

Safety Data Sheet dated 10/12/2018, version 4

	entification of the substance/mixture and of the company/undertaking
	ct identifier
	ure identification:
	de name: OXICLOR 10 EVOLUTION
	ant identified uses of the substance or mixture and uses advised against
Identified u	
	nd oxidizing agent for pool water and sanitary use. With antiscale effect.
	sed against:
	use different from the identified uses.
	s of the supplier of the safety data sheet
	npany:
	RCHEMICALS SRL
	S.ALLENDE 14
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	v.barchemicals.it
	t person responsible for the safety data sheet:
	ani.corrado@barchemicals.it
	gency telephone number
Bara	ani Dr.Corrado - MOBILE PHONE. +39 335/6109383
-	azards identification
	fication of the substance or mixture
EC regulat	tion criteria n°1272/2008 (CLP)
\diamond	Warning, Met. Corr. 1, May be corrosive to metals.
	Desper Olin Com 14. Courses sources alin human and our demand
\sim	Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.
	Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.
	Denger Fue Dem 1 Courses serious ave demogra
~	Danger, Eye Dam. 1, Causes serious eye damage.
	Warning, Aquatic Acute 1, Very toxic to aquatic life.
EUF	1031 Contact with acids liberates toxic gas.
	hysicochemical, human health and environmental effects:
	other hazards
2.2. Label	
Hazard pic	tograms:
	\sim \sim



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Danger

Hazard statements:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

Precautionary statements:

P102 Keep out of reach of children.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face protection.

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

P303+P361+P353+P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a doctor.

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 doctor.

Special Provisions:

EUH031 Contact with acids liberates toxic gas.

EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

Contains

sodium hypochlorite, solution ... % Cl active sodium hydroxide; caustic soda

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

- 3.1. Substances
- N.A.
- 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 10% - < 15%	sodium hypochlorite, solution % Cl active	number: CAS: EC: REACH No.:	017-011-00-1 7681-52-9 231-668-3 01-21194881 54-34	 2.16/1 Met. Corr. 1 H290 3.2/1B Skin Corr. 1B H314 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411 EUH031
>= 5% - < 10%	sodium hydroxide; caustic soda	number: CAS: EC: REACH No.:	011-002-00-6 1310-73-2 215-185-5 01-21194578 92-27	 2.16/1 Met. Corr. 1 H290 3.2/1A Skin Corr. 1A H314 3.3/1 Eye Dam. 1 H318
>= 5% -	Sodium chloride	CAS:	7647-14-5	The product is not classified as

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< 10%		EC:	231-598-3	dangerous according to Regulation EC 1272/2008 (CLP).
< 1%	Acido aminotrimetilenfosfonic o-N-ossido, sale potassico	CAS: REACH No.:		The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately and dispose off safely. After contact with skin, wash immediately with soap and plenty of water.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

- Protect uninjured eye.
- In case of Ingestion:

Rinse well your mouth

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

In case of breathing difficult, bring the injured person into the open air and store it in a comfortable position for breathing. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation produces a burning sensation, coughing, difficulty breathing and sore throat. Inhalation may cause pulmonary edema. The symptoms of lung edema do not see them often, until after a few hours and become more severe with physical exertion.

Contact with the skin produces redness, burning and pain.

Contact with the eyes produces redness, pain, severe deep burns and loss of vision. Ingestion causes severe irritation or chemical burns in the mouth, throat, esophagus and stomach.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

If swallowed, seek immediate medical attention. Do not induce vomiting to the danger of perforation. Keep the patient at rest.

In case of contact with eyes, rinse immediately with water and seek medical advice. After contact with skin, wash immediately with plenty of soap and water.

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media: Water. Carbon dioxide (CO2). Extinguishing media which must not be used for safety reasons: None in particular.
- 5.2. Special hazards arising from the substance or mixture Do not inhale explosion and combustion gases. Burning produces heavy smoke.
- 5.3. Advice for firefighters

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Immediately isolate the area by removing all persons from the area of the accident in the event of a fire. No action shall be taken involving any personal risk or without proper training. Firefighters must wear protective equipment and self-contained breathing apparatus (SCBA) with a full-face mask on the working face at positive pressure. Fire extinguishers (including helmets, protective boots and gloves) conforming to European Standard EN469 will provide basic protection for chemical accidents.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - Wear personal protection equipment.
 - Prevent entry of foreign and unprotected personnel.
 - Eliminate all free flames and possible sources of ignition.
 - Not smoking.
 - Wear breathing apparatus if exposed to vapours/dusts/aerosols.
 - Remove persons to safety.
- 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

In case of a liquid product, hold and absorb the spillage with inert absorbent material (eg, sand, earth, vermiculite, fossil flour). Store contaminated material in suitable containers and start waste disposal. After collection, rinse the area and the materials with water by retrieving the water used and, if necessary, dispose of it in authorized plants.

6.4. Reference to other sections See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from other incompatible materials (see section 10) and food and drink. Keep the container tight and sealed until use. Open containers should be carefully resealed and kept straight to avoid accidental spillage of the product. Do not store in labels without label. Do not eat, drink or smoke at the workplace. Foods and beverages should be consumed only in areas specifically identified after removing contaminated clothing and protective equipment and after washing your hands. Wash in any case hands after handling the substance / mixture. Keep away from food, drink and feed.

Incompatible materials:

Keep away from acids.

Instructions as regards storage premises:

- Adequately ventilated premises.
- 7.3. Specific end use(s)
 - See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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sodium hydroxide; caustic soda - CAS: 1310-73-2 ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr
DNEL Exposure Limit Values sodium hypochlorite, solution % Cl active - CAS: 7681-52-9 Worker Professional: 3.10 03 - Consumer: 3.10 03 - Exposure: Human Inhalation -
Frequency: Short Term, systemic effects - Endpoint: Repeated dose toxicity Worker Professional: 1.55 03 - Consumer: 1.55 03 - Exposure: Human Inhalation -
Frequency: Long Term, systemic effects - Endpoint: Repeated dose toxicity Worker Professional: 3.10 03 - Consumer: 3.10 03 - Exposure: Human Inhalation -
Frequency: Short Term, local effects - Endpoint: Repeated dose toxicity Worker Professional: 1.55 03 - Consumer: 1.55 03 - Exposure: Human Inhalation -
Frequency: Long Term, local effects - Endpoint: Repeated dose toxicity mg/kg
sodium hydroxide; caustic soda - CAS: 1310-73-2
Worker Professional: 1 03 - Consumer: 1 03 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Professional: 1 03 - Consumer: 1 03 - Exposure: Human Inhalation - Frequency: Long Term, local effects
PNEC Exposure Limit Values sodium hypochlorite, solution % CI active - CAS: 7681-52-9
Target: Fresh Water - Value: 0.00021 mg/l Target: Marine water - Value: 0.000042 mg/l
Target: Microorganisms in sewage treatments - Value: 0.03 mg/l Target: Occasional issue Value: 0.000260 mg/l
Target: Air - Value: 11.1 mg/l
8.2. Exposure controls Eye/face protection:
Eye glasses with side protection.EN166
Protective visor against liquid splashes (EN166). Recommended when there is a risk of spraying, spraying or spraying of liquid.
Protection for skin:
Corrosive resistant apron.
Clothing resistant to corrosive products CLASS I, EN 340 Neoprene rubber boots (EN 374).
Protection for hands:
Gloves resistant to chemicals. EN 374
Respiratory protection: Full facial mask with chlorine filter (EN14387).
Thermal Hazards:
Not applicable (the product is handled at room temperature) Environmental exposure controls:
Do not allow the product to be absorbed from the soil or from entering waterways or sewers. Do
not let product enter drains. Discharge into the environment must be avoided. The product is toxic to the aquatic environment.
Appropriate engineering controls:
Ensure adequate ventilation. Comply with the maximum concentration values in the workplace.

SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid giallino		
Odour:	Mild chlorine		
Odour threshold:	Not Available		
pH:	12.5		

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Melting point / freezing point:	Not Relevant	
Initial boiling point and	>100	
boiling range:		
Flash point:	Not	
	inflammable	
Evaporation rate:	Not Relevant	
Solid/gas flammability:	Prodotto non	
	infiammabile	
Upper/lower flammability or	N.A.	
explosive limits:		
Vapour pressure:	Not Relevant	
Vapour density:	Not Relevant	
Relative density:	1.20 Kg/l	
Solubility in water:	Complete	
Solubility in oil:	Not Relevant	
Partition coefficient	Not Relevant	
(n-octanol/water):		
Auto-ignition temperature:	Prodotto non	
	piroforico	
Decomposition	35 °C	
temperature:		
Viscosity:	Not Relevant	
Explosive properties:	Prodotto non	
•	esplosivo	
Oxidizing properties:	Not Available	

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Complete		
Fat Solubility:	Not Relevant		
Conductivity:	Not Relevant		
Substance Groups relevant properties	Not Relevant		

SECTION 10: Stability and reactivity

10.1. Reactivity

- The product is not pyrophoric. May be corrosive to metals.
- 10.2. Chemical stability
- Stable under recommended storage and handling. Please refer to section 7 of the MSDS.
- 10.3. Possibility of hazardous reactions In the presence of combustible materials. In presence of metals. Acids and Amines.
- 10.4. Conditions to avoid Do not mix with acids. It can be produced toxic gases (chlorine). Keep away from heat sources. Avoid direct sunlight.
- 10.5. Incompatible materials Concentrated acids. Ammine Metals and combustible materials.

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10.6. Hazardous decomposition products Chlorine.

SECTION 11: Toxicological information 11.1. Information on toxicological effects Toxicological information of the product: **OXICLOR 10 EVOLUTION** a) acute toxicity Not classified Based on available data, the classification criteria are not met b) skin corrosion/irritation The product is classified: Skin Corr. 1A H314 c) serious eye damage/irritation The product is classified: Eye Dam. 1 H318 d) respiratory or skin sensitisation Not classified Based on available data, the classification criteria are not met e) germ cell mutagenicity Not classified Based on available data, the classification criteria are not met f) carcinogenicity Not classified Based on available data, the classification criteria are not met g) reproductive toxicity Not classified Based on available data, the classification criteria are not met h) STOT-single exposure Not classified Based on available data, the classification criteria are not met i) STOT-repeated exposure Not classified Based on available data, the classification criteria are not met j) aspiration hazard Not classified Based on available data, the classification criteria are not met Toxicological information of the main substances found in the product: sodium hypochlorite, solution ... % Cl active - CAS: 7681-52-9 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 1100 mg/kg - Source: Pubblicazione 1977 (ECHA) Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg Test: LC50 - Route: Inhalation - Species: Rat > 10.5 mg/l - Duration: 1h - Source: Study report 1962 (ECHA) - Notes: Oecd Guideline 403 (Acute inhalation Toxicity) e) germ cell mutagenicity: Test: Mutagenesis - Species: Rat Negative f) carcinogenicity: Test: Carcinogenicity - Species: Rat Negative sodium hydroxide; caustic soda - CAS: 1310-73-2 a) acute toxicity: Test: LD50 - Route: Skin - Species: Rabbit = 1350 mg/kg - Source: IUCLID b) skin corrosion/irritation: Test: Skin Corrosive - Route: Skin - Species: Rabbit Yes - Source: JACOBS G 1990 (ECHA) - Notes: OECD GUIDELINE 404 (ACUTE DERMAL IRRITATION / CORROSION) d) respiratory or skin sensitisation:



Test: Skin Sensitization No - Source: PARK 1995 (ECHA) e) germ cell mutagenicity: Test: Genotoxicity No - Source: MORITA 1989 (ECHA) - Notes: MAMMALIAN CELL GENE MUTATION ASSAY Acido aminotrimetilenfosfonico-N-ossido, sale potassico - CAS: 255830-15-0 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Notes: OECD 401 b) skin corrosion/irritation: Test: Skin Corrosive - Route: Skin - Species: Rabbit Negative **SECTION 12: Ecological information** 12.1. Toxicity No information is available on the mixture as a whole. This is the information on eco-toxicological effects of the individual components. **OXICLOR 10 EVOLUTION** The product is classified: Aquatic Chronic 2 - H411; Aquatic Acute 1 - H400 sodium hypochlorite, solution ... % Cl active - CAS: 7681-52-9 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 0.060 mg/l - Duration h: 96 - Notes: ECHA Endpoint: EC50 - Species: Daphnia = 0.05 mg/l - Duration h: 48 Endpoint: IC50 - Species: Algae = 0.3 mg/l - Duration h: 96 sodium hydroxide; caustic soda - CAS: 1310-73-2 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 45 mg/l - Duration h: 96 - Notes: ECHA Endpoint: EC50 - Species: Daphnia = 40 mg/l - Duration h: 48 - Notes: ECHA Acido aminotrimetilenfosfonico-N-ossido, sale potassico - CAS: 255830-15-0 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Brachydanio rerio = 1100 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia = 900 mg/l - Duration h: 48 12.2. Persistence and degradability N.A. 12.3. Bioaccumulative potential N.A. 12.4. Mobility in soil N.A. 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None 12.6. Other adverse effects None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



14.1. UN number ADR-UN Number:

1760

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IATA-UN Number:	1760
IMDG-UN Number:	1760
14.2. UN proper shipping name	
ADR-Shipping Name:	CORROSIVE LIQUID, N.O.S. (sodium hypochlorite, solution
, en emphily name	% Cl active)
IATA-Shipping Name:	CORROSIVE LIQUID, N.O.S. (sodium hypochlorite, solution
	% Cl active)
IMDG-Shipping Name:	CORROSIVE LIQUID, N.O.S. (sodium hypochlorite, solution
	% Cl active)
14.3. Transport hazard class(es)	
ADR-Class:	8
ADR - Hazard identification nur	-
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8
14.4. Packing group	0
ADR-Packing Group:	11
IATA-Packing group:	
IMDG-Packing group:	
14.5. Environmental hazards	
ADR-Enviromental Pollutant:	Yes
IMDG-Marine pollutant:	Marine Pollutant
Most important toxic componer	
14.6. Special precautions for user	
ADR-Subsidiary risks:	-
ADR-S.P.:	274
ADR-Transport category (Tunn	el restriction code): 1 (E)
IATA-Passenger Aircraft:	850
IATA-Subsidiary risks:	-
IATA-Cargo Aircraft:	854
IATA-S.P.:	A3 A803
IATA-ERG:	8L
IMDG-EmS:	F-A , S-B
IMDG-Subsidiary risks:	-
IMDG-Stowage and handling:	Category B SW2
IMDG-Segregation:	•
14.7. Transport in bulk according to A	nnex II of Marpol and the IBC Code
N.A.	

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 944/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/1179 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)



Regulation (EU) n. 2017/776 (ATP 10 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: **Restriction 3** Restrictions related to the substances contained: No restriction. Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive) Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 Product belongs to category: E1 15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out for the mixture. Substances for which a Chemical Safety Assessment has been carried out: None

SECTION 16: Other information

For professional use.

Full text of phrases referred to in Section 3:

- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- EUH031 Contact with acids liberates toxic gas.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification SECTION 3: Composition/information on ingredients SECTION 8: Exposure controls/personal protection SECTION 9: Physical and chemical properties SECTION 11: Toxicological information SECTION 12: Ecological information SECTION 15: Regulatory information SECTION 16: Other information



Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Met. Corr. 1, H290	On basis of test data
Skin Corr. 1A, H314	On basis of test data (pH)
Aquatic Chronic 2, H411	Calculation method
Eye Dam. 1, H318	On basis of test data (pH)
Aquatic Acute 1, H400	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

Liability exclusion clause: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

For professional use.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of
	Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport
	Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods
	by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average



WGK: German Water Hazard Class.