

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Reference number: Annex VI Issue date: 2/2/2017 Revision date: 6/18/2021 Supersedes version of: 2/28/2020 Version: 3.0

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

1.1. Product identifier

UFI:EC Index-No.:EC-No.:CAS-No.:REACH registration No:Product code:	Hydrochloric acid 30% KE2X-9Q3P-Q69S-7D7K 017-002-01-X 231-595-7 7647-01-0 01-2119484862-27 99150
Formula :	HCL

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

1.2.1. Relevant identified uses

Main use category

: Industrial use, Professional use

Title	Use descriptors
Production, Recovery, Distribution of Product	SU3, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC15, ERC1, ERC2
Use as an intermediate	SU3, PROC1, PROC2, PROC3, PROC4, PROC9, ERC6a
Formulation & (re) packaging of substances and mixtures	SU3, PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, ERC2
Industrial use	SU3, PROC1, PROC2, PROC3, PROC4, PROC9, PROC10, PROC13, PROC15, PROC19, ERC4, ERC6b
Professional use	SU22, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC10, PROC11, PROC13, PROC15, PROC19, ERC4, ERC6b, ERC8a, ERC8b, ERC8e
Consumers use	SU21, PC20, PC21, PC35, PC37, PC38, ERC8b, ERC8e

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Breustedt Chemie B.V. IJsseldijk 28 7325 WZ Apeldoorn - Nederland T 055-5332844 productinfo@breustedt.nl - www.breustedt.nl

1.4. Emergency telephone number

Emergency number

: Noodnummer Breustedt Chemie B.V. -Alleen bij calamiteiten buiten kantoor uren-+31(0)653244323

+31(0)30-2748888 Nationaal Vergiftigingen Informatie Centrum (NVIC) (uitsluitend bestemd om artsen te informeren bij accidentele vergiftigingen)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

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SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272	2/2008 [CLP]
Corrosive to metals, Category 1 Skin corrosion/irritation, Category 1, Sub-Category 1B Specific target organ toxicity — Single exposure, Categor tract irritation Full text of H statements : see section 16	H290 H314 ory 3, Respiratory H335
Adverse physicochemical, human health and enviro	nmental effects
No additional information available	
2.2. Label elements	
Labelling according to Regulation (EC) No. 1272/200 Hazard pictograms (CLP) :	GHS05 GHS07
č	Danger H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage. H335 - May cause respiratory irritation.
	 P261 - Avoid breathing dust / fume / gas / mist / vapors / spray. P280 - Wear protective gloves / protective clothing / eye protection / face protection. 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 . P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or a doctor. P390 - Absorb spillage to prevent material damage.
Listed in Annex VI :	EC Index-No. : 017-002-01-X
2.3. Other hazards	

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrochloric acid	(CAS-No.) 7647-01-0 (EC-No.) 231-595-7 (EC Index-No.) 017-002-01-X (REACH-no) 01-2119484862-27	30	Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits
Hydrochloric acid	(CAS-No.) 7647-01-0 (EC-No.) 231-595-7 (EC Index-No.) 017-002-01-X (REACH-no) 01-2119484862-27	(10 ≤C < 100) STOT SE 3, H335 (10 ≤C < 25) Eye Irrit. 2, H319 (10 ≤C < 25) Skin Irrit. 2, H315 (25 ≤C < 100) Skin Corr. 1B, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	 Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact	 Causes severe skin burns and eye damage. May cause respiratory irritation. Causes severe burns. Risk of serious damage to eyes.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

E.O. Advise for firefield

SECTION 5: Firefighting measures 5.1. Extinguishing media Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Unsuitable extinguishing media : Do not use a heavy water stream. 5.2. Special hazards arising from the substance or mixture No additional information available

5.3. Advice for firefighters	
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any
	chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release meas	SECTION 6: Accidental release measures		
6.1. Personal precautions, protective eq	6.1. Personal precautions, protective equipment and emergency procedures		
6.1.1. For non-emergency personnel			
Protective equipment Emergency procedures	8.2. Exposure controls/personal protection.Evacuate unnecessary personnel.		
6.1.2. For emergency responders			
Protective equipment Emergency procedures	Equip cleanup crew with proper protection.Ventilate area.		

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5.2. Environmental precautions	
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.	
3. Mothods and material for containment and cleaning up	

Methods for cleaning up

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	 Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. 	
7.2. Conditions for safe storage, inclu	uding any incompatibilities	
Technical measures Storage conditions	 Comply with applicable regulations. Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed. 	
Incompatible products Incompatible materials Packaging materials	 Strong bases. Oxidizing agent. Sources of ignition. Direct sunlight. Suitable packing materials. Polyvinylchloride (PVC). Polyethylene. polypropylene. 	

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Hydrochloric acid (7647-01-0)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	8 mg/m ³ 2000/39/EC	
IOEL TWA [ppm]	5 ppm 2000/39/EC	
IOEL STEL	15 mg/m ³ 2000/39/EC	
IOEL STEL [ppm]	10 ppm 2000/39/EC	
Netherlands - Occupational Exposure Limits		
MAC-TGG (OEL TWA)	8 mg/m³ NL WG	
MAC-TGG (OEL TWA) [ppm]	15 ppm NL WG	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	2 ppm	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

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8.1.4. DNEL and PNEC	8.1.4.	DNEL	and	PNEC	
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Hydrochloric acid 30% (7647-01-0)		
DNEL/DMEL (Workers)		
Acute - local effects, inhalation	15 mg/m ³	
Long-term - local effects, inhalation	8 mg/m ³	
PNEC (Water)		
PNEC aqua (freshwater)	36 μg/l	
PNEC aqua (marine water)	36 µg/l	
PNEC aqua (intermittent, freshwater)	45 μg/l	
PNEC (STP)		
PNEC sewage treatment plant	36 µg/l	

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Gas mask. Gloves. Safety glasses. Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:				
Chemical goggles or face shield				
Туре	Field of application	Characteristics	Standard	
Safety glasses		Protective goggles	EN 166	

8.2.2.2. Skin protection

Skin and body protection:			
Wear suitable protective clothing			
Туре	Standard		
Long sleeved protective clothing			

Hand protection:

protective gloves					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Polyvinylchloride (PVC)	5 (> 240 minutes)			
Disposable gloves	Nitrile rubber (NBR)		0.51		

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Disposable gloves	Neoprene rubber (HNBR)	6 (> 480 minutes)	0.46		EN ISO 374
Other skin protection Materials for protective clothing:					
Protective clothing	Protective clothing				

8.2.2.3. Respiratory protection

Respiratory protection:				
Wear appropriate mask				
Device	Filter type	Condition	Standard	
Breathing equipment		Vapour protection		

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

9.1. Information on basic physical and ch	nemical properties
Physical state	: Liquid
Colour	: Colourless. light yellow.
Odour	: strong. Pungent.
Odour threshold	: No data available
pH	: <1
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -52 °C
Freezing point	: No data available
Boiling point	: 108 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: > 1500 °C
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: 16.4 hPa 20°C,30%
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ≈ 1.15 kg/m³ 20°C
Solubility	: Water solubility.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 1.73 mm²/s 20°,30%
Viscosity, dynamic	: 1.5 mPa·s 20°,30%
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Can react with. Bases. Strong oxidizing agents.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Oxidizing agent. Strong acids. metals.

10.6. Hazardous decomposition products

Chlorine. hydrogen. Hydrogen chloride gas.

SECTION 11: Toxicological information

SECTION 11: Toxicological infor	mation
11.1 Information on toxicological eff	ects
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified
Hydrochloric acid (7647-01-0)	
LC50 Inhalation - Rat	8.3 – 45.6 mg/l 30 min./ 5 min.
LC50 Inhalation - Rat [ppm]	4701 30 min.
Skin corrosion/irritation	: Causes severe skin burns. pH: < 1
Serious eye damage/irritation	Assumed to cause serious eye damage pH: < 1
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
Hydrochloric acid (7647-01-0)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Hydrochloric acid 30% (7647-01-0)	
Viscosity, kinematic	1.73 mm²/s 20°,30%

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SECTION 12: Ecological information				
12.1. Toxicity				
(acute)	Not classified Not classified			
Hydrochloric acid (7647-01-0)				
LC50 - Fish [1]	282 ml/l			
EC50 - Crustacea [1]	< 56 ml/l			
12.2. Persistence and degradability				
Hydrochloric acid (7647-01-0)				
Persistence and degradability	Not established.			
12.3. Bioaccumulative potential				
Hydrochloric acid (7647-01-0)				
Partition coefficient n-octanol/water (Log Pow)	0.25			
Partition coefficient n-octanol/water (Log Kow)	< 4			
Bioaccumulative potential	Not established.			
12.4. Mobility in soil				
No additional information available				
12.5. Results of PBT and vPvB assessment				

Component		
Hydrochloric acid (7647-01-0)	PBT: not relevant – no registration required vPvB: not relevant – no registration required	
12.6. Other adverse effects		

No additional information available

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container toa certified waste disposal depot.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 06 01 02* - hydrochloric acid

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID				
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number	·		·	
UN 1789	UN 1789	UN 1789	UN 1789	UN 1789

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14.2. UN proper shipping	g name			
HYDROCHLORIC ACID	HYDROCHLORIC ACID	Hydrochloric acid	HYDROCHLORIC ACID	HYDROCHLORIC ACID
Transport document descr	iption		·	
UN 1789 HYDROCHLORIC ACID, 8, II, (E)	UN 1789 HYDROCHLORIC ACID, 8, II	UN 1789 Hydrochloric acid, 8, II	UN 1789 HYDROCHLORIC ACID, 8, II	UN 1789 HYDROCHLORIO ACID, 8, II
14.3. Transport hazard o	lass(es)	I	1	
8	8	8	8	8
8	B	B	B	8
14.4. Packing group			-	
II	II	II	II	II
14.5. Environmental haz	ards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary informatio	n available		1	I

14.6. Special precautions for user

Overland transport		
Classification code (ADR)	:	C1
Special provisions (ADR)	:	520
Limited quantities (ADR)	:	11
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02
Mixed packing provisions (ADR)	:	MP15
Portable tank and bulk container instructions (ADR)	:	Т8
Portable tank and bulk container special provisions (ADR)	:	TP2
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Hazard identification number (Kemler No.)	:	80
Orange plates	:	80
		1789
Tunnel restriction code (ADR)	:	
Tunnel restriction code (ADR) EAC code	:	1789
EAC code	:	1789
EAC code Transport by sea		1789
EAC code Transport by sea Limited quantities (IMDG)	: :	1789 E 2R
EAC code Transport by sea		1789 E 2R 1 L
EAC code Transport by sea Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG)		1789 E 2R 1 L E2
EAC code Transport by sea Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG)		1789 E 2R 1 L E2 P001
EAC code Transport by sea Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG)		1789 E 2R 1 L E2 P001 IBC02
EAC code Transport by sea Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) IBC special provisions (IMDG)		1789 E 2R 1 L E2 P001 IBC02 B20
EAC code Transport by sea Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) IBC special provisions (IMDG) Tank instructions (IMDG)	· · · · · · · · · · · · · · · · · · ·	1789 E 2R 1 L E2 P001 IBC02 B20 T8
EAC code Transport by sea Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) IBC special provisions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG)	· · · · · · · · · · · · · · · · · · ·	1789 E 2R 1 L E2 P001 IBC02 B20 T8 TP2
EAC code Transport by sea Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) IBC special provisions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire)	· · · · · · · · · · · · · · · · · · ·	1789 E 2R 1 L E2 P001 IBC02 B20 T8 TP2 F-A
EAC code Transport by sea Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) IBC special provisions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage)	· · · · · · · · · · · · · · · · · · ·	1789 E 2R 1 L E2 P001 IBC02 B20 T8 TP2 F-A S-B

: Colourless liquid. An aqueous solution of the gas hydrogen chloride. Highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.

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Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3
ERG code (IATA)	: 8L
Inland waterway transport	
Classification code (ADN)	: C1
Special provisions (ADN)	: 520
Limited quantities (ADN)	: 1L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: C1
Special provisions (RID)	: 520
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T8
Portable tank and bulk container special provisions	: TP2
(RID)	
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE6
Hazard identification number (RID)	: 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

France

France	
Occupational diseases	
Code	Description
RG 66	Occupational rhinitis and asthma
Germany Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG) Observe restrictions according Act on the Protection of Young People in Employment

: WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

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Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
ABM category	: B(5) - low hazard for aquatic organisms
SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting	: None of the components are listed
giftige stoffen – Borstvoeding	
NIET-limitatieve lijst van voor de voortplanting	: None of the components are listed
giftige stoffen – Vruchtbaarheid	
NIET-limitatieve lijst van voor de voortplanting	: None of the components are listed
giftige stoffen – Ontwikkeling	
Denmark	
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product
-	
15.2. Chemical safety assessment	

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out

Hydrochloric acid

SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
1.1	Additional information	Added	18-06-2021: UFI Code

Abbreviations and acronyms:	
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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development

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: None.

PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
CAS-No.	Chemical Abstract Service number
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
ED	Endocrine disrupting properties
EC-No.	European Community number
EN	European Standard
IOELV	Indicative Occupational Exposure Limit Value
N.O.S.	Not Otherwise Specified
OEL	Occupational Exposure Limit
ThOD	Theoretical oxygen demand (ThOD)
TRGS	Technical Rules for Hazardous Substances
VOC	Volatile Organic Compounds
WGK	Water Hazard Class

December 2008 on classification, labelling and packaging of substances and mixtures, amending a repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Full text of use descriptors	
ERC1	Manufacture of the substance

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ERC2	Formulation into mixture
ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC6a	Use of intermediate
ERC6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
ERC8e	Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)
PC20	Metal surface treatment products
PC21	Laboratory chemicals
PC35	Washing and cleaning products
PC37	Water treatment chemicals
PC38	Welding and soldering products, flux products
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC15	Use as laboratory reagent
PROC19	Manual activities involving hand contact
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU21	Consumer uses: Private households (= general public = consumers)
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3	Industrial uses: Uses of substances as such or in preparations* at industrial sites

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.