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Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_HU

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

1.1 Product identifier

Trade name : No data available

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

Recommended use : Additive

1.3 Details of the supplier of the safety data sheet Ellis Enterprises B.V., an affiliate of Valvoline Wieldrechtseweg 39 3316 BG Dordrecht Netherlands +31 (0)78 654 3500 (in the Netherlands), or contact your local CSR contact person	1.4 Emergency telephone number +1-800-VALVOLINE (+1-800-825-8654), or contact your local emergency telephone number at 06 80 20 11 99, 06 1 476 6464 Product Information +31 (0)78 654 3500 (in the Netherlands), or contact your local CSR contact person
SDS@valvoline.com	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Specific target organ toxicity - repeated exposure, Category 2, Kidney

H373: May cause damage to organs through prolonged or repeated exposure if swallowed.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word : Warning

Hazard statements : H373 May cause damage to organs (Kidney)

through prolonged or repeated exposure if

swallowed.

Precautionary statements : P101 If medical advice is needed, have product

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container or label at hand.

P102 Keep out of reach of children.

Prevention:

P260 Do not breathe vapours.

Response:

P314 Get medical advice/ attention if you feel

unwell.

Disposal:

P501 Dispose of contents/ container to an

approved waste disposal plant.

Hazardous components which must be listed on the label:

Ethanediol

2.3 Other hazards

Additional advice

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.	(REGULATION (EC)	(%)
	Registration number	No 1272/2008)	
Ethanediol	107-21-1	Acute Tox.4; H302	>= 15,00 - <
	203-473-3	STOT RE2; H373	25,00
	01-2119456816-28-xxxx		
Morpholine	110-91-8	Flam. Liq.3; H226	>= 0,50 - <
	203-815-1	Acute Tox.4; H302	1,00
	01-2119496057-30-xxxx	Acute Tox.3; H331	
		Acute Tox.3; H311	
		Skin Corr.1B; H314	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : If breathed in, move person into fresh air.

If unconscious, place in recovery position and seek medical

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advice.

If symptoms persist, call a physician.

In case of skin contact : First aid is not normally required. However, it is

recommended that exposed areas be cleaned by washing

with soap and water.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

If eye irritation persists, consult a specialist.

If swallowed : Obtain medical attention.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Signs and symptoms of exposure to this material through

breathing, swallowing, and/or passage of the material through

the skin may include:

stomach or intestinal upset (nausea, vomiting, diarrhea)

irritation (nose, throat, airways)

Cough

cyanosis (causes blue coloring of the skin and nails from lack

of oxygen)

lung edema (fluid buildup in the lung tissue)

acute kidney failure (sudden slowing or stopping of urine

production) Convulsions

Risks : Effects of acute ethylene glycol poisoning appear in three

fairly distinct stages. The initial stage occurs shortly after exposure, lasts 6-12 hours, and is characterized by central nervous system effects (transient exhilaration, nausea, vomiting, and in severe cases, coma, convulsions, and possible death). The second stage lasts from 12-36 hours after exposure and is initiated by the onset of coma. This phase is characterized by tachypnia, tachycardia, mild hypotension, cyanosis, and in severe cases, pulmonary edema, bronchopneumonia, cardiac enlargement, and congestive failure. The final stage occurs 24-72 post-exposure and is characterized by renal failure, ranging from a mild increase in blood urea nitrogen and creatinine followed by recovery, to complete anuria with acute tubular necrosis

that can lead to death. Oxaluria is found in most cases. The

most significant laboratory finding in ethylene glycol

intoxication is severe metabolic acidosis.

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4.3 Indication of any immediate medical attention and special treatment needed

Treatment : This product contains ethylene glycol. Ethanol decreases the

metabolism of ethylene glycol to toxic metabolites. Ethanol should be administered as soon as possible in cases of severe poisoning since the elimination half-life of ethylene alvol is 3 hours. If medical care will be delayed several hours, give the patient three to four 1-ounce oral "shots" of 86proof or higher whiskey before or during transport to the hospital. Fomepizole (4-methylpyrazole) is an effective antagonist of alcohol dehydrogenase, and as such, may be used as an antidote in the treatment of ethylene glycol poisoning. Hemodialysis effectively removes ethylene glycol

and its metabolites from the body.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray

Foam

Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air

and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the

point of release.

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: Alcohols Aldehydes

carbon dioxide and carbon monoxide

ethers toxic fumes

5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

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Specific extinguishing

methods

: Product is compatible with standard fire-fighting agents.

Further information : Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Smoking, eating and drinking should be prohibited in the

application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday. When

using do not eat or drink. When using do not smoke.

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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep container tightly closed in a dry and well-ventilated

place.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Ethanediol	107-21-1	TWA	20 ppm 52 mg/m3	2000/39/EC
		STEL	40 ppm 104 mg/m3	2000/39/EC
		TWA	52 mg/m3	HU OEL
		STEL	104 mg/m3	HU OEL
Morpholine	110-91-8	TWA	10 ppm 36 mg/m3	2006/15/EC
		STEL	20 ppm 72 mg/m3	2006/15/EC
		TWA	36 mg/m3	HU OEL
		STEL	72 mg/m3	HU OEL

8.2 Exposure controls

Engineering measures

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection : Not required under normal conditions of use. Wear splash-

proof safety goggles if material could be misted or splashed

into eyes.

Hand protection

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Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Wear as appropriate:

Impervious clothing Safety shoes

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : green

Odour : citrus

Odour Threshold : No data available

pH : 9,5

(20 °C)

Melting point/freezing point : No data available

Initial boiling point and boiling

range

100 °C

Flash point : > 100 °C

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : 1,02 g/cm3 (20 °C)

Solubility(ies)

Water solubility : soluble

Solubility in other solvents : No data available

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Partition coefficient: n-

octanol/water

: No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Product will not undergo hazardous polymerization.

10.4 Conditions to avoid

Conditions to avoid : excessive heat

10.5 Incompatible materials

Materials to avoid : Aldehydes

Alkali metals

Alkaline earth metals

Strong acids strong alkalis

Strong oxidizing agents Sulphur compounds

10.6 Hazardous decomposition products

Hazardous decomposition : Aldehydes

products carbon dioxide and carbon monoxide

Organic acids

ketones

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of : Inhalation

exposure Skin contact

Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Components:

Ethanediol

Acute oral toxicity : LD0 (Human): Estimated 1,56 g/kg

Assessment: The component/mixture is classified as acute

oral toxicity, category 4.

Acute inhalation toxicity : LC50 (Rat): 10,9 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Assessment: No adverse effect has been observed in acute

inhalation toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): 9.530 mg/kg

Components:

Morpholine

Acute oral toxicity : LD50 (Rat): ca. 1.900 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : Test atmosphere: vapour

Assessment: The component/mixture is classified as acute

inhalation toxicity, category 3.

Acute dermal toxicity : LD50 (Rabbit): ca. 500 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

Ethanediol

Species: Rabbit

Result: No skin irritation

Morpholine Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive after 3 minutes or less of exposure

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Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

Ethanediol

Result: Slight, transient irritation

Morpholine Species: Rabbit

Method: OECD Test Guideline 405

Result: Corrosive

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Components: Ethanediol

Test Type: Maximisation Test

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Components:

Ethanediol

Genotoxicity in vitro : Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

Morpholine

Genotoxicity in vitro : Test Type: unscheduled DNA synthesis assay

Test species: rat hepatocytes

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 482

Result: negative

: Test Type: In vitro mammalian cell gene mutation test

Test species: mouse lymphoma cells

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 476

Result: positive

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

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STOT - repeated exposure

Not classified based on available information.

Components:

Ethanediol

Exposure routes: Ingestion Target Organs: Kidney

Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

Ethanediol

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 27.540 mg/l

> Exposure time: 96 h Test Type: static test

LC50 (Pimephales promelas (fathead minnow)): 8.050 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : LC50 (Daphnia magna (Water flea)): > 10.000 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 6.500 -

13.000 mg/l

End point: Growth inhibition Exposure time: 7 Days

Toxicity to fish (Chronic

toxicity)

: NOEC: 32.000 mg/l Exposure time: 7 d

Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC: 24.000 mg/l Exposure time: 7 d

Species: Daphnia magna (Water flea)

Morpholine

: LC50 (Oncorhynchus mykiss (rainbow trout)): 380 mg/l Toxicity to fish

> Exposure time: 96 h Test Type: static test

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aquatic invertebrates

Toxicity to daphnia and other : EC50 (Water flea (Daphnia magna)): 45 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 28

mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other : NOEC: 5 mg/l

aquatic invertebrates (Chronic toxicity)

Exposure time: 21 d

Species: Water flea (Daphnia magna)

Test Type: semi-static test

Method: OECD Test Guideline 211

12.2 Persistence and degradability

Components:

Ethanediol

Biodegradability : Result: Readily biodegradable.

Biodegradation: 90 - 100 %

Exposure time: 10 d

Method: OECD Test Guideline 301

Morpholine

Biodegradability : Result: Readily biodegradable.

> Biodegradation: 92,6 % Exposure time: 22 d

Method: OECD Test Guideline 301E

12.3 Bioaccumulative potential

Components:

Ethanediol

: Species: Crayfish (Procambarus) Bioaccumulation

Exposure time: 61 d Concentration: 1000 mg/l

Bioconcentration factor (BCF): 0,27

Method: Flow through

Partition coefficient: n-

octanol/water

: log Pow: -1,36

Morpholine

Partition coefficient: n-

octanol/water

: log Pow: -0,86

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12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological

information

: No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

ADN: Not dangerous goods **ADR:** Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

RID: Not dangerous goods

14.2 UN proper shipping name

ADN: Not dangerous goods **ADR:** Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

RID: Not dangerous goods

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14.3 Transport hazard class(es)

ADN: Not dangerous goods **ADR:** Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

RID: Not dangerous goods

14.4 Packing group

ADN: Not dangerous goods **ADR:** Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

RID: Not dangerous goods

14.5 Environmental hazards

ADN: Not applicable **ADR:** Not applicable

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not applicable INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not applicable

INTERNATIONAL MARITIME DANGEROUS GOODS: Not applicable

RID: Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Ship Type: Not applicable Hazard code(s): Not applicable Pollutant Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15: Regulatory information

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

Regulation (EC) No 1005/2009 on substances that : Not applicable

deplete the ozone layer

Regulation (EC) No 850/2004 on persistent organic : Not applicable

pollutants

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REACH - List of substances subject to authorisation

(Annex XIV)

: Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

: Not applicable

preparations and articles (Annex XVII)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

: Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and

import of dangerous chemicals

: Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Other regulations : 2000 XXV. Law on chemical safety

44/2000. (XII 27) Ministry of health dangerous substances and

preparations dangerous for certain procedures and

arrangements for activities

Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the

protection of young people at work.

The components of this product are reported in the following inventories:

DSL : This product contains one or several components that are not

on the Canadian DSL and have annual quantity limits.

AICS Not in compliance with the inventory

ENCS Not in compliance with the inventory

KECI Not in compliance with the inventory

PICCS Not in compliance with the inventory

IECSC Not in compliance with the inventory

TSCA Not On TSCA Inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

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15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information

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Classification procedure:

H373 May cause damage to organs

through prolonged or repeated

exposure if swallowed.

Full text of H-Statements

H226 Flammable liquid and vapour.

H302 Harmful if swallowed. H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure

if swallowed.

Other information : The information accumulated herein is believed to be accurate

but is not warranted to be whether originating with the

company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Valvoline's Environmental Health and Safety Department

Calculation method

('+31 (0)78 654 3500).

Sources of key data used to compile the Safety Data Sheet

Valvoline internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet:

ACGIH: American Conference of Industrial Hygienists

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service (Division of the American Chemical Society).

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

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FG: Food grade

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement: Hazard Statement

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization

ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"

IMDG: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

logPow: octanol-water partition coefficient

LCxx: Lethal Concentration, for xx percent of test population

LDxx: Lethal Dose, for xx percent of test population. ICxx: Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx N.O.S.: Not Otherwise Specified

OECD: Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic

PPE: Personal Protective Equipment STEL: Short-term exposure limit STOT: Specific Target Organ Toxicity

TLV: Threshold Limit Value TWA: Time-weighted average

vPvB: Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Level

ABM: Water Hazard Class for the Netherlands

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.

ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine

CLP: Classification, Labelling and Packaging

CSA: Chemical Safety Assessment CSR: Chemical Safety Report DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances

PEC : Predicted Effect Concentration
PEL : Permissible Exposure Limits

PNEC : Predicted No Effect Concentration

R-phrase: Risk phrase

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail

S-phrase: Safety phrase

WGK: German Water Hazard Class