

WM 0712639	Order number: 0712639	
Version 8.0	Revision Date 16.10.2019	Print Date 08.03.2020

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

1.1 Product identifier

Trade name	:	Energy classic 2x5 l
Identification number	:	61306

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

Use of the Substance/Mixture : dete	rgents for dishwashers
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Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company		tana Chemie GmbH
		Rheinallee 96
		55120 Mainz
Telephone	:	+49613196403
Telefax	:	+4961319642414
E-mail address	:	Produktsicherheit@werner-mertz.com
Responsible/issuing person		
Contact person	:	Product development / product safety

1.4 Emergency telephone number

112

+49(0)6131-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1	H290: May be corrosive to metals.
Skin corrosion, Category 1	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word

Danger

:



Professional

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Hazard statements	:	H290 H314	May be corrosive to met Causes severe skin burr			
Precautionary statements	:	P102 Prevention:	Keep out of reach of chil	dren.		
		P280 Wear protective gloves/ protection/ face protectio				
		Response: P301 + P330 + P3	331 IF SWALLOWED: Rinse vomiting.	mouth. Do NOT induce		
		P303 + P361 + P3	ke off immediately all Rinse skin with water or			
		P305 + P351 + P3	ously with water for e contact lenses, if			
		P310 Disposal:	present and easy to do. Immediately call a POIS	0		
		P501	Dispose of contents/ cor waste disposal plant.	ntainer to an approved		

Hazardous components which must be listed on the label: sodium hydroxide

Additional Labelling:

Safety data sheet available on request.

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

			-
Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
sodium hydroxide	1310-73-2 215-185-5 01-2119457892-27- XXXX	Met. Corr. 1; H290 Skin Corr. 1A; H314 SCL >= 5 % 1A; H314 2 - < 5 % 1B; H314 0,5 - < 2 % 2; H315 0,5 - < 2 % 2; H319	>= 5 - < 10



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tetrasodium ethylenediaminetetraacetate potassium hydroxide	64-02-8 200-573-9 01-2119486762-27 1310-58-3 215-181-3 01-2119487136-33	Eye Dam. 1; H318 Acute Tox. 4; H332 Acute Tox. 4; H302 STOT RE 2; H373 Acute Tox. 4; H302 Skin Corr. 1A; H314 Met. Corr. 1; H290 SCL >= 5 % 1A; H314 2 - < 5 % 1B; H314 0,5 - < 2 % 2; H315 0,5 - < 2 % 2; H319	Print Date 08.03.2020	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

	General advice	:	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
	If inhaled	:	Move to fresh air. If symptoms persist, call a physician.
	In case of skin contact	:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
	In case of eye contact	:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Protect unharmed eye. Continue rinsing eyes during transport to hospital.
	If swallowed	:	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.
4.2	Most important symptoms and ef	fec	cts, both acute and delayed
	Currente rec		annanius affasta

Symptoms	:	corrosive effects
Risks	:	No information available.



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4.3 Indication of any immediate medica	I attention and special treatment needed	d			
Treatment :	For specialist advice physicians should contact the Poisons Information Service.				
SECTION 5: Firefighting measures					
5.1 Extinguishing media					
Suitable extinguishing media :	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.				
5.2 Special hazards arising from the su	bstance or mixture				
Specific hazards during : firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.				
Hazardous combustion products :	No hazardous combustion products are l	known			
5.3 Advice for firefighters					
-	In the event of fire, wear self-contained b	reathing apparatus.			
Further information :	Collect contaminated fire extinguishing w not be discharged into drains. Fire residu extinguishing water must be disposed of regulations.	les and contaminated fire			

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.
6.2 Environmental precautions		

Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	: Neutralise with acid.
	Soak up with inert absorbent material (e.g. sand, silica gel, acid
	binder, universal binder, sawdust).
	Keep in suitable, closed containers for disposal.



Energy classic 2x5 l WM 0712639 Order number: 0712639 Version 8.0 Revision Date 16.10.2019 Print Date 08.03.2020 6.4 Reference to other sections For personal protection see section 8., Treat recovered material as described in the section "Disposal considerations"., Refer to section 15 for specific national regulation. **SECTION 7: Handling and storage** 7.1 Precautions for safe handling Advice on safe handling : Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Advice on protection against fire : Normal measures for preventive fire protection. and explosion : Handle in accordance with good industrial hygiene and safety Hygiene measures practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. 7.2 Conditions for safe storage, including any incompatibilities Requirements for storage areas Store in original container. Keep container tightly closed in a dry and : and containers well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store at room temperature in the original container. Other data : No decomposition if stored and applied as directed. 7.3 Specific end use(s) Specific use(s) : detergents for dishwashers

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL	
sodium hydroxide 1310-73-2:	 End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects, Long-term local effects Value: 1,5 mg/m3
	End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term exposure, Local effects, Systemic



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	effects Value: 3 mg/m3	
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local e effects Value: 0,6 mg/m3	effects, Long-term systemic
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Short-term expos effects Value: 1,2 mg/m3	sure, Local effects, Systemic
	End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term local e effects Value: 25 mg/m3	effects, Long-term systemic
tetrasodium : ethylenediaminetetraacetate 64-02-8:	: End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local e Value: 1,5 mg/m3	effects
	End Use: Workers Exposure routes: Inhalation Potential health effects: Acute local effec Value: 3,0 mg/m3	ts
	End Use: Workers Exposure routes: Inhalation Potential health effects: Acute local effec Value: 2,8 mg/m3	ts
	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term syster Value: 1,5 mg/m3	mic effects
	End Use: Workers Exposure routes: Inhalation Potential health effects: Acute systemic e Value: 2,8 mg/m3	effects
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local e Value: 0,6 mg/m3	effects
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term syster Value: 0,6 mg/m3	mic effects



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potassium hydroxide 1310-58-3:	 End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 1,2 mg/m3 End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute systemic effect Value: 1,2 mg/m3 End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effect Value: 25 mg/kg End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term local effect Value: 25 mg/kg End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effect Value: 25 mg/kg End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effect Value: 1 mg/m3 End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local effect Value: 1 mg/m3 	uffects ts
PNEC tetrasodium ethylenediaminetetraacetate 64-02-8:	 Fresh water Value: 2,2 mg/l Marine water Value: 0,22 mg/l Soil Value: 0,72 mg/kg STP Value: 43 mg/l intermittent release Value: 1,2 mg/l Fresh water Value: 2,8 mg/l Marine water Value: 0,28 mg/l 	



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		intermittent release Value: 1,6 mg/l	
		STP Value: 57 mg/l	
		Soil Value: 0,95 mg/kg	
8.2 Exposure controls			
Personal protective equipment			
Eye protection	:	Tightly fitting safety goggles	
Hand protection			
Material	:	Chemical resistant gloves made of butyl rubbe category III according to EN 374.	er or nitrile rubber
Remarks	:	Take note of the information given by the prod permeability and break through times, and of s conditions (mechanical strain, duration of cont	special workplace
Skin and body protection	:	Choose body protection according to the amount of the dangerous substance at the work place. Remove and wash contaminated clothing before	
Respiratory protection	:	Not required; except in case of aerosol format Recommended Filter type: ABEK-P3-filter	ion.
Environmental exposure control	ls		
General advice	:	Do not flush into surface water or sanitary sew	ver system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: clear
Odour	: characteristic
Odour Threshold	: No data available
рН	: 12,2, Concentration: 10,00 g/l
Melting point/range	: No data available



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Boiling point/boiling range	: No data available	
Flash point	: No data available	
Evaporation rate	: No data available	
Flammability (solid, gas)	: No data available	
Flammability (liquids)	: No data available	
Burning rate	: No data available	
Lower explosion limit	: No data available	
Upper explosion limit	: No data available	
Vapour pressure	: No data available	
Relative vapour density	: No data available	
Relative density	: No data available	
Density	: 1,161 g/cm3	
Water solubility	: No data available	
Solubility in other solvents	: No data available	
Partition coefficient: n- octanol/water	: No data available	
Ignition temperature	: No data available	
Thermal decomposition	: No data available	
Viscosity, dynamic	: No data available	
Viscosity, kinematic	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions., No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	: Stable under recommended storage conditions., No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid

: No data available



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10.5 Incompatible materials				
Materials to avoid	: No data available			
10.6 Hazardous decomposition products				
Hazardous decomposition	: No hazardous decomposition products a	re known.		
products Other information	: No hazardous decomposition products a	re known.		

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Ρ	ro	d	u	С	t

Acute oral toxicity	: Acute toxicity estimate : > 2.000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 20 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Skin corrosion/irritation	: Extremely corrosive and destructive to tissue.
Serious eye damage/eye irritation	: May cause irreversible eye damage.
Respiratory or skin sensitisation	: No data available
Germ cell mutagenicity	: Not Rated
Carcinogenicity	: Not Rated
Reproductive toxicity	: Not Rated
STOT - single exposure	: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	: Not Rated
Further information	: No data available

Components:



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sodium hydroxide 1310-73-2:			
Acute oral toxicity	: LD50 Oral Rat: 2.000 mg/kg		
Skin corrosion/irritation	: Result: Corrosive		
Serious eye damage/eye irritation	Result: Corrosive		
tetrasodium ethylenediaminete	aacetate		
Acute oral toxicity	: LD50 Oral Rat: > 2.000 mg/kg		
	LD50 : 1.780 mg/kg		
Acute inhalation toxicity	: LC50 Rat: 1 - 5 mg/l Exposure time: 6 h Method: OECD Test Guideline 403	3	
potassium hydroxide 1310-58-3: Acute oral toxicity	: LD50 Rat: 273 mg/kg		
	Acute toxicity estimate : 500,0 mg, Method: Converted acute toxicity p		
	LD50 Oral Rat, male: 333 mg/kg Method: OECD Test Guideline 425	5	
Skin corrosion/irritation	: Result: Corrosive		
Serious eye damage/eye irritation	: Species: Rabbit Result: Corrosive Method: OECD Test Guideline 405	5	
Respiratory or skin sensitisation	: Species: Guinea pig Result: Did not cause sensitisation	on laboratory animals.	
Germ cell mutagenicity			
Genotoxicity in vitro	: Type: Ames test Test species: Salmonella typhimuri Result: negative	ium	



Energy classic 2x5 l WM 0712639 Order number: 0712639 Version 8.0 Revision Date 16.10.2019 Print Date 08.03.2020 **SECTION 12: Ecological information** 12.1 Toxicity **Components:** sodium hydroxide 1310-73-2: Toxicity to fish : LC50 (Fish): 33 - 189 mg/l Exposure time: 96 h LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l Exposure time: 96 h LC50 (Poecilia reticulata (guppy)): 76 mg/l Exposure time: 24 h Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 40,4 mg/l aquatic invertebrates EC50 (Daphnia magna (Water flea)): 76 mg/l Exposure time: 24 h : EC50 (Photobacterium phosphoreum): 22 mg/l Toxicity to bacteria Exposure time: 15 min tetrasodium ethylenediaminetetraacetate 64-02-8: Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l Exposure time: 96 h Test Type: static test LC50 (Leuciscus idus (Golden orfe)): > 500 mg/l Exposure time: 96 h LC50 (Lepomis macrochirus (Bluegill sunfish)): > 1.000 mg/l Exposure time: 96 h NOEC (Brachydanio rerio (zebrafish)): > 25,7 mg/l Exposure time: 35 d Toxicity to daphnia and other EC50 (Daphnia magna (Water flea)): > 100 mg/l aquatic invertebrates Exposure time: 48 h Test Type: static test Method: DIN 38412 EC50 (Daphnia magna Straus): 140 mg/l Exposure time: 48 h Method: DIN 38412 NOEC (Daphnia magna (Water flea)): 25 mg/l Exposure time: 21 d : EC50 (Scenedesmus obliquus): > 100 mg/l Toxicity to algae Exposure time: 72 h



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	Test Type: static test Method: see user defined free tex	ct
	EC50 (Desmodesmus subspicatu Exposure time: 72 h Method: OECD Test Guideline 20	
Toxicity to bacteria	: EC20 (activated sludge): > 500 m Exposure time: 30 min Method: OECD Test Guideline 20	-
Toxicity to fish (Chronic toxicity)	: NOEC: 36,9 mg/l Exposure time: 35 d Species: Brachydanio rerio Method: OECD Test Guideline 21	0
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 25 mg/l Exposure time: 21 d Species: Daphnia magna (Water Method: OECD Test Guideline 21	
Toxicity to soil dwelling organisms	: LC50: 156 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworn Method: see user defined free tex	
potassium hydroxide 1310-58-3:		
Toxicity to fish	: (Pimephales promelas (fathead r Exposure time: 96 h Test Type: static test	ninnow)): 880 mg/l
	LC50 (Gambusia affinis (Mosquite Exposure time: 96 h	o fish)): 80 mg/l
	LC50 (Poecilia reticulata (guppy)) Exposure time: 24 h): 165 mg/l
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water fle Exposure time: 48 h Test Type: static test	ea)): 660 mg/l
Toxicity to algae	: EC50 : 1.337 mg/l Exposure time: 120 h	
Toxicity to bacteria	: EC50 (Photobacterium phosphore Exposure time: 15 min	eum): 22 mg/l
Toxicity to soil dwelling organisms	: LC50: 850 mg/kg Exposure time: 90 d	

12.2 Persistence and degradability

Product:



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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.	
Components:		
sodium hydroxide 1310-73-2:		
Biodegradability	: Remarks: The methods for determining the are not applicable to inorganic substances	
l tetrasodium ethylenediamineter 64-02-8:	traacetate	
ThOD	: 262 mg/g	
2.3 Bioaccumulative potential		
Components:		
sodium hydroxide 1310-73-2:		
Bioaccumulation	: Species: Fish Remarks: No bioaccumulation is to be exp	pected (log Pow <= 4).
l potassium hydroxide 1310-58-3:		
Bioaccumulation	: Remarks: Bioaccumulation is unlikely.	
2.4 Mobility in soil		
No data available		
2.5 Results of PBT and vPvB asses	sment	
Components:		
potassium hydroxide		
1310-58-3: Assessment	: This substance is not considered to be ve bioaccumulating (vPvB) This substance persistent, bioaccumulating and toxic (PB	is not considered to be
I 12.6 Other adverse effects		
Product:		
Additional ecological information	: There is no data available for this product	
SECTION 13: Disposal considera	tions	
13.1 Waste treatment methods		
Product	: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or used container	ditches with chemical or

used container. Offer surplus and non-recyclable solutions to a licensed disposal



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	company.	
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.	
SECTION 14: Transport information	n	
I4.1 UN number		
ADR	: 1719	
IMDG	: 1719	
ΙΑΤΑ	: 1719	
14.2 Proper shipping name		
ADR	: CAUSTIC ALKALI LIQUID, N.O.S.	
	(sodium hydroxide)	
IMDG	: CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide)	
ΙΑΤΑ	: Caustic alkali liquid, n.o.s. Not permitted for	or transport
4.3 Transport hazard class		
ADR	: 8	
IMDG	: 8	
ΙΑΤΑ	: 8	
14.4 Packing group		
ADR		
Classification Code	: C5	
Packaging group Hazard Identification Number	: II : 80	
Labels	: 8	
Tunnel restriction code	: (E)	
IMDG		
Packaging group	: 11	
Labels		
EmS Number IATA	: F-A, S-B	
(Cargo)	: Caustic alkali liquid, n.o.s. Not permitted for	or transport
Packaging group	: II	
Labels	: 8	
4.5 Environmental hazards ADR		
Environmentally hazardous	: no	
IMDG Marina pollutant		
Marine pollutant IATA	: no	
Environmentally hazardous	: no	



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15.2 Chemical safety assessment

	SECTION	16:	Other	information
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Full text of H-Statements



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H290	May be corrosive to metals.	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.	
H332	Harmful if inhaled.	
H373	May cause damage to organs through prolonged or inhaled.	repeated exposure if

Further information

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Classification procedure:	H290	Calculation method
-	H314	Based on product data or assessment
	H318	Based on product data or assessment

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS -Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice: IARC - International Agency for Research on Cancer: IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL -International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC -No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT -Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



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