SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Black Limestone Sealer
- Contains xylene

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

- Use of the substance/mixture: Sealing concrete and block paving
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: SmartSeal UK Ltd
- Address of Supplier: Unit 3
  65-67 Cutlers Road
  South Woodham Ferrers
  Chelmsford
  Essex
  CM3 5WA
  UK
- Telephone: +44 (0) 1268 722500
- Email: support@smartseal.co.uk

1.4 Emergency telephone number

- Emergency Telephone: +44 (0) 1268 722500
  (office hours only Mon – Fri 08:30 – 17:30)

SECTION 2: Hazards identification

2.1 Classification of the substance ormixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H332; STOT SE 3, H335; STOT RE 2, H373; Aquatic Chronic 3, H412
- Additional information: For full text of Hazard- and EU Hazard-statements: see section 16

2.2 Label elements

- Signal Word: Danger

- Hazard statements
  H226 - Flammable liquid and vapour.
  H304 - May be fatal if swallowed and enters airways.
  H302+H312 - Harmful if swallowed or in contact with skin
  H315 - Causes skin irritation.
  H319 - Causes serious eye irritation.
  H335 - May cause respiratory irritation.
  H373 - May cause damage to organs through prolonged or repeated exposure.
  H412 - Harmful to aquatic life with long lasting effects.

- Precautionary statements
  P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

SECTION 2: Hazards identification (. ...)

smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P332+P313 - If skin irritation occurs: Get medical advice/attention.

- Supplemental Hazard Information (EU)
  None

2.3 Other hazards

- Not a PBT according to REACHAnnex XIII
- Not a vPvB according to REACHAnnex XIII

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	REACH Registration Number	WEL /OEL
xylene	70-90%	1330-20-7	215-535-7	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H332; STOT SE 3, H335; STOT RE 2, H373; Aquatic Chronic 3, H412	01-2119488216 -32-XXXX	Yes
1-methoxypropan-2-ol	< 5%	107-98-2	203-539-1	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119457435 -35-XXXX	Yes
methyl methacrylate	< 0.1%	80-62-6	201-297-1	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	-	Yes

SECTION 4: First aid measures

4.1 Description of first aid measures

- Contact with eyes
  If substance has got into eyes, immediately wash out with plenty of water for several minutes
  Irrigate eyes thoroughly whilst lifting eyelids
  Remove contact lenses, if present and easy to do. Continue rinsing.
  If eye irritation persists: Get medical advice/attention.

- Contact with skin
  Take off contaminated clothing and wash it before reuse.
  Wash affected area with plenty of soap and water
  If skin irritation occurs: Get medical advice/attention.

- Ingestion
  Rinse mouth with water (do not swallow)
  Do NOT induce vomiting.

SECTION 4: First aid measures (….)

Get immediate medical advice/attention.

- Inhalation
  If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
  Keep warm and at rest, in a half upright position. Loosen clothing
  Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation
  Immediately call a POISON CENTER or doctor/physician.

4.2 Most important symptoms and effects, both acute and delayed

- Contact with eyes
  Causes redness and irritation

- Contact with skin
  May be harmful if absorbed through skin
  Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis
  Causes redness and irritation

- Ingestion
  Can cause damage to the central nervous system
  Can cause damage to the liver
  Can cause damage to the kidneys
  May be fatal if swallowed and enters airways.
  Causes nausea/vomiting

- Inhalation
  Effect may vary from irritation of the nasal mucous membrane to severe lung irritation.
  Can cause damage to the central nervous system
  Causes dizziness, confusion, headache or stupor
  May cause breathing difficulty

4.3 Indication of any immediate medical attention and special treatment needed

- Consider gastric lavage with protected airway, administration of activated charcoal.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- In case of fire use water spray or fog, alcohol resistant foam, dry chemical or carbon dioxide
- Unsuitable extinguishing media: high volume water jet

5.2 Special hazards arising from the substanceor mixture

- Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback
- May form explosive vapour/air mixtures
- In a fire or if heated, a pressure increase will occur and the container may burst
- Decomposition products may include carbon oxides
- Decomposition products mayincludehydrocarbons

5.3 Advice for firefighters

- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
- Collect extinguishing media and dispose of as hazardous waste
- Keep container(s) exposed to fire cool, by spraying with water
- Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures (. ...)

6.1 Personal precautions, protective equipment and emergency procedures

- Rescuers should take suitable precautions to avoid becoming casualties themselves
- Shut off all ignition sources
- In confined spaces, sewers, etc., the vapours may collect to form explosive mixtures with air
- Personal precautions for non-emergency personnel: Avoid breathing vapours, mist or gas; Avoid contact with skin and eyes; Wear protective clothing as per section 8; Wash thoroughly after handling.
- Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Wear chemical protection suit; Wear self-contained breathing apparatus (SCBA).

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Stop leak if safe to do so.
- In case of leakage, eliminate all ignition sources.
- Use non-sparking tools.
- Take action to prevent static discharges.
- Contain the spillage using bunding
- Absorb spillage in inert material and shovel up
- Place in appropriate container
- Seal containers and label them
- Remove contaminated material to safe location for subsequent disposal
- Dispose of contents/container to an authorised waste collection point
- To be disposed of as hazardous waste

6.4 Reference to other sections

- See section(s): 7,8 &13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Do not eat, drink or smoke when using this product.
- Take precautionary measures against static discharges
- Use explosion-proof equipment.
- Use non-sparking tools.
- Use only in well ventilated areas
- Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines
- In case of inadequate ventilation wear respiratory protection.

7.2 Conditions for safe storage, including any incompatibilities

- Keep only in the original container
- Keep container tightly closed, in a cool, well ventilated place
- Opened containers should be carefully resealed and stored in an upright position
- Ground and bond container and receiving equipment.
- Keep away from heat and sources of ignition
- Incompatible with strong acids
- Incompatible with oxidizing substances

7.3 Specific end use(s)

- Sealant

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- xylene
  BMGV (Biological Monitoring Guidance Value) (UK) 650 mmol methyl hippuric acid/mol creatine in urine Sampling Time: post shift
  (EU) OELV (long term TWA) 50 ppm 221 mg/m3
  (EU) OELV (short term limit value) 100 ppm 442 mg/m3
  WEL (long term TWA) 50 ppm 220 mg/m3 (UK)
  WEL (short term limit value) 100 ppm 441 mg/m3 (UK)
  DNEL (inhalational) 221 mg/m3 Industry, Long Term, Systemic Effects
  DNEL (inhalational) 442 mg/m3 Industry, Acute/Short Term, Systemic Effects
  DNEL (inhalational) 221 mg/m3 Industry, Long Term, Local Effects
  DNEL (inhalational) 442 mg/m3 Industry, Acute/Short Term, Local Effects
  DNEL (dermal) 212 mg/kg (bw/day) Industry, Long Term, Systemic Effects
  DNEL (inhalational) 65.3 mg/m3 Consumer, Long Term, Systemic Effects
  DNEL (inhalational) 260 mg/m3 Consumer, Acute/Short Term, Systemic Effects
  DNEL (inhalational) 65.3 mg/m3 Consumer, Long Term, Local Effects
  DNEL (inhalational) 260 mg/m3 Consumer, Acute/Short Term, Local Effects
  DNEL (dermal) 125 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
  DNEL (oral) 12.5 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
  PNEC aqua (freshwater) 327 ug/l
  PNEC aqua (intermittent releases, freshwater) 327 ug/l
  PNEC aqua (marine water) 327 ug/l
  PNEC (STP) 6.58 mg/l
  PNEC sediment (freshwater) 12.46 mg/kg
  PNEC sediment (marine water) 12.46 mg/kg
  PNEC terrestrial (soil) 2.31 mg/kg

- 1-methoxypropan-2-ol
  (EU) OELV (long term TWA) 100 ppm 375 mg/m3
  (EU) OELV (short term limit value) 150 ppm 563 mg/m3
  WEL (long term TWA) 100 ppm 375 mg/m3 (UK)
  WEL (short term limit value) 150 ppm 560 mg/m3 (UK)
  DNEL (inhalational) 369 mg/m3 Industry, Long Term, Systemic Effects
  DNEL (inhalational) 553.5 mg/m3 Industry, Acute/Short Term, Systemic Effects
  DNEL (inhalational) 553.5 mg/m3 Industry, Acute/Short Term, Local Effects
  DNEL (dermal) 183 mg/kg (bw/day) Industry, Long Term, Systemic Effects
  DNEL (inhalational) 43.9 mg/m3 Consumer, Long Term, Systemic Effects
  DNEL (dermal) 78 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
  DNEL (oral) 33 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
  PNEC aqua (freshwater) 10 mg/l
  PNEC aqua (intermittent releases, freshwater) 100 mg/l
  PNEC aqua (marine water) 1 mg/l
  PNEC (STP) 100 mg/l
  PNEC sediment (freshwater) 52.3 mg/kg
  PNEC sediment (marine water) 5.2 mg/kg
  PNEC terrestrial (soil) 4.59 mg/kg

- methyl methacrylate
  (EU) OELV (long term TWA) 50 ppm
  (EU) OELV (short term limit value) 100 ppm
  WEL (long term TWA) 50 ppm 208 mg/m3 (UK)
  WEL (short term limit value) 100 ppm 416 mg/m3 (UK)
  DNEL (inhalational) 208 mg/m3 Industry, Long Term, Systemic Effects
  DNEL (inhalational) 208 mg/m3 Industry, Long Term, Local Effects
  DNEL (dermal) 13.67 mg/kg (bw/day) Industry, Long Term, Systemic Effects
  DNEL (dermal) 1.5 mg/cm2 Industry, Long Term, Local Effects
  DNEL (dermal) 1.5 mg/cm2 Industry, Acute/Short Term, Local Effects
  DNEL (inhalational) 74.3 mg/m3 Consumer, Long Term, Systemic Effects
  DNEL (inhalational) 104 mg/m3 Consumer, Long Term, Local Effects
  DNEL (dermal) 8.2 mg/kg (bw/day) Consumer, Long Term, Systemic Effects

SECTION 8: Exposure controls/personal protection (. ...)

DNEL (dermal) 1.5 mg/cm2 Consumer, Long Term, Local Effects
DNEL (dermal) 1.5 mg/cm2 Consumer, Acute/Short Term, Local Effects
PNEC aqua (freshwater) 940 ug/l
PNEC aqua (intermittent releases, freshwater) 940 ug/l
PNEC aqua (marine water) 940 ug/l
PNEC (STP) 10 mg/l
PNEC sediment (freshwater) 5.74 mg/kg
PNEC terrestrial (soil) 1.47 mg/kg

8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls should be provided to prevent the need for ventilation
- Where a reusable half mask respirator is required, use EN 140, with gas/vapour filter EN 14387 type ABEK, or EN 405; EN 1827
- Where a full face mask respirator is required, use EN 136, with gas/vapour filter EN 14387 type ABEK
- Wear goggles giving complete eye protection
- Wear suitable protective clothing
- Wear anti-static boots
- Contaminated clothing should be laundered before reuse
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
- Use good personal hygiene practices
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.
- Ensure eyewash stations and safety showers are nearby

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Black Liquid
- Odour: Sweet-smelling; Aromatic odour
- Odour threshold: 1 ppm (xylene)
- pH: Not applicable
- Melting point/freezing point: -94.96 - 13.25 °C @ 101.3 kPa (xylene)
- Initial boiling point and boiling range: 136.16 - 144.5 °C @ 101.3 kPa (xylene)
- Flashpoint: 18 - 32 °C @ 101.3 kPa (xylene)
- Evaporation Rate: No information available
- Flammability (solid,gas): May form explosive vapour/air mixtures
- Upper/lower flammability or explosive limits: Lower explosive limit: (xylene) 1.1 % (in air); Upper explosive limit: (xylene) 7 % (in air)
- Vapour Pressure: 8.21 hPa @ 20 °C (xylene)
- Vapour Density: No information available
- Relative Density: 0.86 - 0.863 @ 25 °C (xylene)
- Solubility(ies): 146 - 208 mg/L @ 25 °C and pH 7 (xylene)
- Partition Coefficient (n-Octanol/Water): Log Pow: 3.12 - 3.2 @ 20 °C and pH 7 (xylene)

SECTION 9: Physical and chemical properties (.....)

- Autoignition Temperature: 432 - 528 °C @ 101.3 kPa (xylene)
- Decomposition temperature: No information available
- Viscosity: (dynamic) 0.581 - 0.76 mPa s @ 20 °C (xylene)
- Explosive Properties: May form explosive vapour/air mixtures
- Oxidising properties: Not applicable

9.2 Other information

- No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

- Reacts violently with strong oxidizing substances

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- May form explosive vapour/air mixtures

10.4 Conditions to avoid

- Keep away from heat and sources of ignition
- In confined spaces, sewers, etc., the vapours may collect to form explosive mixtures with air

10.5 Incompatible materials

- Incompatible with acids and alkalis
- Incompatible with oxidizing substances

10.6 Hazardous decomposition products

- Decomposition products may include carbon oxides
- Decomposition products may include hydrocarbons

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute Toxicity
  Harmful if swallowed or in contact with skin
  Classification based on calculation and concentration thresholds
  xylene
  LD50 (oral, rat) 3 523 - 4 000mg/kg bw
  LC50 (inhalation, rat) 6 350 - 6 700 ppm/4h
  LD50 (dermal, rabbit) 12 126 mg/kg bw
  1-methoxypropan-2-ol
  LD50 (oral, rat) 3 739 - 4 277 mg/kg bw
  LC0 (inhalation, rat) : 7 000 ppm/6h
  LC50 (inhalation, mouse) : 6 000 - 7 000 ppm/6 h
  LD50 (dermal, rat) 2 000 mg/kg bw
  methyl methacrylate
  LD50 (oral, rat) 7 900 - 9 400 mg/kg bw
  LC50 (inhalation, rat) 29.8 mg/l/4h
  LD50 (dermal, rabbit) 5 000 mg/kg bw

- Skin corrosion/irritation
  Causes skin
  irritation.
  Classification based on calculation and concentration thresholds

- Serious eye damage/irritation
  Causes serious eye irritation.

SECTION 11: Toxicological information (.....)

Classification based on calculation and concentration thresholds

- Respiratory or skin sensitisation
  Based on available data, the classification criteria are not met
- Germ cell mutagenicity
  No evidence of mutagenic effects
- Carcinogenicity
  No evidence of carcinogenic effects
- Reproductive toxicity
  No evidence of reproductive effects
- Specific target organ toxicity (STOT) - single exposure
  STOT SE 3
  May cause respiratory irritation.
  Classification based on calculation and concentration thresholds
- Specific target organ toxicity (STOT) - repeated exposure
  STOT RE 2
  May cause damage to organs through prolonged or repeated exposure.
  Classification based on calculation and concentration thresholds
  NOAEL (oral, rat): 150 - 250 mg/kg bw/day (xylene)
  NOAEC (inhalation, rat): 3 515 mg/m3 (xylene)
- Aspiration hazard
  May be fatal if swallowed and enters airways.
  Classification based on calculation and concentration thresholds
- Contact with eyes
  Causes redness and irritation
- Contact with skin
  May be harmful if absorbed through skin
  Causes redness and irritation
  Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis
- Ingestion
  Can cause damage to the central nervous system
  Can cause damage to the liver
  Can cause damage to the kidneys
  May be fatal if swallowed and enters airways.
  Causes nausea/vomiting
- Inhalation
  Effect may vary from irritation of the nasal mucous membrane to severe lung irritation.
  Can cause damage to the central nervous system
  Causes dizziness, confusion, headache or stupor

SECTION 12: Ecological information

12.1 Toxicity

- Harmful to aquatic life with long lasting effects.
- Classification based on calculation and concentration thresholds
- xylene
  LC50 (fish) 2.6 - 8.4 mg/l (4 days)
  EC50 (aquatic invertebrates) 1 mg/l (24 hr)
  EC50 (aquatic algae) 4.6 - 4.9 mg/l (72 hr)
- methyl methacrylate
  LC50 (fish) 79 mg/l (4 days)
  EC50 (aquatic invertebrates) 69 mg/l (48 hr)
  EC50 (aquatic algae) 110 mg/l (72 hr)

SECTION 12: Ecological information (. ...)

- 1-methoxypropan-2-ol
  LC50 (fish) 1 - 20.8 g/l (4 days)
  LC50 (aquatic invertebrates) 21.1 - 25.9 g/l (48 hr)
  EC50 (aquatic algae) 1 g/l (7 days)

12.2 Persistence and degradability

- Readily biodegradable

12.3 Bio accumulative potential

- BCF 25.9 (xylene)

12.4 Mobility in soil

- No information available

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACHAnnex XIII
- Not a vPvB according to REACHAnnex XIII

12.6 Other adverse effects

- No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Dispose of contents/container to an authorised waste collection point
- This material and its container must be disposed of as hazardous waste
- Do not reuse empty containers without commercial cleaning or reconditioning
- Do not pierce or burn container, even after use

13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)

SECTION 14: Transport information

14.1 UN number

- UN No.: 1307

14.2 UN proper shipping name

- Proper Shipping Name: XYLENES SOLUTION

14.3 Transport hazard class(es)

- Hazard Class: 3

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- Not applicable

14.6 Special precautions for user

- No special precautions are required for this product

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

SECTION 14: Transport information (. ...)

- Not applicable

14.8 Road/Rail (ADR/RID)

- Proper Shipping Name: XYLENES SOLUTION
- ADR UN No.: 1307
- ADR Hazard Class: 3
- ADR Packing Group: III
- Tunnel Code: D/E

14.9 Sea (IMDG)

- Proper Shipping Name: XYLENES SOLUTION
- IMDG UN No.: 1307
- IMDG Hazard Class: 3
- IMDG Pack Group.: III

14.10 Air (ICAO/IATA)

- Proper Shipping Name: XYLENES SOLUTION
- ICAO UN No.: 1307
- ICAO Hazard Class: 3
- ICAO Packing Group: III

SECTION 15: Regulatory information

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2015/830
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- This product is covered by EU Directive 2012/18/EU (the Seveso III Directive)

15.2 Chemical safety assessment

- A REACH chemical safety assessment has not been carried out

SECTION 16: Other information

The above information is believed to be correct but does not purport to be all inclusive and shall only be used as a guide. The company will not be held liable for any damage resulting from handling or from contact with this product.

Sources of data: Information from published literature and internal company data

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

Flam. Liq. 3, H226:	Classification based on calculation and concentration thresholds
Asp. Tox. 1, H304:	Classification based on calculation and concentration thresholds
Acute Tox. 4, H312:	Classification based on calculation and concentration thresholds
Skin Irrit. 2, H315:	Classification based on calculation and concentration thresholds
Eye Irrit. 2, H319:	Classification based on calculation and concentration thresholds
Acute Tox. 4, H332:	Classification based on calculation and concentration thresholds
STOT SE 3, H335:	Classification based on calculation and concentration thresholds
STOT RE 2, H373:	Classification based on calculation and concentration thresholds
Aquatic Chronic 3, H412:	Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

SECTION 16: Other information (.....)

- H225: Highly flammable liquid andvapour.
- H226: Flammable liquid and vapour
- H304: May be fatal if swallowed and enters airways
- H312: Harmful in contact withskin.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled
- H335: May cause respiratory irritation
- H336: May cause drowsiness ordizziness
- H373: May cause damage to organs through prolonged or repeated exposure
- H412: Harmful to aquatic life with long lasting effects

Acronyms

- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC50: Effective Concentration, 50%
- GHS: Globally Harmonised System
- LC50: Lethal Concentration, 50%
- LD50: Lethal Dose, 50%
- NOAEL: No observed adverse effect level
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bio accumulative and Toxic
- PNEC: Predicted No-Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- STOT RE: Specific Target Organ Toxicity Repeated Exposure
- STOT SE: Specific Target Organ Toxicity Single Exposure
- vPvB: very Persistent and very Bio accumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---