Printing date 12/18/2015 Reviewed on 12/18/2015

1 Identification

· Product identifer

· Trade name: MC-FERROX A 2.8

· Article number: W23.X W23.XX W23.XXXX

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Wasser Corporation 4118 B PL NW, Suite B Auburn, WA 98001, US Phone 253-850-2967

· Information department: Product safety department

· Emergency telephone number: EMERGENCY PHONE NUMBERS: USA and Canada: 1-800 424-9300 International: 1-703 527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



Flam. Liq. 3 H226 Flammable liquid and vapor.



Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 1B H340 May cause genetic defects.

Carc. 1A H350 May cause cancer.

STOT RE 1 H372 Causes damage to the central nervous system through prolonged or repeated exposure.



Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms







GHS02 GHS07

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

xylene

titanium dioxide

(Contd. on page 2)

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

(Contd. of page 1)

Ferric oxide

Hexane, 1,6-diisocyanato-, homopolymer

· Hazard statements

H226 Flammable liquid and vapor.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H340 May cause genetic defects.

H350 May cause cancer.

H335 May cause respiratory irritation.

H372 Causes damage to the central nervous system through prolonged or repeated exposure.

· Precautionary statements

Keep out of reach from children.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P284 [In case of inadequate ventilation] wear respiratory protection.

P280 Wear protective gloves / eye protection / face protection.
P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P363 Wash contaminated clothing before reuse.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray. P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 3 Fire = 3Reactivity = 0

(Contd. on page 3)

(Contd. of page 2)

Safety Data Sheet acc. to OSHA HCS

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

· HMIS-ratings (scale 0 - 4)

HEALTH *3 Health = *3 Fire = 3 REACTIVITY 0 Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- \cdot **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous		
1309-37-1	Ferric oxide	10-30%%
13463-67-7	titanium dioxide	10-30%%
1330-20-7	xylene	10-30%%
14807-96-6	Talc (Mg3H2(SiO3)4)	10-30%%
110-43-0	methyl amyl ketone	1-5%%
28182-81-2	Hexane, 1,6-diisocyanato-, homopolymer	1-5%%
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	1-5%%
53880-05-0	Homopolymer of IPDI	1-5%%
8052-41-3	Stoddard solvent	1-5%%
7429-90-5	aluminium powder (stabilised)	0.1-1%%
1333-86-4	Carbon black	0.1-1%%
64742-95-6	Solvent naphtha (petroleum), light arom.	0.1-1%%
14808-60-7	Quartz (SiO2)	0.1-1%%
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	0.1-1%%
64741-65-7	Naphtha (petroleum), heavy alkylate	0.1-1%%

4 First-aid measures

- · Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

US

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

(Contd. of page 3)

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

1330-20-7 xylene

PEL Long-term value: 435 mg/m³, 100 ppm

(Contd. on page 5)

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

(Contd. of page 4) REL Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm TLV Short-term value: 651 mg/m³, 150 ppm Long-term value: 434 mg/m³, 100 ppm BEI110-43-0 methyl amyl ketone PEL Long-term value: 465 mg/m³, 100 ppm REL Long-term value: 465 mg/m³, 100 ppm TLV Long-term value: 233 mg/m³, 50 ppm 8052-41-3 Stoddard solvent PEL Long-term value: 2900 mg/m³, 500 ppm REL Long-term value: 350 mg/m³ Ceiling limit value: 1800* mg/m³ *15-min TLV | Long-term value: 525 mg/m³, 100 ppm 7429-90-5 aluminium powder (stabilised) PEL Long-term value: 15*; 5** mg/m³ *Total dust; ** Respirable fraction REL Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powd./welding f. TLV Long-term value: 1* mg/m³ as Al; *as respirable fraction 4098-71-9 isophorone di-isocyanate REL Short-term value: 0.18 mg/m³, 0.02 ppm Long-term value: 0.045 mg/m³, 0.005 ppm Skin TLV Long-term value: 0.045 mg/m³, 0.005 ppm · Ingredients with biological limit values: 1330-20-7 xylene BEI 1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Breathing equipment:

During mixing, handling and application: Splash goggles. Full protective clothing. Gloves (impervious). Wear suitable respiratory equipment. When air concentrations are not known (or above the TLV), an air-supplied respirator is required. Refer to OSHA Respiratory Protection Standard (29 CFR 1910.134). In presence of air movement, air-purifying (cartridge type) respirators are not the best protection but can be used, if you replaced them frequently. Change cartridges after 8h max or less due to their low warning properties. When in a confined space wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

(Contd. on page 6)

(Contd. of page 5)

Safety Data Sheet acc. to OSHA HCS

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and conference of the conference of	hemical properties
· Appearance:	
Form:	Fluid
Color:	Various colors
· Odor:	Aromatic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	137 °C (279 °F)
· Flash point:	30 °C (86 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	500 °C (932 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	1.1 Vol %
Upper:	7.0 Vol %
· Vapor pressure at 20 °C (68 °F):	6.7 hPa (5 mm Hg)
· Density at 20 °C (68 °F): · Relative density	1.56-1.70 g/cm³ (13.018-14.187 lbs/gal) Not determined.

(Contd. on page 7)

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

		(Contd. of page 6
· Vapor density	Not determined.	
Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wa	t ter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Solids content:	7984 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:		
1309-37-1	1309-37-1 Ferric oxide	
Oral	LD50	>5000 mg/kg (rat)
1330-20-7	1330-20-7 xylene	
Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
64742-95-	64742-95-6 Solvent naphtha (petroleum), light arom.	
Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)
64741-65-7 Naphtha (petroleum), heavy alkylate		
Oral	LD50	> 6000 mg/kg (rat)
Dermal	LD50	> 3000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 7.8 mg/l (rat)
ъ	witant offor	

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

(Contd. on page 8)

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

(Contd. of page 7)

Harmful

Irritant

The product can cause inheritable damage.

· Carcinogenic categories

· IARC (Inter	national Agency for Research on Cancer)	
1309-37-1	Ferric oxide	3
13463-67-7	titanium dioxide	2B
1330-20-7	xylene	3
14807-96-6	Talc (Mg3H2(SiO3)4)	2B
1333-86-4	Carbon black	2B
7631-86-9	silicon dioxide, chemically prepared	3
14808-60-7	Quartz (SiO2)	1
111-76-2	2-butoxyethanol	3
· NTP (Nation	nal Toxicology Program)	
14808-60-7	Quartz (SiO2)	K
· OSHA-Ca (Occupational Safety & Health Administration)	

12 Ecological information

None of the ingredients is listed.

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

- · UN-Number
- · DOT, ADR, IMDG, IATA UN1263
- · UN proper shipping name
- · **DOT**, **IATA** Paint

(Contd. on page 9)

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

	(Contd. of page
· ADR · IMDG	1263 Paint PAINT
· Transport hazard class(es)	
DOT	
RAMMARE LOUID	
· Class	3 Flammable liquids
· Label	3
ADR, IMDG, IATA	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Flammable liquids
Danger code (Kemler):	30
EMS Number:	$F-E, \underline{S-E}$
Stowage Category	A
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
Transport/Additional information:	
· DOT	
Quantity limitations	On passenger aircraft/rail: 60 L
2	On cargo aircraft only: 220 L
· ADR	
Excepted quantities (EQ)	Code: E1
- • • • • •	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1263 PAINT, 3, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

4098-71-9 isophorone di-isocyanate

(Contd. on page 10)

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

(Contd. of page 9) · Section 313 (Specific toxic chemical listings): 1330-20-7 xylene 4098-71-9 isophorone di-isocyanate 95-63-6 1,2,4-trimethylbenzene 822-06-0 hexamethylene-di-isocyanate 872-50-4 N-methyl-2-pyrrolidone 111-76-2 2-butoxyethanol · TSCA (Toxic Substances Control Act): Ferric oxide titanium dioxide xylene Talc (Mg3H2(SiO3)4) methyl amyl ketone Hexane, 1,6-diisocyanato-, homopolymer 4-chloro-alpha,alpha,alpha-trifluorotoluene Homopolymer of IPDI Stoddard solvent · Proposition 65 · Chemicals known to cause cancer: 13463-67-7 titanium dioxide 1333-86-4 Carbon black 14808-60-7 Quartz (SiO2) · Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed. · Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. · Chemicals known to cause developmental toxicity: 872-50-4 N-methyl-2-pyrrolidone · Carcinogenic categories · EPA (Environmental Protection Agency) 1330-20-7 xylene 111-76-2 2-butoxyethanol NL· TLV (Threshold Limit Value established by ACGIH) Ferric oxide *A4* A4titanium dioxide xylene A4*Talc* (*Mg3H2*(*SiO3*)4) *A4* Carbon black *A4* Quartz (SiO2) A2zirconium dioxide A4· NIOSH-Ca (National Institute for Occupational Safety and Health) 13463-67-7 titanium dioxide 1333-86-4 Carbon black 14808-60-7 Quartz (SiO2) · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 11)

(Contd. of page 10)

Safety Data Sheet acc. to OSHA HCS

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

· Hazard pictograms







GHS02 GHS07

· Signal word Danger

· Hazard-determining components of labeling:

xylene

titanium dioxide Ferric oxide

Hexane, 1,6-diisocyanato-, homopolymer

· Hazard statements

H226 Flammable liquid and vapor.

 $H332\ Harmful\ if\ inhaled.$

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H340 May cause genetic defects.

H350 May cause cancer.

H335 May cause respiratory irritation.

H372 Causes damage to the central nervous system through prolonged or repeated exposure.

· Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P284	[In case of inadequate ventilation] wear respiratory protection.
P280	Wear protective gloves / eye protection / face protection.
P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P201	Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321	Specific treatment (see on this label).
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P363	Wash contaminated clothing before reuse.
P308+P313	IF exposed or concerned: Get medical advice/attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

(Contd. on page 12)

Printing date 12/18/2015 Reviewed on 12/18/2015

Trade name: MC-FERROX A 2.8

(Contd. of page 11)

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · National regulations:
- · Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department
- · Contact: HS REG.DEPART.REG.SS
- · Date of preparation / last revision 12/18/2015 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Muta. 1B: Germ cell mutagenicity, Hazard Category 1B

Carc. 1A: Carcinogenicity, Hazard Category 1A

 $STOT\,SE\,3:\,Specific\,target\,organ\,toxicity\,-\,Single\,exposure,\,Hazard\,Category\,3$

STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

US