

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 as amended

Printing date 28.03.2025

Version number 2.0 (replaces version 1.0)

Revision: 28.03.2025

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

- **1.1 Product identifier**
- **Trade name:** **PUREX HB-RN RAL 9005 A**
- **UFI:** ADM3-G0AP-400A-QMFX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Product category** PC15 Non-metal-surface treatment products
- **Application of the substance / the mixture** Coating
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
POLYCHEM SYSTEMS Sp. z o.o.
ul. Wołczyńska 43
60-003 Poznań, Polska
tel. (+48) 61 867 60 51
e-mail: msds@polychem-systems.com.pl
- **Further information obtainable from:** POLYCHEM SYSTEMS Sp. z o. o.
- **1.4 Emergency telephone number:** (+48) 61 867 60 51 (open 7.00 am to 3.00 pm)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 4	H302 Harmful if swallowed.
Skin Corr. 1B	H314 Causes severe skin burns and eye damage.
Eye Dam. 1	H318 Causes serious eye damage.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT RE 2	H373 May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



- **Signal word** Danger
- **Hazard-determining components of labelling:**
Polyetheramine
diethylmethylbenzenediamine
butane-1,4-diol
dimetylobis[(1-oksoneodecyl)oksy]stannan
- **Hazard statements**
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P260 Do not breathe dust, fume, gas, mist, vapours, spray.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Determination of endocrine-disrupting properties** No endocrine disruptors.

(Contd. on page 2)

UL

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 as amended

Printing date 28.03.2025

Version number 2.0 (replaces version 1.0)

Revision: 28.03.2025

Trade name: PUREX HB-RN RAL 9005 A

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 9046-10-0	Polyetheramine ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318 ⚠ Acute Tox. 4, H302 ⚠ Aquatic Chronic 3, H412	25-50%
CAS: 68479-98-1 EINECS: 270-877-4 Index number: 612-130-00-0 Reg.nr.: 01-2119486805-25	diethylmethylbenzenediamine ⚠ STOT RE 2, H373 ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Eye Irrit. 2, H319	≥10-<25%
CAS: 110-63-4 EINECS: 203-786-5 Reg.nr.: 01-2119471849-20-0014	butane-1,4-diol ⚠ Acute Tox. 4, H302; STOT SE 3, H336	2.5-10%
CAS: 68928-76-7 EINECS: 273-028-6 Reg.nr.: 01-2120770324-57-xxxx	dimetylobis[(1-oksonodecyl)oksy]stannan ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1A, H317 ⚠ Aquatic Chronic 3, H412	≥0.1-<1%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Every person taking part in fire-fighting must wear complete protective clothing: full face mask with breathing apparatus fed from independent air source, safety helmet, a coverall, gloves and shoes made of PVC.

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 3)

UL

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 as amended

Printing date 28.03.2025

Version number 2.0 (replaces version 1.0)

Revision: 28.03.2025

Trade name: PUREX HB-RN RAL 9005 A

(Contd. of page 2)

See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in dry conditions.
Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

CAS: 68479-98-1 diethylmethylbenzenediamine

Oral	DNEL	0.1 mg/kg b.w./day (consumers) (long-term exposure)
Dermal	DNEL	1 mg/kg b.w./day (consumers) (long-term exposure)
		1 mg/kg b.w./day (workers) (long-term exposure)
Inhalative	DNEL	0.1 mg/m ³ (consumers) (long-term exposure)
		0.13 mg/m ³ (workers) (long-term exposure)

· PNECs

CAS: 68479-98-1 diethylmethylbenzenediamine

Oral	PNEC	2 mg/kg foods (secondary poisoning)
	PNEC	0.005 mg/l (intermittent)
		0.00005 mg/l (marine water)
		0.0005 mg/l (fresh water)
		17 mg/l (waste treatment plant)
	PNEC	5.6 mg/kg dry weight (soil)
		0.0029 mg/kg dry weight (marine water sediment)
		0.029 mg/kg dry weight (sediment)

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Hand protection**
Protective gloves, resistant to chemicals (EN 374).
Discard contaminated gloves.



Protective gloves

The glove material has to be impermeable and resistant to the product.

(Contd. on page 4)

UL

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 as amended

Printing date 28.03.2025

Version number 2.0 (replaces version 1.0)

Revision: 28.03.2025

Trade name: PUREX HB-RN RAL 9005 A

(Contd. of page 3)

Due to missing tests no recommendation to the glove material can be given for the product/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**



Tightly sealed goggles

· **Environmental exposure controls**

There are not any obligations to make regular measurements of emission to environment. Basic rules of machinery and devices exploitation are to be observed.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· Physical state	Liquid
· Colour:	RAL compliant
· Odour:	Amine-like
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	Undetermined.
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic at 25 °C:	440-660 mPas
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 25 °C:	1.01-1.05 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.

· **9.2 Other information**

· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Evaporation rate	Not determined.

· **Information with regard to physical hazard classes**

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void

(Contd. on page 5)

— UL —

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 as amended

Printing date 28.03.2025

Version number 2.0 (replaces version 1.0)

Revision: 28.03.2025

Trade name: PUREX HB-RN RAL 9005 A

(Contd. of page 4)

· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Avoid contacts with strong oxidizing substances.
- **10.2 Chemical stability** The product is stable at room temperature.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Avoid heat sources (sunbeams, heaters and the like) influence.
- **10.5 Incompatible materials:** Strong oxidizers.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Harmful if swallowed.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral	LD50	1,128 mg/kg (rat)
------	------	-------------------

CAS: 9046-10-0 Polyetheramine

Oral	LD50	480 mg/kg (rat)
Dermal	LD50	2,090 mg/kg (rabbit)

CAS: 68479-98-1 diethylmethylbenzenediamine

Oral	LD50	738 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

CAS: 110-63-4 butane-1,4-diol

Oral	LD50	1,525 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	5.1 mg/l (rat)

CAS: 68928-76-7 dimetylobis[(1-oksoneodecyl)oksy]stannan

Oral	LD50	1,470 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 401)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards** No further data.
- **Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

CAS: 9046-10-0 Polyetheramine

LC50/96h	220-460 mg/l (fish)
----------	---------------------

(Contd. on page 6)

UL

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 as amended

Printing date 28.03.2025

Version number 2.0 (replaces version 1.0)

Revision: 28.03.2025

Trade name: PUREX HB-RN RAL 9005 A

(Contd. of page 5)

CAS: 68479-98-1 diethylmethylbenzenediamine

EC10/72h	54 mg/l (algae)
EC50/48h	0.5 mg/l (daphnia)
EC50/72h	104 mg/l (algae)
LC50/48h	0.5 mg/l (daphnia)
	200 mg/l (fish)

CAS: 110-63-4 butane-1,4-diol

LC50/96h	33,000 mg/l (fish)
UE50/48h	15,000 mg/l (daphnia)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
 Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 Must not reach sewage water or drainage ditch undiluted or unneutralised.
 Danger to drinking water if even extremely small quantities leak into the ground.
 Also poisonous for fish and plankton in water bodies.
 Toxic for aquatic organisms

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue**
 - 1 Regulation of the Minister of Climate of 2 January 2020 on the waste catalogue (OJ 2020, item 10)
 2. the Commission (EU) notice on technical guidance on waste classification (2018/C 124/01)
 3. Commission Regulation (EU) No 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives (Guidelines for HP01-08, 10-13,15)
 - 4 Council Regulation (EU) 2017/997 of 8 June 2017 amending Annex III to Directive 2008/98/EC of the European Parliament and of the Council with regard to the hazardous property HP 14 "Ecotoxic" (Guidance document for HP14)

The waste codes listed are a proposal based on the likely use of the product. Based on the specific types of use and waste management conditions, other waste codes may be assigned if necessary.

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
15 01 10*	packaging containing residues of or contaminated by hazardous substances
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP8	Corrosive
HP14	Ecotoxic

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR/RID/ADN, IMDG, IATA** UN2735
- **14.2 UN proper shipping name**
- **ADR/RID/ADN** AMINES, LIQUID, CORROSIVE, N.O.S. (Polyetheramine, diethylmethylbenzenediamine), ENVIRONMENTALLY HAZARDOUS
- **IMDG, IATA** AMINES, LIQUID, CORROSIVE, N.O.S. (Polyetheramine, diethylmethylbenzenediamine)

(Contd. on page 7)

— UL —

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 as amended

Printing date 28.03.2025

Version number 2.0 (replaces version 1.0)

Revision: 28.03.2025

Trade name: PUREX HB-RN RAL 9005 A

(Contd. of page 6)

14.3 Transport hazard class(es) ADR/RID/ADN, IMDG	
 	
Class Label	8 Corrosive substances. 8
IATA	
	
Class Label	8 Corrosive substances. 8
14.4 Packing group ADR/RID/ADN, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant: Special marking (ADR/RID/ADN):	Environmentally hazardous substance, liquid Product contains environmentally hazardous substances: diethylmethylbenzenediamine Symbol (fish and tree) Symbol (fish and tree)
14.6 Special precautions for user Hazard identification No.: EMS Number: Segregation groups Stowage Category Stowage Code	Warning: Corrosive substances. 80 F-A,S-B (SGG18) Alkalis A SW2 Clear of living quarters.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
Transport/Additional information:	
ADR/RID/ADN Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category Tunnel restriction code	2 E
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (POLYETHERAMINE, DIETHYLMETHYLBENZENEDIAMINE), 8, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

- 1.Regulation (EC) No 1272/2008 Of The European Parliament And Of The Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- 2.Regulation (EC) No 1907/2006 of the European Parliament and the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 and Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEG, 93/105/EC and 2000/21/WE
- 3.Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

(Contd. on page 8)

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 as amended

Printing date 28.03.2025

Version number 2.0 (replaces version 1.0)

Revision: 28.03.2025

Trade name: PUREX HB-RN RAL 9005 A

(Contd. of page 7)

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E2** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Regulation (EC) No 1272/2008** Calculation method

· **Contact:** Polychem Systems Sp. z o. o.

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3