1 Identification

· Product identifier

· Product Name: LPC Standard 1

· Part Name:

LPC-1-100 LPC-1-100N LPC-1-500N LPC-1-500N

- · Application of the substance / the mixture Certified Reference Material
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: SPEX CertiPrep, LLC. 203 Norcross Ave, Metuchen, NJ 08840 USA
- · Information department: product safety department
- Emergency telephone number: Emergency Phone Number (24 hours) CHEMTREC (800-424-9300) Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · Label elements
- $\cdot \textit{GHS label elements The product is classified and labeled according to the \textit{Globally Harmonized System (GHS)}. \\$
- · Hazard pictograms



GHS05

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

nitric acid

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

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.

P310 Immediately call a poison center/doctor. P321 Specific treatment (see on this label).

P405 Store locked up.

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

· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



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

(Contd. on page 2)

Product Name: LPC Standard 1

· vPvB: Not applicable.

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures

Dangerous components:	
7697-37-2 nitric acid	5.09
7664-39-3 hydrofluoric acid	0.29
Chemical identification of the substance/preparation	
87-69-4 (+)-tartaric acid	<0.9%
7723-14-0 phosphorus	0.01%
7440-09-7 potassium	0.01%
7631-86-9 silicon dioxide, chemically prepared	0.01%
7440-66-6 zinc powder -zinc dust (stabilized)	0.0029
7440-39-3 Barium from Barium carbonate	0.0029
7440-02-0 nickel	0.0029
7439-92-1 Lead from Lead Oxide	0.0029
7439-96-5 manganese	0.0029
7440-50-8 copper	0.0029
7440-41-7 Beryllium from Beryllium Acetate	0.0029
7440-43-9 cadmium (non-pyrophoric)	0.0029
7440-42-8 Boron from Ammonium tetraborate tetrahydrate	0.0029
7440-70-2 Calcium from Calcium carbonate	0.0029
7440-48-4 cobalt	0.0029
7440-62-2 Vanadium from Ammonium trioxovanadate	0.0029
7782-49-2 selenium	0.0029
7429-90-5 aluminium	0.0029
7440-47-3 Chromium from Chromium(III) nitrate nonahydrate	0.0029
7439-93-2 Lithium from Lithium carbonate	0.0029
7439-89-6 iron	0.0029
7440-23-5 Sodium from Sodium carbonate	0.0029
7440-24-6 Strontium from Strontium carbonate	0.0029
7440-38-2 arsenic	0.0029
7440-31-5 tin	0.002
7440-28-0 Thallium from Thallium nitrate	0.0029
7439-95-4 magnesium	0.0029
7439-98-7 molybdenum	0.0029
7440-36-0 antimony	0.002
7440-22-4 silver	0.0005
7732-18-5 water, distilled, conductivity or of similar purity	93.829

4 First-aid measures

- · Description of first aid measures
- $\cdot \textit{General information:} \textit{Immediately remove any clothing soiled by the product.}$
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not give anything to eat or drink Do not induce vomitting
- · 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.

Product Name: LPC Standard 1

(Contd. of page 2)

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · 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:

Dilute with plenty of water.

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).

Use neutralizing agent.

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.

· Protective Action Criteria for Chemicals

7697-37-2	nitric acid	0.16 ppm
87-69-4	(+)-tartaric acid	1.6 mg/m³
7723-14-0	phosphorus	0.27 mg/m^3
7440-09-7	potassium	2.3 mg/m^3
7631-86-9	silicon dioxide, chemically prepared	18 mg/m³
7440-66-6	zinc powder -zinc dust (stabilized)	6 mg/m³
7440-39-3	Barium from Barium carbonate	1.5 mg/m^3
7440-02-0	nickel	4.5 mg/m^3
7439-92-1	Lead from Lead Oxide	0.15 mg/m^3
7439-96-5	manganese	$3 mg/m^3$
7440-50-8	copper	3 mg/m ³
7440-41-7	Beryllium from Beryllium Acetate	0.0023 mg/n
7440-43-9	cadmium (non-pyrophoric)	0.10 mg/m^3
7440-42-8	Boron from Ammonium tetraborate tetrahydrate	1.9 mg/m^3
7440-48-4	cobalt	0.18 mg/m^3
7440-62-2	Vanadium from Ammonium trioxovanadate	$3 mg/m^3$
7782-49-2	selenium	0.6 mg/m^3
7440-47-3	Chromium from Chromium(III) nitrate nonahydrate	1.5 mg/m^3
7439-93-2	Lithium from Lithium carbonate	3.3 mg/m^3
7439-89-6	iron	3.2 mg/m^3
7440-23-5	Sodium from Sodium carbonate	13 mg/m³
7440-24-6	Strontium from Strontium carbonate	30 mg/m³
7440-38-2	arsenic	1.5 mg/m^3
7440-31-5	tin	6 mg/m ³
7440-28-0	Thallium from Thallium nitrate	0.06 mg/m^3
7439-95-4	magnesium	18 mg/m^3
7439-98-7	molybdenum	30 mg/m^3
7440-36-0	antimony	1.5 mg/m^3
7440-22-4	silver	0.3 mg/m^3
PAC-2:		•
7697-37-2	nitric acid	24 ppm
87-69-4	(+)-tartaric acid	17 mg/m^3

Safety Data Sheet acc. to OSHA HCS

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7723-14-0	phosphorus	(Contd. of pag 3 mg/m³
	potassium	$\frac{3 m_0^2 m^2}{25 mg/m^3}$
	silicon dioxide, chemically prepared	740 mg/m
	zinc powder -zinc dust (stabilized)	21 mg/m ³
	Barium from Barium carbonate	180 mg/m
7440-02-0	· ·	50 mg/m^3
	Lead from Lead Oxide	120 mg/m
	manganese	$5 mg/m^3$
7440-50-8		33 mg/m^3
	Beryllium from Beryllium Acetate	0.025 mg/m
	cadmium (non-pyrophoric)	0.76 mg/n
	Boron from Ammonium tetraborate tetrahydrate	
7440-42-8		21 mg/m^3
		$2 mg/m^3$
	Vanadium from Ammonium trioxovanadate	5.8 mg/m³
7782-49-2		6.6 mg/m³
	Chromium from Chromium(III) nitrate nonahydrate	17 mg/m³
	Lithium from Lithium carbonate	36 mg/m³
7439-89-6		35 mg/m^3
	Sodium from Sodium carbonate	140 mg/m
	Strontium from Strontium carbonate	330 mg/m
7440-38-2		17 mg/m³
7440-31-5		67 mg/m ³
	Thallium from Thallium nitrate	3.3 mg/m ³
	magnesium	200 mg/m
7439-98-7	molybdenum	330 mg/m
7440-36-0	antimony	13 mg/m³
7440-22-4	silver	170 mg/m
<i>PAC-3:</i>		·
7697-37-2	nitric acid	92 ppm
	(+)-tartaric acid	100 mg/m
	phosphorus	18 mg/m³
	potassium	150 mg/m
	silicon dioxide, chemically prepared	4,500 mg/
	zinc powder -zinc dust (stabilized)	120 mg/m
	Barium from Barium carbonate	1,100 mg/
7440-02-0	· · ·	99 mg/m ³
	Lead from Lead Oxide	700 mg/m
	manganese	1,800 mg/
7440-50-8	· ·	200 mg/m
	Beryllium from Beryllium Acetate	0.1 mg/m ³
	cadmium (non-pyrophoric)	4.7 mg/m ³
	Boron from Ammonium tetraborate tetrahydrate	
7440-42-8		130 mg/m 20 mg/m³
		- Contract of the Contract of
	Vanadium from Ammonium trioxovanadate	35 mg/m^3
7782-49-2		40 mg/m^3
	Chromium from Chromium(III) nitrate nonahydrate	99 mg/m³
	Lithium from Lithium carbonate	220 mg/m
7439-89-6		150 mg/m
	Sodium from Sodium carbonate	870 mg/m
7440-24-6	Strontium from Strontium carbonate	2,000 mg/
	arsenic	100 mg/m
7440-38-2		100
	tin	400 mg/m
7440-38-2 7440-31-5	tin Thallium from Thallium nitrate	
7440-38-2 7440-31-5 7440-28-0		400 mg/m ³ 20 mg/m ³ 1,200 mg/

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	10	Contd. of page 4)
7440-36-0	antimony	80 mg/m³
7440-22-4	silver	990 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: 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:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

7697-37-2 nitric acid

PEL Long-term value: 5 mg/m³, 2 ppm

REL Short-term value: 10 mg/m³, 4 ppm

Long-term value: 5 mg/m³, 2 ppm

TLV Short-term value: 10 mg/m³, 4 ppm Long-term value: 5.2 mg/m³, 2 ppm

- 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.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· 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.

(Contd. on page 6)

Product Name: LPC Standard 1

· Eye protection:





General Information	
Appearance: Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odour Threshold:	Not applicable.
pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	83 °C (181.4 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not applicable.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not applicable.
Upper:	Not applicable.
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
Density	Not applicable.
Relative density	Not applicable.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Fully miscible.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability

· Viscosity:

Dynamic: Kinematic:

· Solvent content:

VOC content:
Solids content:

· Other information

Water:

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

No further relevant information available.

Not applicable.

Not applicable.

93.8 %

0.00 %

- · 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.

Product Name: LPC Standard 1

(Contd. of page 6)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

Corrosive

Irritant

· Carcinogenic categories

· IARC (Inte	ernational Agency for Research on Cancer)	
7631-86-9	silicon dioxide, chemically prepared	3
7440-02-0		2B
7439-92-1	Lead from Lead Oxide	2 <i>B</i>
7440-41-7	Beryllium from Beryllium Acetate	1
7440-43-9	cadmium (non-pyrophoric)	1
7440-48-4	cobalt	2 <i>B</i>
7782-49-2	selenium	3
7440-47-3	Chromium from Chromium(III) nitrate nonahydrate	3
7440-38-2	arsenic	1
· NTP (Nati	ional Toxicology Program)	
7440-02-0	nickel	R
7439-92-1	Lead from Lead Oxide	R
7440-41-7	Beryllium from Beryllium Acetate	K
7440-43-9	cadmium (non-pyrophoric)	K
7440-48-4	cobalt	R
7440-38-2	arsenic	K
· OSHA-Ca	(Occupational Safety & Health Administration)	
7440-43-9	cadmium (non-pyrophoric)	
7440-38-2	arsenic	

12 Ecological information

- · Toxicity
- $\cdot \textbf{\textit{Aquatic toxicity:}} \ \textit{No further relevant information available}.$
- · 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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even 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.

(Contd. on page 8)

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Product Name: LPC Standard 1

(Contd. of page 7)

- Uncleaned packagings:
 Recommendation: Disposal must be made according to official regulations.
 Recommended cleansing agent: Water, if necessary with cleansing agents.

4 Transport information	
· UN-Number	11N/2044
· DOT, ADR, IMDG, IATA	UN3264
· UN proper shipping name	
· DOT	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid Solution)
$\cdot ADR$	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACI. SOLUTION)
· IMDG, IATA	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACI
	SOLUTION)
· Transport hazard class(es)	
$\cdot DOT$	
CORROSIVE	
· Class	8 Corrosive substances
· Cuss · Label	8
· ADR, IMDG, IATA	
· Class · Label	8 Corrosive substances 8
	0
· Packing group · DOT, ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Corrosive substances
Danger code (Kemler):	80
EMS Number:	F- A , S - B
· Segregation groups	Acids
· Stowage Category · Stowage Code	A SW2 Clear of living quarters.
Transport in bulk according to Annex II of MARP Code	OL73/78 and the IBC Not applicable.
Transport/Additional information:	**
· 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 $(\widetilde{E}Q)$	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRI ACID SOLUTION), 8, III

Product Name: LPC Standard 1

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Kegulato	ry information	
Safety, hed Sara	alth and environmental regulations/legislation specific for the substance or mixture	
	13 (Specific toxic chemical listings):	
	nitric acid	
	hydrofluoric acid	
	phosphorus	
	zinc powder -zinc dust (stabilized)	
	Barium from Barium carbonate	
7440-02-0	· · · · · · · · · · · · · · · · · · ·	
7439-92-1	Lead from Lead Oxide	
	manganese	
7440-50-8	copper	
	Beryllium from Beryllium Acetate	
	cadmium (non-pyrophoric)	
7440-48-4		
7440-62-2	Vanadium from Ammonium trioxovanadate	
	selenium	
7429-90-5	aluminium	
7440-47-3	Chromium from Chromium(III) nitrate nonahydrate	
7439-93-2	Lithium from Lithium carbonate	
7440-38-2	arsenic	
7440-28-0	Thallium from Thallium nitrate	
	antimony	
7440-22-4	silver	
TSCA (To	xic Substances Control Act):	
7697-37-2	nitric acid	ACT
87-69-4	(+)-tartaric acid	ACT
7723-14-0	phosphorus	ACT
7440-09-7	potassium	ACT
7631-86-9	silicon dioxide, chemically prepared	ACT
	zinc powder -zinc dust (stabilized)	ACT
7440-39-3	Barium from Barium carbonate	ACT
7440-02-0		ACT
	Lead from Lead Oxide	ACT
7439-96-5	manganese	ACT
7440-50-8		ACT
	Beryllium from Beryllium Acetate	ACT
	cadmium (non-pyrophoric)	ACT
	Boron from Ammonium tetraborate tetrahydrate	ACT
	Calcium from Calcium carbonate	ACT
7440-48-4		ACT
	Vanadium from Ammonium trioxovanadate	ACT
	selenium	ACT
	aluminium	ACT
	Chromium from Chromium(III) nitrate nonahydrate	ACT
	Lithium from Lithium carbonate	ACT
7439-89-6		ACT
	Sodium from Sodium carbonate	ACT
	Strontium from Strontium carbonate	ACT
7440-38-2 7440-31-5		ACT
14411-31-5		ACT
7440-28-0	Thallium from Thallium nitrate	ACT
7440-28-0 7439-95-4	Inatitum from Inatitum nitrate magnesium molybdenum	ACT ACT ACT

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7440-36-0	antimony	(Contd. of page ACTIV
	Air Pollutants	
-	phosphorus	
	Lead from Lead Oxide	
	manganese	
7440-48-4		
Proposition		
_	known to cause cancer:	
7440-02-0	nickel	
	Lead from Lead Oxide	
	Beryllium from Beryllium Acetate	
	cadmium (non-pyrophoric)	
7440-48-4		
7440-38-2	arsenic	
Chemicals	known to cause reproductive toxicity for females:	
	e ingredients is listed.	
	known to cause reproductive toxicity for males:	
	cadmium (non-pyrophoric)	
	known to cause developmental toxicity:	
	cadmium (non-pyrophoric) Lithium from Lithium carbonate	
/439-93-2	Lunium from Lunium carbonaie	
	nic categories	
	ronmental Protection Agency)	
	zinc powder -zinc dust (stabilized)	D, I, II
	Barium from Barium carbonate	D, CBD(inh), NL(oral)
	Lead from Lead Oxide	B2
	manganese	D
7440-50-8		D
	Beryllium from Beryllium Acetate	B1, K/L(inh), CBD(ord
	cadmium (non-pyrophoric)	B1
	Boron from Ammonium tetraborate tetrahydrate	I (oral)
7782-49-2		D
7440-38-2		A
7440-22-4		D
-	shold Limit Value established by ACGIH)	
	Barium from Barium carbonate	2
7440-02-0		2
	Lead from Lead Oxide	2
	cadmium (non-pyrophoric)	A
7440-48-4		2
7429-90-5		A
7440-38-2		/
	molybdenum	2
	(National Institute for Occupational Safety and Health)	
7440-02-0		
	cadmium (non-pyrophoric)	
7440-38-2	arsenic	

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

· Hazard pictograms



· Signal word Danger

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· Hazard-determining components of labeling:

nitric acid

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

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.

Immediately call a poison center/doctor. P321 Specific treatment (see on this label).

P405 Store locked up.

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

· 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:

SPEX CertiPrep, LLC.

1-732-549-7144

· Date of preparation / last revision 09/09/2019 / -

· 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) 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

Skin Corr. 1B: Skin corrosion/irritation – Category 1B Eye Dam. 1: Serious eye damage/eye irritation – Category 1