

Version: 1.2 Issue Date: 21.03.2019 Last revised date: 29.08.2023

Supersedes Date: 16.02.2021

SAFETY DATA SHEET

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

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

1.1 Product identifier

Product name: POLYCAT DBU

Additional identification

Chemical name: 1,8-diazabicyclo[5.4.0]undec-7-ene

Chemical formula: - INDEX No. -

CAS-No. 6674-22-2 **EC No.** 229-713-7

REACH Registration 01-2119977097-24

No.:

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

Identified uses: Industrial use

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet

Company Name : Evonik Operations GmbH

Rellinghauser Str. 1-11

45128 Essen Germany

Telephone : +49 201 173 01 Fax : +49 201 173 3000

E-mail : productsafety-cs@evonik.com

1.4 Emergency telephone number:

24-Hour Health : +49 2365 49 2232 Emergency +49 2365 49 4423 (Fax)

National Poison Information Service (NPIS) England, Scotland and Wales: NHS: 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720,



Version: 1.2

Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

and UK SI 2020/1567

Health Hazards

Acute toxicity (Oral) Category 3 H301: Toxic if swallowed.

Skin corrosion Sub-category H314: Causes severe skin burns and eye damage.

1B

Serious eye damage Category 1 H318: Causes serious eye damage.

2.2 Label Elements



Signal Words: Danger

Hazard Statement(s): H301: Toxic if swallowed.

H314: Causes severe skin burns and eye damage.

Precautionary Statements

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

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

Response: P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/ physician.

2.3 Other hazards

PBT/vPvB data

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

3.1 Substances

Chemical name: 1,8-diazabicyclo[5.4.0]undec-7-ene

INDEX No.:

CAS-No.: 6674-22-2 **EC No.:** 229-713-7

REACH Registration No.: 01-2119977097-24

	Concentrati on	CAS-No.		UK-REACH Registration No.			Notes
1,8- diazabicycl	50 - <100%	6674-22-2	229-713-7		01- 211997709	No data available.	



emistry

Version: 1.2 Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

Product name: POLYCAT DBU

o[5.4.0]und			7-24	
ec-7-ene				

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Classification

Chemical name	Classification	Notes
1,8-	Classification: Acute Tox.: 3: H301; Skin Corr.: 1B: H314; Eye	None.
diazabicyclo[5.4.0]undec-	Dam.: 1: H318;	
7-ene		
	Supplemental label information: None known.	

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Remove contaminated clothing immediately and store/dispose of

safely

Inhalation: If inhalated remove from side of exposure to fresh air, seek

medical advice.

Skin Contact: In case of contact with skin wash off with soap and water.

Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds Cover wound with sterile dressing.

Eye contact: In case of contact with eyes rinse thoroughly with plenty of water

and seek medical advice

Ingestion: drink large quantities of water, do not induce vomiting; consult a

physician - show this data sheet.

Personal Protection for First-aid

Responders:

First Aid responders should pay attention to self-protection and

use the recommended protective clothing

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Causes burns. Symptoms of poisoning may not appear for

several hours. Keep under medical supervision for at least 48

hours.

Hazards: No data available.

4.3 Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray.

Unsuitable extinguishing media: High volume water jet.

[#] This substance has workplace exposure limit(s).

^{##} This substance is listed as SVHC.



Version: 1.2 Issue Date: 21.03.2019

Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

5.2 Special hazards arising from the

substance or mixture:

In the event of fire the following can be released: - carbon dioxide, carbon monoxide - Ammonia (NH3) - Nitrous gases (NOx) Under certain conditions of combustion traces of

other toxic substances cannot be excluded

5.3 Advice for firefighters

Special fire fighting procedures: No specific precautions.

Special protective equipment for fire-

fighters:

Do not inhale explosion and/or combustion gases. Use self-

contained breathing apparatus and wear protective suit

SECTION 6: Accidental release measures

6.1 Personal precautions, protective

equipment and emergency procedures:

Use personal protective equipment. Ensure adequate

ventilation.

6.1.1 For non-emergency personnel: No data available.

6.1.2 For emergency responders:No data available.

6.2 Environmental Precautions:Do not allow to enter drains or waterways Prevent product

from getting into subsoil/soil.

6.3 Methods and material for containment and

cleaning up:

Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in

accordance with the regulations.

6.4 Reference to other sections: For further information on exposure monitoring and disposal

see sections 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures:No data available.

Local/Total ventilation:No data available.

Safe handling advice: Ensure adequate ventilation. Avoid contact with skin and

eyes. Do not inhale gases/vapours/aerosols.

Contact avoidance measures: No data available.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage conditions: Keep container tightly closed and in a well-ventilated place.

Keep only in the original container. Do not store near acids.

Safe packaging materials: No data available.

7.3 Specific end use(s):No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits



Version: 1.2

Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

None of the components have assigned exposure limits.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

DNEL-Values

Remarks: DNEL-Values

Critical component	Туре	Route of Exposure	Health Warnings	Remarks
1,8-diazabicyclo[5.4.0]undec-7-ene	General population	Inhalation	Systemic, long-term; 2.6 mg/m3	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 10.6 mg/m3	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 1.5 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 1.5 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, long-term; 3 mg/kg	Repeated dose toxicity
	Workers	Eyes		Medium hazard (no threshold derived)
	General population	Eyes		Medium hazard (no threshold derived)

PNEC-Values

Remarks: PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
1,8-diazabicyclo[5.4.0]undec-7-ene	Aquatic (marine water)	0.024 mg/l	
	Sediment (marine water)	0.146 mg/kg	
	Sewage treatment plant	13 mg/l	
	Sediment (freshwater)	1.46 mg/kg	
	Aquatic (freshwater)	0.24 mg/l	
	Soil	0.152 mg/kg	

8.2 Exposure controls

Appropriate Engineering Controls: No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Protective goggles; wear additional face protection if risk is

increased.

Hand Protection: Material: Nitrile butyl rubber (NBR).

Break-through time: > 480 min

Glove thickness: 0.4 mm

Skin and Body Protection: protective clothing

Respiratory Protection: in case of formation of vapours/aerosols: Short term: filter

apparatus, combination filter A-P2

Hygiene measures: Wash hands before breaks and immediately after handling

the product. When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately.

Environmental Controls: The environmental regulations on the control and monitoring

of environmental exposures are to be observed.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties



Version: 1.2

Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

Appearance

Physical state: liquid
Form: liquid
Color: colorless
Odor: Odorless

Odor Threshold: not measured Freezing point: not measured

Boiling Point: 260 °C

Method: OECD 104

Flammability: not measured
Upper/lower limit on flammability or explosive limits
Explosive limit - upper: not measured
Explosive limit - lower: not measured

Flash Point: 111 °C

Method: DIN 51758 (Pensky-Martens (A and B Closed Cup))

Auto-ignition temperature: not measured

Decomposition Temperature: not measured

pH: 12.6 at 23 °C

Concentration: 100 g/l Concentration: 10 %

in Water

Viscosity

Dynamic viscosity: 10.3 mPa.s at 20 °C

Method: OECD 114

Kinematic viscosity: 10.1 mm2/s at 20 °C,

Method: OECD 114

Solubility(ies)

Solubility in Water: 1,000 g/l at 20 °C

Soluble

Solubility (other):No data available.

Partition coefficient (n-octanol/water): not measured

Vapor pressure: 0.03 hPa at 25 °C

Method: OECD 104

Relative density: not measured

Density: 1.019 g/cm3 at 20 °C

Method: OECD 109

Relative vapor density: not measured

9.2 Other information

Explosive properties:not measuredOxidizing properties:not oxidizingSelf-ignition:not measured

Metal Corrosion: Not corrosive to metals

Evaporation Rate: not measured



Version: 1.2

Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

SECTION 10: Stability and reactivity

10.1 Reactivity: see section "Possibility of hazardous reactions".

10.2 Chemical Stability: The product is stable under normal conditions.

10.3 Possibility of hazardous reactions: No hazardous reactions with proper storage and handling

10.4 Conditions to avoid: Unknown

10.5 Incompatible Materials: Unknown

10.6 Hazardous Decomposition None with proper storage and handling.

Products:

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Inhalation: If handled correctly, not a relevant route of exposure. Information on

effects are given below.

Skin Contact: Relevant route of exposure. Information on effects are given below.

Eye contact: Relevant route of exposure. Information on effects are given below.

Ingestion: If handled correctly, not a relevant route of exposure. Information on

effects are given below.

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50, Rat, Female, Male, > 215 - < 681 mg/kg, OECD 401

Components:

1,8- LD 50, Rat, Female, Male, > 215 - < 681 mg/kg, OECD 401

diazabicyclo[5.4.0]undec-

7-ene

Dermal

Product: Not classified for acute toxicity based on available data.

Components:

1,8- Not toxic after single exposure, No data due to skin-corrosive action

diazabicyclo[5.4.0]undec-

7-ene

Inhalation

Product: Not classified for acute toxicity based on available data.

Components:

1,8- Vapour, Not toxic after single exposure, No data due to skin-corrosive

diazabicyclo[5.4.0]undec- action

7-ene Dust and mist, Not toxic after single exposure, No data due to skin-

corrosive action

Repeated dose toxicity

Product: NOAEL - No Observable Adverse Effect Level, Rat, oral (gavage), 120

mg/kg

NOAEL - No Observable Adverse Effect Level, Rat, oral (gavage), 50



Version: 1.2

Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

mg/kg

Components:

1,8- NOAEL - No Observable Adverse Effect Level, Rat, oral (gavage), 120

diazabicyclo[5.4.0]undec- mg/k

7-ene NOAEL - No Observable Adverse Effect Level, Rat, oral (gavage), 50

mg/kg

Skin Corrosion/Irritation

Product: No data available.

Components:

1.8- Corrosive.

diazabicyclo[5.4.0]undec-

7-ene

Serious Eye Damage/Eye Irritation

Product: No data available.

Components:

1,8- Risk of serious damage to eyes.

diazabicyclo[5.4.0]undec-

7-ene

Respiratory or Skin Sensitization

Product: No data available.

Components:

1,8- No data available.

diazabicyclo[5.4.0]undec-

7-ene

Carcinogenicity

Product: No data available.

Components:

1,8- No data available.

diazabicyclo[5.4.0]undec-

7-ene

Germ Cell Mutagenicity

No data available.

In vitro

Product: Ames test, OECD 471: , negative, The data are derived from the

evaluations or test results achieved with similar products (conclusion by

analogy).

Micronucleus test, OECD 487: , negative, The data are derived from the evaluations or test results achieved with similar products (conclusion by

analogy).

gene mutation test, OECD 476: , negative, The data are derived from the evaluations or test results achieved with similar products (conclusion by

analogy).

comet assay: , negative, The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Components:

1,8- Ames test, OECD 471: , negative, (analogy)

diazabicyclo[5.4.0]undec- Micronucleus test, OECD 487: , negative, (analogy)

7-ene gene mutation test, OECD 476: , negative, (analogy)

comet assay: , negative, (analogy)



Version: 1.2

Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

In vivo

Product: No data available.

Components:

1,8- No data available.

diazabicyclo[5.4.0]undec-

7-ene

Reproductive toxicity

Product: No data available. oral (gavage)

Components:

1,8- oral (gavage)

diazabicyclo[5.4.0]undec-

7-ene

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Components:

1,8- No data available.

diazabicyclo[5.4.0]undec-

7-ene

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Components:

1,8- No data available.

diazabicyclo[5.4.0]undec-

7-ene

Aspiration Hazard

Product: Not classified

Components:

1.8- Not classified

diazabicyclo[5.4.0]undec-

7-ene

11.2 Information on other hazards

Other information

Product: Toxic if swallowed. Causes severe skin burns and eye damage.;

SECTION 12: Ecological information

12.1 Toxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC 50, Leuciscus idus (Golden orfe), 96 h, > 100 - < 220 mg/l DIN 38412

section 15

NOEC, Leuciscus idus (Golden orfe), 96 h, 100 mg/l DIN 38412 section

15

Components:

1,8- LC 50, Leuciscus idus (Golden orfe), 96 h, > 100 - < 220 mg/l DIN 38412

diazabicyclo[5.4.0]undec section 15

-7-ene NOEC, Leuciscus idus (Golden orfe), 96 h, 100 mg/l DIN 38412 section

15



Version: 1.2

Issue Date: 21.03.2019

Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

Aquatic Invertebrates

Product: EC 50, Daphnia magna, 48 h, 50 mg/l 79/831/EEC V, C

Components:

1,8-EC 50, Daphnia magna, 48 h, 50 mg/l 79/831/EEC V, C

diazabicvclo[5.4.0]undec

-7-ene

Toxicity to Aquatic Plants

Product: EC 50 (Desmodesmus subspicatus (Scenedesmus subspicatus), 72 h): >

100 mg/l (OECD 201)

EC 50 (Desmodesmus subspicatus (Scenedesmus subspicatus), 72 h): >

100 mg/l (OECD 201)

Components:

1,8-EC 50 (Desmodesmus subspicatus (Scenedesmus subspicatus), 72 h):

diazabicyclo[5.4.0]undec-> 100 mg/l (OECD 201)

7-ene EC 50 (Desmodesmus subspicatus (Scenedesmus subspicatus), 72 h):

> 100 mg/l (OECD 201)

Toxicity to microorganisms

Product: EC 20, activated sludge, 0.5 h, Approximate, 650 mg/l, ISO 8192

EC 50, Pseudomonas putida, 17 h, 330 mg/l, DIN 38412 part 8

Components:

1,8-EC 20, activated sludge, 0.5 h, Approximate, 650 mg/l, ISO 8192

diazabicyclo[5,4,0]undec- EC 50. Pseudomonas putida, 17 h, 330 mg/l, DIN 38412 part 8

7-ene

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Components:

1,8-No data available.

diazabicyclo[5.4.0]undec

-7-ene

Aquatic Invertebrates

Product: NOEC, Daphnia magna, 21 d, > 12 mg/l, OECD 211

Lowest Observed Effect Concentration, Daphnia magna, 21 d, >= 12

mg/l, OECD 211

Components:

NOEC, Daphnia magna, 21 d, > 12 mg/l, OECD 211 1,8-

diazabicyclo[5.4.0]undec Lowest Observed Effect Concentration, Daphnia magna, 21 d, 12 mg/l,

-7-ene **OECD 211**

Toxicity to Aquatic Plants

Product: No data available.

Components:

1,8-No data available.

diazabicyclo[5.4.0]undec-

7-ene

Toxicity to microorganisms

Product: EC 20, activated sludge, 0.5 h, Approximate, 650 mg/l, ISO 8192

EC 50, Pseudomonas putida, 17 h, 330 mg/l, DIN 38412 part 8

Components:

1,8-EC 20, activated sludge, 0.5 h, Approximate, 650 mg/l, ISO 8192

diazabicyclo[5.4.0]undec- EC 50, Pseudomonas putida, 17 h, 330 mg/l, DIN 38412 part 8



Version: 1.2 Issue Date: 21.03.2019

Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

7-ene

12.2 Persistence and Degradability

Biodegradation

Product: 19 %, 28 d, OECD 302 B, The product is not biodegradable. The data are

derived from the evaluations or test results achieved with similar products

(conclusion by analogy)., aerobic

Components:

1.8-19 %, 28 d, OECD 302 B, The product is not biodegradable. (analogy),

diazabicyclo[5.4.0]undec- aerobic

7-ene

12.3 Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:

1.8-No data available.

diazabicyclo[5.4.0]undec-

7-ene

Partition Coefficient n-octanol / water (log Kow)

Product: not measured

Components:

1.8-< -2.2. 25 °C diazabicyclo[5.4.0]undec- -0.43, 25 °C

7-ene

12.4 Mobility in soil:

Product No data available.

Components:

1,8-No data available.

diazabicyclo[5.4.0]undec-7-

ene

12.5 Results of PBT and vPvB assessment:

Product 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:

1,8-No data available.

diazabicyclo[5.4.0]undec-7-

ene

12.6 Other adverse effects:

Other hazards

Product: Do not allow to enter soil, waterways or waste water canal.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: No data available.



Version: 1.2 Issue Date: 21

Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

Disposal methods: In accordance with local authority regulations, take to

special waste incineration plant

Contaminated Packaging: If empty contaminated containers are recycled or disposed

of, the receiver must be informed about possible hazards.

SECTION 14: Transport information

14.1 UN/ID No.

ADR : UN 2922
RID : UN 2922
IMDG : UN 2922
IATA : UN 2922

14.2 UN proper shipping name

ADR : CORROSIVE LIQUID, TOXIC, N.O.S.

(Diazabicyclo(5.4.0)undec-7-ene, 1,8- (dbu))

RID : CORROSIVE LIQUID, TOXIC, N.O.S.

(Diazabicyclo(5.4.0)undec-7-ene, 1,8- (dbu))

IMDG : CORROSIVE LIQUID, TOXIC, N.O.S.

(Diazabicyclo(5.4.0)undec-7-ene, 1,8- (dbu))

IATA : Corrosive liquid, toxic, n.o.s.

(Diazabicyclo(5.4.0)undec-7-ene, 1,8- (dbu))

14.3 Transport hazard class(es)

ADR : 8
RID : 8
IMDG : 8
IATA : 8

14.4 Packing group

ADR

Packing group : II
Classification Code : CT1
Hazard Identification Number : 86
Labels : 8 (6.1)
Tunnel restriction code : (E)

RID

Packing group : II
Classification Code : CT1
Hazard Identification Number : 86
Labels : 8 (6.1)

IMDG

Packing group : II Labels : 8 (6.1) EmS Code : F-A, S-B

Remarks : SW2 - Clear of living quarters., Segregation group not

required / not applicable



Version: 1.2 Issue Date: 21.03.2019

Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

IATA (Cargo aircraft only)

Packing instruction (cargo : 855

aircraft)

Packing instruction (LQ) : Y840
Packing group : II
Labels : 8 (6.1)

IATA (Passenger and cargo

aircraft)

Packing instruction : 851

(passenger aircraft)

Packing instruction (LQ) : Y840
Packing group : II
Labels : 8 (6.1)

14.5 Environmental hazards

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

Remarks : Keep separate from foodstuffs, luxury foods, feedstuffs

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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

EU Regulations

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: Not applicable

15.2 Chemical safety assessment: No chemical safety assessment was carried out for this product.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable



Version: 1.2 Issue Date: 21.03.2019 Last revised date: 29.08.2023 Supersedes Date: 16.02.2021

Kyoto protocol Not applicable

SECTION 16: Other information

Abbreviations and acronyms:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC -Australian Inventory of Industrial Chemicals; 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: EIGA -European Industrial Gases Association; 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; SVHC - substance of very high concern; TCSI -Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Key literature references and No data available. **sources for data:**

Training information: Comply with national laws regulating employee instruction.

Revision Information Changes since the last version are highlighted in the margin. This version

replaces all previous versions.



Version: 1.2 Issue Date: 21.03.2019 Last revised date: 29.08.2023

Supersedes Date: 16.02.2021

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