

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

## 1 Identification

- **Product identifier**
- **Trade name:** 15 Component Metals Standard  
100.0 ppm each in 5% HNO<sub>3</sub>
- **Article number:** VWR085
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Aqua Solutions, Inc.  
6913 Highway 225  
DEER PARK, TX 77536  
USA  
800-256-2586
- **Information department:**  
Technical Coordinator  
Sherman Nelson [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Skin Corrosion 1A H314 Causes severe skin burns and eye damage.

Eye Damage 1 H318 Causes serious eye damage.

- **Label elements**

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

- **Hazard pictograms**



GHS05

- **Signal word** Danger

- **Hazard-determining components of labeling:**

Nitric Acid

- **Hazard statements**

Causes severe skin burns and eye damage.

- **Precautionary statements**

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

Specific treatment (see on this label).

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 1)

Wash contaminated clothing before reuse.

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **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 components:**

CAS: 7697-37-2	Nitric Acid	5.0%
----------------	-------------	------

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	94.85%
CAS: 7439-89-6	Iron Metal	0.01%
CAS: 7439-95-4	Magnesium	0.01%
CAS: 7439-98-7	Molybdenum Metal, 99.8%	0.01%
CAS: 7440-02-0	Nickel Metal	0.01%
CAS: 7440-09-7	potassium	0.01%
CAS: 7440-23-5	sodium	0.01%
CAS: 7440-42-8	boron	0.01%
CAS: 7440-47-3	chromium	0.01%
CAS: 7440-48-4	cobalt	0.01%
CAS: 7440-50-8	copper	0.01%
CAS: 7440-62-2	vanadium	0.01%
CAS: 7440-66-6	Zinc Metal	0.01%
CAS: 7440-70-2	Calcium Metal	0.01%
CAS: 7723-14-0	red phosphorus	0.01%
CAS: 7783-20-2	Ammonium Sulfate	0.01%

US

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 2)

## 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** 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. Then consult a doctor.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a 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.

## 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 section 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**

### · PAC-I:

CAS: 7697-37-2	Nitric Acid	0.16 ppm
CAS: 7439-89-6	Iron Metal	3.2 mg/m <sup>3</sup>
CAS: 7439-95-4	Magnesium	18 mg/m <sup>3</sup>
CAS: 7439-98-7	Molybdenum Metal, 99.8%	30 mg/m <sup>3</sup>
CAS: 7440-02-0	Nickel Metal	4.5 mg/m <sup>3</sup>
CAS: 7440-09-7	potassium	2.3 mg/m <sup>3</sup>
CAS: 7440-23-5	sodium	13 mg/m <sup>3</sup>

(Contd. on page 4)

US

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 3)

CAS: 7440-42-8	boron	1.9 mg/m <sup>3</sup>
CAS: 7440-47-3	chromium	1.5 mg/m <sup>3</sup>
CAS: 7440-48-4	cobalt	0.18 mg/m <sup>3</sup>
CAS: 7440-50-8	copper	3 mg/m <sup>3</sup>
CAS: 7440-62-2	vanadium	3 mg/m <sup>3</sup>
CAS: 7440-66-6	Zinc Metal	6 mg/m <sup>3</sup>
CAS: 7723-14-0	red phosphorus	0.27 mg/m <sup>3</sup>
CAS: 7783-20-2	Ammonium Sulfate	13 mg/m <sup>3</sup>

**· PAC-2:**

CAS: 7697-37-2	Nitric Acid	24 ppm
CAS: 7439-89-6	Iron Metal	35 mg/m <sup>3</sup>
CAS: 7439-95-4	Magnesium	200 mg/m <sup>3</sup>
CAS: 7439-98-7	Molybdenum Metal, 99.8%	330 mg/m <sup>3</sup>
CAS: 7440-02-0	Nickel Metal	50 mg/m <sup>3</sup>
CAS: 7440-09-7	potassium	25 mg/m <sup>3</sup>
CAS: 7440-23-5	sodium	140 mg/m <sup>3</sup>
CAS: 7440-42-8	boron	21 mg/m <sup>3</sup>
CAS: 7440-47-3	chromium	17 mg/m <sup>3</sup>
CAS: 7440-48-4	cobalt	2 mg/m <sup>3</sup>
CAS: 7440-50-8	copper	33 mg/m <sup>3</sup>
CAS: 7440-62-2	vanadium	5.8 mg/m <sup>3</sup>
CAS: 7440-66-6	Zinc Metal	40 mg/m <sup>3</sup>
CAS: 7723-14-0	red phosphorus	3 mg/m <sup>3</sup>
CAS: 7783-20-2	Ammonium Sulfate	99 mg/m <sup>3</sup>

**· PAC-3:**

CAS: 7697-37-2	Nitric Acid	92 ppm
CAS: 7439-89-6	Iron Metal	150 mg/m <sup>3</sup>
CAS: 7439-95-4	Magnesium	1,200 mg/m <sup>3</sup>
CAS: 7439-98-7	Molybdenum Metal, 99.8%	2,000 mg/m <sup>3</sup>
CAS: 7440-02-0	Nickel Metal	99 mg/m <sup>3</sup>
CAS: 7440-09-7	potassium	150 mg/m <sup>3</sup>
CAS: 7440-23-5	sodium	870 mg/m <sup>3</sup>
CAS: 7440-42-8	boron	130 mg/m <sup>3</sup>
CAS: 7440-47-3	chromium	99 mg/m <sup>3</sup>
CAS: 7440-48-4	cobalt	20 mg/m <sup>3</sup>
CAS: 7440-50-8	copper	200 mg/m <sup>3</sup>
CAS: 7440-62-2	vanadium	35 mg/m <sup>3</sup>
CAS: 7440-66-6	Zinc Metal	240 mg/m <sup>3</sup>
CAS: 7723-14-0	red phosphorus	18 mg/m <sup>3</sup>
CAS: 7783-20-2	Ammonium Sulfate	590 mg/m <sup>3</sup>

US

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 4)

## 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 section 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**CAS: 7697-37-2 Nitric Acid**

PEL	Long-term value: 5 mg/m <sup>3</sup> , 2 ppm
REL	Short-term value: 10 mg/m <sup>3</sup> , 4 ppm
	Long-term value: 5 mg/m <sup>3</sup> , 2 ppm
TLV	Short-term value: (4) NIC-0.025 ppm
	Long-term value: (2) ppm
	NIC-A4

- **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.
- **Breathing equipment:**  
 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

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 5)

· **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

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **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 determined.

· **Ignition temperature:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

Water: Fully miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO3**

(Contd. of page 6)

- |                            |  |
|----------------------------|--|
| · <b>Viscosity:</b>        |  |
| <b>Dynamic:</b>            | Not determined.                            |
| <b>Kinematic:</b>          | Not determined.                            |
| · <b>Solvent content:</b>  |  |
| <b>Water:</b>              | 94.9 %                                     |
| <b>VOC content:</b>        | 0.00 %                                     |
|                            | 0.0 g/l / 0.00 lb/gal                      |
| <b>Solids content:</b>     | 0.1 %                                      |
| · <b>Other information</b> | 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:**

**ATE (Acute Toxicity Estimate)**

Inhalative	LC50/4h	60 mg/l
------------	---------	---------

- **Primary irritant effect:**
- **on the skin:** Strong 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  
 Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

CAS: 7440-02-0	Nickel Metal	2B
CAS: 7440-47-3	chromium	3
CAS: 7440-48-4	cobalt	2A

(Contd. on page 8)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 7)

· **NTP (National Toxicology Program)**

CAS: 7440-02-0 Nickel Metal

R

CAS: 7440-48-4 cobalt

R

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **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 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

· **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.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

· **UN-Number**

DOT, IMDG, IATA

UN3264

· **UN proper shipping name**

DOT

Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)

IMDG, IATA

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric Acid)

(Contd. on page 9)

US



# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 8)

· **Transport hazard class(es)**

· **DOT**



· **Class**

8 Corrosive substances

· **Label**

8

· **IMDG, IATA**



· **Class**

8 Corrosive substances

· **Label**

8

· **Packing group**

· **DOT, IMDG, IATA**

III

· **Environmental hazards:**

Not applicable.

· **Special precautions for user**

Warning: Corrosive substances

· **Hazard identification number (Kemler code):** 80

· **EMS Number:**

F-A,S-B

· **Segregation groups**

(SGG1a) Strong acids

· **Stowage Category**

B

· **Stowage Code**

SW2 Clear of living quarters.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **DOT**

· **Quantity limitations**

On passenger aircraft/rail: 1 L

On cargo aircraft only: 30 L

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
(NITRIC ACID), 8, III

\*

## 15 Regulatory information

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

No further relevant information available.

(Contd. on page 10)

US

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 9)

· **Sara**· **Section 355 (extremely hazardous substances):**

CAS: 7697-37-2	Nitric Acid
CAS: 7723-14-0	red phosphorus

· **Section 313 (Specific toxic chemical listings):**

CAS: 7697-37-2	Nitric Acid
CAS: 7440-02-0	Nickel Metal
CAS: 7440-47-3	chromium
CAS: 7440-48-4	cobalt
CAS: 7440-50-8	copper
CAS: 7440-62-2	vanadium
CAS: 7440-66-6	Zinc Metal
CAS: 7723-14-0	red phosphorus
CAS: 7783-20-2	Ammonium Sulfate

· **TSCA (Toxic Substances Control Act):**

Water	ACTIVE
Nitric Acid	ACTIVE
Iron Metal	ACTIVE
Magnesium	ACTIVE
Molybdenum Metal, 99.8%	ACTIVE
Nickel Metal	ACTIVE
potassium	ACTIVE
sodium	ACTIVE
boron	ACTIVE
chromium	ACTIVE
cobalt	ACTIVE
copper	ACTIVE
vanadium	ACTIVE
Zinc Metal	ACTIVE
Calcium Metal	ACTIVE
red phosphorus	ACTIVE
Ammonium Sulfate	ACTIVE

· **Hazardous Air Pollutants**

CAS: 7440-48-4	cobalt
CAS: 7723-14-0	red phosphorus

· **Proposition 65**· **Chemicals known to cause cancer:**

CAS: 7440-02-0	Nickel Metal
CAS: 7440-48-4	cobalt

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.
------------------------------------

(Contd. on page 11)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 10)

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

CAS: 7440-42-8	boron	I (oral)
CAS: 7440-47-3	chromium	D
CAS: 7440-50-8	copper	D
CAS: 7440-66-6	Zinc Metal	D, I, II
CAS: 7723-14-0	red phosphorus	D

· **TLV (Threshold Limit Value)**

CAS: 7439-98-7	Molybdenum Metal, 99.8%	A3
CAS: 7440-02-0	Nickel Metal	A5
CAS: 7440-47-3	chromium	A4
CAS: 7440-48-4	cobalt	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

CAS: 7440-02-0	Nickel Metal
----------------	--------------

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

· **Hazard pictograms**



GHS05

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

Nitric Acid

· **Hazard statements**

Causes severe skin burns and eye damage.

· **Precautionary statements**

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

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

(Contd. on page 12)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/13/2024

Reviewed on 06/13/2024

**Trade name: 15 Component Metals Standard**  
**100.0 ppm each in 5% HNO<sub>3</sub>**

(Contd. of page 11)

· **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:** Environment protection department.

· **Contact:**

*Date of Preparation / Last Revision:*

· **Date of preparation / last revision**

*Revision 1.2, 06/13/2024: Reviewed SDS for accuracy. MH/STN*

*06/13/2024 / 1.0*

· **Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*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*

*Skin Corrosion 1A: Skin corrosion/irritation – Category 1A*

*Eye Damage 1: Serious eye damage/eye irritation – Category 1*

· **\* Data compared to the previous version altered.**

US