

# SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH Annex II) and its amendments



## KP010 DELETION PEN

SUBID : 000000010365

Version 3  
Revision Date 26.05.2015

Print Date 04.01.2016

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Identification of the substance or mixture:

Product name : KP010 DELETION PEN  
REACH Registration No : Registration numbers of the individual components: see section 3.2, if applicable.

#### 1.2 Use of the substance/mixture:

Identified relevant uses : Correction pen  
Uses advised against : Do not use for products which come into direct contact with the skin. Do not use for products which come into direct contact with food stuffs. Do not use for private purposes (household).

#### 1.3 Company/undertaking identification

Agfa-Gevaert Ltd.  
Vantage West  
Great West Road  
Brentford, Middlesex TW8 9AX  
United Kingdom  
Tel. : +44 (0)20 8 231 4616  
Fax : +44 (0)20 8 231 4951  
E-mail: electronic.sds@agfa.com

#### 1.4 Emergency telephone

Emergency telephone number (Belgium) : +32 3 4443333 (24h/24h)

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture:

Regulation(EC) No 1272/2008 (CLP)	
• Hazard classes	Serious eye damage
Hazard categories	Category 1
Hazard statements	H318
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.
• Hazard classes	Specific target organ toxicity - single exposure
Hazard categories	Category 3
Hazard statements	H336
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.

67/548/EEC or 1999/45/EC	
Hazards characteristics	Harmful
R-phrases	R22, R36

Full text of each relevant R and H phrase is listed in section 16.

#### 2.2 Label elements:

Hazardous components which must be listed on the label :

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- CAS-No. : 96-48-0 gamma-Butyrolactone

Symbol(s)



GHS05



GHS07

Signal word	: DANGER	
Hazard statements	: H318	Causes serious eye damage.
	: H336	May cause drowsiness or dizziness.
Precautionary statements: prevention	: P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	: P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements: response	: P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing.
	: P310	Immediately call a POISON CENTER/doctor/...

### 2.3 Other hazards:

In normal conditions of storage, transport and use, the pencil will not cause any special health or safety hazard.

This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Mixture related information:

This correction pen mainly consists of a plastic housing enclosing a porous wick, which retains a very small quantity of corrector liquid. When not in use, the pen is closed with a protective cap. Labelling and hazard information in this Safety Data Sheet refers to the pure corrector liquid as retained in the wick.

### 3.2 Hazard ingredients:

The hazard and labelling information in this section is that of the individual ingredients. The corresponding information relative to this product as supplied is given in section 2.1.

#### Hazardous components in the meaning of regulation(EC) No 1272/2008 (CLP)

- gamma-Butyrolactone Concentration [%] : 60.0 - 80.0  
CAS-No. : 96-48-0  
EINECS-No. : 202-509-5  
REACH Registration No : 02-2119471839-21-0002  
Hazard classes : Acute toxicity Oral, Serious eye damage, Specific target organ toxicity - single exposure  
Hazard categories : Category 4, Category 1, Category 3  
Hazard statements : H302, H318, H336
- Phosphoric acid Concentration [%] : 1.0 - 5.0

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- CAS-No. : 7664-38-2
- Index-No. : 015-011-00-6
- EINECS-No. : 231-633-2
- REACH Registration No : 01-2119485924-24-0007
- Hazard classes : Skin corrosion, Serious eye damage
- Hazard categories : Category 1B, Category 1
- Hazard statements : H314, H318
- Polycarboxylic acids Concentration [%] : 1.0 - 5.0
  - CAS-No. : 26099-09-2
  - REACH Registration No : Transition time according to REACH regulation article 23 is still not expired.
  - Hazard classes : Serious eye irritation, Skin irritation
  - Hazard categories : Category 2, Category 2
  - Hazard statements : H319, H315
- Tetrafluoroboric acid Concentration [%] : 0.1 - 0.5
  - CAS-No. : 16872-11-0
  - Index-No. : 009-010-00-X
  - EINECS-No. : 240-898-3
  - REACH Registration No : 01-2119456258-32-XXXX
  - Hazard classes : Skin corrosion, Serious eye damage
  - Hazard categories : Category 1B, Category 1
  - Hazard statements : H314, H318

### Hazardous components in the meaning of 67/548/EEC or 1999/45/EC

- gamma-Butyrolactone Concentration [%] : 60.0 - 80.0
  - CAS-No. : 96-48-0
  - EINECS-No. : 202-509-5
  - Symbol(s) : Xn
  - R-phrases(s) : R22, R41, R67
- Phosphoric acid Concentration [%] : 1.0 - 5.0
  - CAS-No. : 7664-38-2
  - Index-No. : 015-011-00-6
  - EINECS-No. : 231-633-2
  - Symbol(s) : C
  - R-phrases(s) : R34
- Polycarboxylic acids Concentration [%] : 1.0 - 5.0
  - CAS-No. : 26099-09-2
  - Symbol(s) : Xi
  - R-phrases(s) : R36/38
- Tetrafluoroboric acid Concentration [%] : 0.1 - 0.5
  - CAS-No. : 16872-11-0
  - Index-No. : 009-010-00-X
  - EINECS-No. : 240-898-3
  - Symbol(s) : C
  - R-phrases(s) : R34

### Components with a community workplace exposure limit

- gamma-Butyrolactone
- Phosphoric acid
- Tetrafluoroboric acid

### 3.3 Remark:

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Full text of each relevant R and H phrase is listed in section 16.

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures:

- Eye contact : Immediately flush eye(s) with plenty of water. Consult an oculist if necessary.
- Skin contact : Wash immediately with plenty of water and soap. Apply calcium gluconate gel on and around the affected area and continuous massage it into the skin until at least 15 minutes after pain is relieved. Cover the area with a dressing soaked in the gel and lightly bandage. Seek medical attention.
- Ingestion : Rinse mouth with plenty of water. Consult a physician if necessary. Do not induce vomiting.
- Inhalation : Take patient to fresh air if necessary. Consult a physician if necessary.

#### 4.2 Most important symptoms and effects:

- Symptoms : In case of eye contact: redness and pain. May cause headache and dizziness.

#### 4.3 Indication of immediate medical attention and special treatment needed:

- General advice : Call a physician immediately.

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

- Suitable extinguishing media : Alcohol-resistant foam., Carbon dioxide (CO<sub>2</sub>)., Dry extinguishing powder., Water.
- Extinguishing media which must not be used for safety reasons : Do not use a solid water stream as it may scatter and spread fire.

#### 5.2 Special hazards arising from the substance or mixture:

- Specific hazards during fire fighting : Combustion of one pencil will not cause a major problem to health, safety and to the environment. When burning large amounts of pencils, hazardous fumes can be set free. Their composition is depending on the conditions of the combustion process and will not substantially differ from that resulting from merely burning plastic housings and caps of such pencils.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

#### 5.3 Advice for fire-fighters:

- Special protective equipment for fire-fighters : Regular fire intervention clothes.

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### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures:

- Personal precautions : Cleanup personnel must use appropriate personal protective equipment.  
Additional advice : Observe normal precautions when handling chemicals.

#### 6.2 Environmental precautions:

- Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.

#### 6.3 Methods and material for containment and cleaning up:

- Methods for cleaning up : Not applicable

#### 6.4 Reference to other sections:

- For waste disposal see section 13.  
For personal protection see section 8.

### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling:

- Advice on safe handling : In normal conditions of storage, transport and use, the liquid will not leak from the pencil.  
Hygiene measures : Observe normal precautions when handling chemicals. Avoid inhaling vapour. Don't wear the correction pen on your body. Avoid that the tip of the wick comes into contact with the eyes and the skin. Always apply the protective cap to the pen, when the latter is not in use. Unproper handling, such as licking the wick, inhaling the corrector liquid or breaking and opening the pen, so as to set free the wick, is to be avoided. Keep away from foodstuffs, drinks and tobacco.  
Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

#### 7.2 Conditions for safe storage:

- Requirements for storage areas and containers : Keep in a dry place.  
Further information on storage conditions : Store in a dry area.

#### 7.3 Specific end use:

- This substance is used only by trained professionals under restricted conditions.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 Control parameters:

##### 8.1.1 Components with occupational exposure limits resp. biological occupational exposure limits requiring monitoring:

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### 8.1.1.1 Occupational exposure limits:

#### Air limit values

- Phosphoric acid

CAS-No.: 7664-38-2

Basis	Revision Date	Value	Type
EU ELV	12 2009	1 mg/m <sup>3</sup>	TWA
EU ELV	12 2009	2 mg/m <sup>3</sup>	STEL
EH40 WEL	2005	1 mg/m <sup>3</sup>	TWA
EH40 WEL	2005	2 mg/m <sup>3</sup>	STEL

- Tetrafluoroboric acid

CAS-No.: 16872-11-0

Basis	Revision Date	Value	Type
EH40 WEL	2007	2.5 mg/m <sup>3</sup>	TWA
EU ELV	12 2009	2.5 mg/m <sup>3</sup>	TWA

#### Biological limit values

- gamma-Butyrolactone

CAS-No.: 96-48-0

Basis	Value	Investigation parameter	Sampling time	Biological specimen
		We are not aware of any national exposure limit.		

### 8.1.1.2 Additional exposure limits under the conditions of use:

No other exposure limits applicable.

### 8.1.1.3 DNEL/DMEL and PNEC-values:

#### DNEL

No Chemical Safety Report performed. No DNEL/DMEL value determined.

#### PNEC

No Chemical Safety Report performed. No PNEC value determined.

### 8.2 Exposure controls:

#### Occupational exposure controls:

- **Instruction measures to prevent exposure:**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Keep away from foodstuffs, drinks and tobacco.

- **Technical measures to prevent exposure:**

Ensure adequate ventilation.

- **Personal measures to prevent exposure:**

Respiratory protection : not required under normal use  
Hand protection : Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness  $\geq$  0.36 mm, breakthrough

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time > 480 min), nitrile rubber (thickness  $\geq$  0.38 mm, breakthrough time > 480 min) or neoprene (thickness  $\geq$  0.65 mm, breakthrough time > 240 min). For intermittent splash protection corresponding gloves with breakthrough times > 60 min can be used. Avoid gloves made of: natural latex.

Eye protection : Safety glasses.  
Body Protection : Safety clothes : long sleeved clothing EN13688

### Environmental exposure controls:

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Basic physical and chemical properties:

#### 9.1.1 Appearance:

State of matter : Liquid  
Form : Liquid.  
Color : Colourless.  
Odor : Pungent smell  
Odor threshold : No data available

#### 9.1.2 Important health, safety and environmental information:

pH : Not applicable  
Melting point/range : < 0 °C Method: Literature.  
Boiling point/range : > 100 °C Method: Literature.  
Flash point : No data available  
Autoignition temperature : No data available  
Vapour pressure : No data available  
Relative vapour density : Not applicable  
Relative density : No data available  
Density : No data available  
Solubility/qualitative : Miscible with water at all ratios.  
Water solubility : No data available  
Partition coefficient (n-octanol/water) : No data available  
Viscosity, dynamic : No data available  
Viscosity, kinematic : No data available  
Lower explosion limit : No data available  
Upper explosion limit : No data available  
Evaporation rate : No data available  
Flammability (solid, gas) : Not flammable. Method: Literature.

#### 9.2 Other information:

VOC content : Not applicable

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity:

Reactivity : Reactivity is not to be expected under normal conditions of temperature and pressure.

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### 10.2 Chemical stability:

Stability : The product is stable under normal conditions of storage and use.

### 10.3 Possibility of hazardous reactions:

Hazardous reactions : The product is stable under normal conditions of storage and use.

### 10.4 Conditions to avoid:

Conditions to avoid : No data available

### 10.5 Materials to avoid:

Materials to avoid : No data available

### 10.6 Hazardous decomposition products:

Hazardous decomposition products : No specified dangerous decomposition products are known.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Toxicity data specific for individual ingredients in their pure state:

#### Toxicokinetics, metabolism and distribution:

No data available

#### Acute effects (toxicity tests):

##### ➤ Acute Toxicity

- gamma-Butyrolactone

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	1,540 mg/kg	Literature.
Acute dermal toxicity	LD50	guinea pig	> 5,000 mg/kg	Literature.
Acute inhalation toxicity	LC50	rat	> 5.1 mg/l/ 4 h	Literature.
				Based on available data, the classification criteria are not met.

- Phosphoric acid

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	1,530 mg/kg	Literature.
Acute dermal toxicity	LD50	rabbit	2,740 mg/kg	Literature.
Acute inhalation toxicity	LC50	rat	> 0.2 mg/l/ 4 h	Literature.
				Based on available data, the classification criteria are not met.

- Polycarboxylic acids

	Effect dose	Species	Value	Method
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Acute oral toxicity	LD50	rat	> 2,000 mg/kg	Literature.
Based on available data, the classification criteria are not met.				

- Tetrafluoroboric acid

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	464 mg/kg	Literature.

### > Specific target organ toxicity (STOT):

Specific effects	Affected organs
May cause impairment of central nervous system. May cause drowsiness and dizziness.	

### > Irritant and corrosive effects:

	Exposure time	Species	Evaluation	Method
Primary irritation to the skin	Based on available data, the classification criteria are not met.			
Irritation to eyes	Risk of serious damage to eyes.			

### > Irritation to the respiratory tract:

Based on available data, the classification criteria are not met.

### > Sensitisation:

Species	Evaluation	Method
Based on available data, the classification criteria are not met.		

### > Aspiration hazard:

No data available

### Sub-acute, sub-chronic and chronic toxicity

#### > Repeated dose toxicity:

No data available

#### > Specific target organ toxicity (STOT):

Based on available data, the classification criteria are not met.

#### > CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

##### - Carcinogenicity

Based on available data, the classification criteria are not met.

##### - Mutagenicity

Based on available data, the classification criteria are not met.

##### - Genetic toxicity in vitro

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No data available

- **Genetic toxicity in vivo**

No data available

- **Teratogenicity**

Based on available data, the classification criteria are not met.

- **Toxicity to reproduction**

Based on available data, the classification criteria are not met.

➤ **Summarised evaluation of the CMR properties:**

Carcinogenicity : Based on available data, the classification criteria are not met.  
Mutagenicity : Based on available data, the classification criteria are not met.  
Teratogenicity : Based on available data, the classification criteria are not met.  
Toxicity to reproduction : Based on available data, the classification criteria are not met.

**Experiences made in practice:**

Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use. Other dangerous properties can not be excluded.

## 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity:

• gamma-Butyrolactone

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC50	96 h	Leuciscus idus (golden orfe)	> 220 mg/l
	Method: DIN 38412			
Toxicity to daphnia	EC50	48 h	Daphnia magna	> 500 mg/l
	Method: Literature.			
Toxicity to algae	EC50	72 h	Scenedesmus subspicatus (algae)	360 mg/l
	Method: Literature.			
Toxicity to bacteria	EC50	17 h	Pseudomonas putida (bacteria)	> 10,000 mg/l
	Method: OECD-Guideline No.209; 88/302/EEC C.11			

• Phosphoric acid

	Effect dose	Exposure time	Species	Value
Toxicity to fish	No data available			
Toxicity to daphnia	EC50	96 h	Daphnia magna (water flea)	> 100 mg/l
	Method: Literature.			
Toxicity to algae	Based on available data, the classification criteria are not met.			
	No data available			

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Toxicity to bacteria	EC50	16 h	Pseudomonas putida (bacteria)	270 mg/l
Method: Literature. Based on available data, the classification criteria are not met.				

- Polycarboxylic acids

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC50	96 h	Brachidanio rerio (zebra fish)	100 mg/l
Method: Literature. Based on available data, the classification criteria are not met.				
Toxicity to daphnia	EC50	48 h	Daphnia magna (water flea)	> 1,000 mg/l
Method: Literature. Based on available data, the classification criteria are not met.				

### 12.2 Persistence and degradability:

#### Physico-chemical removability

No data available

#### Chemical Oxygen Demand (COD)

No data available

#### Adsorbed organic bound halogens (AOX)

Product does not contain any organic halogens.

#### Biodegradation

No data available

#### Biochemical Oxygen Demand (BOD)

No data available

### 12.3 Bioaccumulative potential:

#### Partition coefficient (n-octanol/water)

No data available

#### Bioconcentration factor (BCF)

No data available

### 12.4 Mobility in soil:

No information available.

#### Henry's constant

Value	Temperature	Method
		No information available.

### Transport between environmental compartments

No data available

### 12.5 Results of PBT and vPvB assessment:

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This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

### 12.6 Other adverse effects:

The corrector liquid does not contain any ingredient that is classified as hazardous to the environment according to European Directives and corresponding national legislation. This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer. Avoid infiltration in to drinking supplies, waste water or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

#### Waste disposal methods

Used correction pencils are considered industrial waste. Refer to local provisions and regulations on disposal of such waste. When this product or its contaminated packaging has to be removed as waste, contact an authorized waste contractor.

#### Empty containers.

As the packaging can be contaminated with product residus, please observe the warnings of the label even when the container is empty. Label precautions also apply to this container when empty.

## 14. TRANSPORT INFORMATION

Not regulated according to ADR.  
Not regulated according to ADNR.  
Not regulated according to RID.  
Not regulated according to IMO/IMDG.  
Not regulated according to ICAO/IATA aircraft only.  
Not regulated according to ICAO/IATA passenger and cargo aircraft.

## 15. REGULATORY INFORMATION

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

#### Authorisation and/or restriction on use

Authorisation : No  
Restriction on use : Not listed on EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixtures & articles (Reg 1907/2006/EC, as amended)

#### Other EU regulations

Does not fall under specific EU-Regulations.

### 15.2 Chemical Safety Assessment

No Chemical Safety Report needed according REACH.

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### 16. OTHER INFORMATION

#### Text of H-phrases referred to under headings 2 and 3:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

#### Text of R-phrases referred to under headings 2 and 3:

R22	Harmful if swallowed.
R34	Causes burns.
R36	Irritating to eyes.
R36/38	Irritating to eyes and skin.
R41	Risk of serious damage to eyes.
R67	Vapours may cause drowsiness and dizziness.

#### Further information

This product is not manufactured by Agfa. The information disclosed in this Safety Data Sheet has been provided by the manufacturer. This Safety Data Sheet is compiled in accordance with European Directives and corresponding national legislation.

The information disclosed in this Safety Data Sheet is believed to be correct to the best of our current knowledge and experience. It only relates to the specific product designated herein and it may not be valid when said product is used in combination with any other material or in any process, unless specified in the text. This document aims to provide the necessary health and safety information of the product and is not to be considered a warranty or quality specification. It is the responsibility of the user to comply with local legislation relating to safety, health, environment and waste management.

#### Sources of key data used to compile the datasheet

Handbuch der gefährlichen Güter, Hommel.  
The Dictionary of Substances and their Effects, Royal Society of Chemistry.  
Gefährliche Chemische Reaktionen, L.Roth und U.Weller.  
Handbuch der Umweltgifte, Dauderer.  
Chemiekaarten, latest version.  
Safety Data Sheet from the supplier.  
IUCLID Test data. This safety data sheet contains an ES (if applicable) in an integrated form.  
Contents of the exposure scenario have been included (if applicable) into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet. The downstream user has to check whether his uses are covered by the integrated ES information in this safety data sheet.

#### Abbreviations

ADR:	Accord européen relatif au transport international des marchandises Dangereuses par Route
ADNR:	Accord européen relatif au transport international des marchandises Dangereuses par la Rhin
AGW:	Arbeitsplatzgrenzwerte (GE)

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ATEmix:	Acute toxicity estimate of the mixture
CLP:	Classification, Labelling and Packaging of substances and mixtures
CMR:	Carcinoge
DNEL:	Derived No Effect Level
EC0:	Effective Concentration 0%
EC5:	Effective Concentration 5%
EC10:	Effective Concentration 10%
EC50:	Median Effective Concentration
EC100:	Effective Concentration 100%
EH40 WEL:	Workplace Exposure Limit (UK)
IATA:	International Air Transport Association
ICAO:	International Civil Aviation Organization
IC50:	inhibitory concentration 50%
IMDG:	International Maritime Dangerous Goods
IMO:	International Maritime Organization
IUCLID:	International Uniform Chemical Information Database
LC50:	Lethal Concentration 50%
LC100:	Lethal Concentration 100%
LOAEL:	Lowest Observed Adverse Effect Level
LDL0	Lethal Dose (minimum found to be lethal)
LD50:	Lethal Dose 50%
MAC:	Maximaal Aanvaardbare Concentratie (NL)
MAK:	Maximale Arbeitsplatz-Konzentration
NOAEL:	No Observed Adverse Effect Level
NOEL:	No Observed Effect Level
NOEC:	No Observed Effect Concentration
OEL:	Occupational Exposure Limit
PBT:	Persistent, Bioaccumulative and Toxic substance
PNEC:	Predicted No Effect Concentration
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID:	Regulations concerning the International Transport of Dangerous Goods by Rail
STEL:	Short Term Exposure Limit
TLV:	Threshold Limit Value
TRGS900:	Arbeitsplatzgrenswerte (GE)
TWA:	Time Weighted Average
VOC:	Volatile Organic Compound
vPvB:	very Persistent and very Bioaccumulative substance