
Toxicity to algae	:	IC50 (Scenedesmus capricornutum (fresh water algae)): > 1 mg/l Exposure time: 72 h NOEC (Scenedesmus capricornutum (fresh water algae)): 0,14 mg/l
M-Factor (Chronic aquatic toxicity)	:	1

Didecyldimethylammonium chloride (CAS: 7173-51-5)**:**

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 0,19 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,062 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,026 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,032 mg/l Exposure time: 34 d Species: Danio rerio (zebra fish) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,014 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5)**:**

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 0,28 mg/l

		Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,016 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (microalgae)): 0,049 mg/l Exposure time: 72 h Test Type: Cell multiplication inhibition test Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,032 mg/l Exposure time: 34 d Species: Leuciscus idus (Golden orfe) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,0042 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1

Propan-2-ol (CAS: 67-63-0)**:**

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h
Toxicity to algae	:	EC50 (Scenedesmus capricornutum (fresh water algae)): > 100 mg/l Exposure time: 72 h

Persistence and degradability

Product:

Biodegradability	:	Remarks: The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Components:

Glutaral (CAS: 111-30-8)**:**

Biodegradability	:	Remarks: Readily biodegradable, according to appropriate OECD test.
Biochemical Oxygen Demand (BOD)	:	Biochemical oxygen demand 235 mg/g Incubation time: 5 d
Chemical Oxygen Demand (COD)	:	1.385 mg/g

Didecyldimethylammonium chloride (CAS: 7173-51-5)**:**

Biodegradability	:	Method: Modified Sturm Test Remarks: Readily biodegradable, according to appropriate OECD test.

Benzyl-C12-18-alkyldimethylammonium chlorides (CAS: 68391-01-5)**:**

Biodegradability	:	Remarks: According to the results of tests of biodegradability this product is considered as being readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Adsorbed organic bound halogens (AOX)	:	Remarks: Product does not contain any organic halogens.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Dispose of as hazardous waste in compliance with local and national regulations. The product should not be allowed to enter drains, water courses or the soil.
Contaminated packaging	:	Empty remaining contents. Clean container with water. Offer rinsed packaging material to local recycling facilities.

14. TRANSPORT INFORMATION

ADR

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaral, quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides)
Class	:	9
Packing group	:	III
Labels	:	9
Hazard Identification Number	:	90
Environmentally hazardous	:	yes

UNRTDG

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaral, quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides)
Class	:	9
Packing group	:	III
Labels	:	9

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (glutaral, quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides)
Class	:	9
Packing group	:	III
Labels	:	Class 9 - Miscellaneous Dangerous Goods
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger	:	964

aircraft)

IMDG-Code

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaral, quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

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.

15. REGULATORY INFORMATION

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

International Regulations

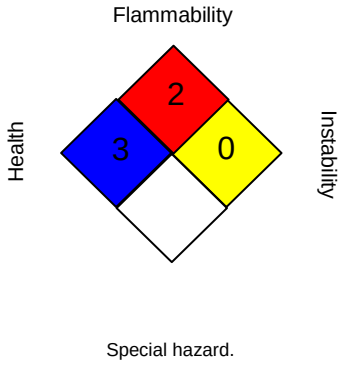
16. OTHER INFORMATION

Safety datasheet sections which have been updated:

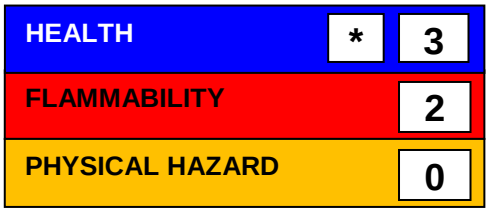
2. Hazards identification

Further information

NFPA:



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)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

TC / EN