

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Toilet Duck Fresh Toilet Cleaner

Revision: 2015-06-04

Version: 06.0

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

1.1 Product identifier

Trade name: Toilet Duck Fresh Toilet Cleaner Toilet Duck ® Used under authority from S.C. Johnson & Son Inc., Racine, Wisconsin, U.S.A.

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

Identified uses: For professional use only. AISE-P305 - Sanitary cleaner. Manual process AISE-P306 - Sanitary cleaner. Spray and wipe manual process Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Ltd Weston Favell Centre, Northampton NN3 8PD, United Kingdom Tel: 01604 405311, Fax: 01604 406809 Regulatory Email: MSDSinfoUK@sealedair.com

1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.

The product does not meet the criteria for classification in accordance with Directive 1999/45/EC and corresponding national legislation

2.2 Label elements

Hazard statements:

EUH210 - Safety data sheet available on request.

2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (1999/45/EC)	Notes	Weight percent
I-(+)-lactic acid	201-196-2	79-33-4	01-2119474164-39	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	Xi;R38-41		1-3
alkyl alcohol alkoxylate [157627-86-6]	500-337-8	157627-86-6	02-2119548515-35	Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	Xi;R41 R52/53		1-3

^{*} Polymer.

For the full text of the R, H and EUH phrases mentioned in this Section, see Section 16.

Workplace exposure limit(s), if available, are listed in subsection 8.1.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.



[3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

SECTION 4: First aid measures

4.1 Description of first aid measure	S
Inhalation	Get medical attention or advice if you feel unwell.
Skin contact:	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
Eye contact:	Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention.
Ingestion:	Rinse mouth. Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.
Self-protection of first aider:	Consider personal protective equipment as indicated in subsection 8.2.
4.2 Most important symptoms and	effects, both acute and delayed
Inhalation:	No known effects or symptoms in normal use.
Skin contact	No known officite or symptoms in normal use

Skin contact:No known effects or symptoms in normal use.Eye contact:No known effects or symptoms in normal use.Ingestion:No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special measures required.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Sealed Air.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original container. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and **PNEC** values

Human exposure

	DNEL oral exposure - Consumer (mg/kg bw)				
	Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
ſ	I-(+)-lactic acid	-	35.4	-	-
ſ	alkyl alcohol alkoxylate [157627-86-6]	No data available	No data available	No data available	No data available

DNEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
I-(+)-lactic acid	No data available	-	No data available	-
alkyl alcohol alkoxylate [157627-86-6]	No data available	No data available	No data available	No data available

DNEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
I-(+)-lactic acid	No data available	-	No data available	-
alkyl alcohol alkoxylate [157627-86-6]	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Worker (mg/m ³)				
Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
I-(+)-lactic acid	592	-	-	-
alkyl alcohol alkoxylate [157627-86-6]	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
I-(+)-lactic acid	296	-	-	-
alkyl alcohol alkoxylate [157627-86-6]	No data available	No data available	No data available	No data available

Environmental exposure Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
I-(+)-lactic acid	1.3	-	-	10
alkyl alcohol alkoxylate [157627-86-6]	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
I-(+)-lactic acid	-	-	-	-
alkyl alcohol alkoxylate [157627-86-6]	No data available	No data available	No data available	No data available

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the <u>undiluted</u> product:

Appropriate engineering controls: Appropriate organisational controls:	Use only in well ventilated areas. Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment	
Eye / face protection:	Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.
Hand protection:	Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.
Body protection:	No special requirements under normal use conditions.
Respiratory protection:	Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.
Environmental exposure controls:	No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

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9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical State: Liquid
Colour: Green
Odour: Slightly perfumed
Odour threshold: Not applicable
pH: ≈ 3 (neat)
Melting point/freezing point (°C): Not determined
Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
I-(+)-lactic acid	110-130	Method not given	1013
alkyl alcohol alkoxylate [157627-86-6]	No data available		

Method / remark

Flash point (°C): Not applicable. Sustained combustion: Not determined Evaporation rate: Not determined Flammability (solid, gas): Not determined Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
I-(+)-lactic acid	8.13	Method not given	25
alkyl alcohol alkoxylate [157627-86-6]	No data available		

Method / remark

Vapour density: Not determined Relative density: 1.01 g/cm³ (20 °C) Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
I-(+)-lactic acid	Soluble		
alkyl alcohol alkoxylate [157627-86-6]	No data available		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Autoignition temperature: Not determined Decomposition temperature: Not determined

Viscosity: ≈ 1600 mPa.s (20 °C) Explosive properties: Not explosive. Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined Corrosion to metals: Not corrosive

Weight of evidence

Method / remark

Substance data, dissociation constant, if available:

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials Reacts with alkali.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:

Eye irritation and corrosivity

Result: Not corrosive or irritant Method: Weight of evidence

Substance data, where relevant and available, are listed below.

Acute toxicity Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
I-(+)-lactic acid	LD 50	1810		Method not given	-
alkyl alcohol alkoxylate [157627-86-6]		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
I-(+)-lactic acid	LD 50	> 2000	Rabbit	EPA OPP 81-2	-
alkyl alcohol alkoxylate [157627-86-6]		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
I-(+)-lactic acid	LC 50	> 7.94	Rat	OECD 403 (EU B.2)	4
alkyl alcohol alkoxylate [157627-86-6]		No data available			

Irritation and corrosivity

Skin irritation and corrosivity								
Ingredient(s)	Result	Species	Method	Exposure time				
I-(+)-lactic acid	Irritant		OECD 404 (EU B.4)					
alkyl alcohol alkoxylate [157627-86-6]	No data available							

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
I-(+)-lactic acid	Severe damage		Method not given	
alkyl alcohol alkoxylate [157627-86-6]	No data available			

Respiratory tract irritation and corrosivity							
Ingredient(s)	Result	Species	Method	Exposure time			
I-(+)-lactic acid	No data available						
alkyl alcohol alkoxylate [157627-86-6]	No data available						

Sensitisation

Sensitisation by skin contact								
Ingredient(s)	Result	Species	Method	Exposure time (h)				
I-(+)-lactic acid	No data available			-				
alkyl alcohol alkoxylate [157627-86-6]	No data available							

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
I-(+)-lactic acid	No data available			-
alkyl alcohol alkoxylate [157627-86-6]	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
I-(+)-lactic acid	No data available		No data available	
alkyl alcohol alkoxylate [157627-86-6]	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
I-(+)-lactic acid	No data available
alkyl alcohol alkoxylate [157627-86-6]	No data available

Toxicity for reproduction							
Ingredient(s)	Endpoint	Specific effect	Value	Species	Method	Exposure	Remarks and other effects
		-	(mg/kg bw/d)	-		time	reported
I-(+)-lactic acid			No data				
			available				
alkyl alcohol alkoxylate			No data				
[157627-86-6]			available				

Repeated dose toxicity

Sub-acute of sub-chronic oral toxicity						
Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
I-(+)-lactic acid		No data available			-	
alkyl alcohol alkoxylate [157627-86-6]		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
I-(+)-lactic acid		No data			-	
		available				
alkyl alcohol alkoxylate [157627-86-6]		No data				
		available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
I-(+)-lactic acid		No data available			-	
alkyl alcohol alkoxylate [157627-86-6]		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
I-(+)-lactic acid			No data available					
alkyl alcohol alkoxylate [157627-86-6]			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
I-(+)-lactic acid	No data available
alkyl alcohol alkoxylate [157627-86-6]	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
I-(+)-lactic acid	No data available
alkyl alcohol alkoxylate [157627-86-6]	No data available

Aspiration hazard Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below

Aquatic short-term toxicity Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
I-(+)-lactic acid	LC 50	130	Oncorhynchus mykiss	Method not given	96
alkyl alcohol alkoxylate [157627-86-6]		No data			

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	available		

Aquatic short-term toxicity - crustacea					
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
I-(+)-lactic acid	EC 50	130	Daphnia magna Straus	Method not given	48
alkyl alcohol alkoxylate [157627-86-6]		No data available			

Aquatic short-term toxicity - algae Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
I-(+)-lactic acid	EC 50	2800	Pseudokirchner iella subcapitata	Method not given	72
alkyl alcohol alkoxylate [157627-86-6]		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
I-(+)-lactic acid		No data available			-
alkyl alcohol alkoxylate [157627-86-6]		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
I-(+)-lactic acid	EC 50	> 100	Activated sludge	Method not given	3 hour(s)
alkyl alcohol alkoxylate [157627-86-6]		No data available			

Aquatic long-term toxicity rm toxicity

Aquatic long-term toxicity - fish									
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed			
I-(+)-lactic acid		No data							
		available							
alkyl alcohol alkoxylate [157627-86-6]		No data							
		available							

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
I-(+)-lactic acid		No data				
		available				
alkyl alcohol alkoxylate [157627-86-6]		No data				
		available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
I-(+)-lactic acid		No data			-	
		available				
alkyl alcohol alkoxylate [157627-86-6]		No data				
		available				

Terrestrial toxicity Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
I-(+)-lactic acid		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
I-(+)-lactic acid		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
I-(+)-lactic acid		No data available			-	

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Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
I-(+)-lactic acid		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
I-(+)-lactic acid		No data available			-	

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
I-(+)-lactic acid				Method not given	Readily biodegradable
alkyl alcohol alkoxylate [157627-86-6]					No data available

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

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.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
I-(+)-lactic acid	-0.72	Method not given	Not relevant, does not	
			bioaccumulate	
alkyl alcohol alkoxylate [157627-86-6]	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
I-(+)-lactic acid	No data available				
alkyl alcohol alkoxylate [157627-86-6]	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
I-(+)-lactic acid	No data available				Low potential for adsorption to soil
alkyl alcohol alkoxylate [157627-86-6]	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations	
13.1 Waste treatment methods Waste from residues / unused	The concentrated contents or contaminated packaging should be disposed of by a certified handler
products:	or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.
European Waste Catalogue:	20 01 30 - detergents other than those mentioned in 20 01 29.
Empty packaging Recommendation: Suitable cleaning agents:	Dispose of observing national or local regulations. Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

- 14.1 UN number: Non-dangerous goods
- 14.2 UN proper shipping name: Non-dangerous goods
- 14.3 Transport hazard class(es): Non-dangerous goods
- Class: -
- 14.4 Packing group: Non-dangerous goods
- 14.5 Environmental hazards: Non-dangerous goods
- 14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

SECTION 15: Regulatory information

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

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to EC Detergents Regulation 648/2004

anionic surfactants, non-ionic surfactants perfumes

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MSDS4505

Version: 06.0

Revision: 2015-06-04

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Reason for revision:

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 3, 8, 9

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the R, H and EUH phrases mentioned in section 3:

- H315 Causes skin irritation.
- H318 Causes serious eye damage. • H412 - Harmful to aquatic life with long lasting effects.
- R38 Irritating to skin.
- · R41 Risk of serious damage to eyes.

Abbreviations and acronyms:

- AISE The international Association for Soaps, Detergents and Maintenance Products
 DNEL Derived No Effect Limit
- EUH CLP Specific hazard statement
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
- · REACH number REACH registration number, without supplier specific part
- vPvB very Persistent and very Bioaccumulative
- ATE Acute Toxicity Estimate

End of Safety Data Sheet