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Version: 2

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SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. **Product identifier:**
CU CONTROL II

UFI: 5T24-40WQ-P003-QKJ2

1.2. **Relevant identified uses of the substance or mixture and uses advised against:**
Cu control. Industrial laser water treatment for system chillers for industrial use.

1.3. **Details of the supplier of the safety data sheet:**

Information about the distributor:
Richardson Electronics Benelux BV
Kruisweg 811, Building IV
Hoofddorp, 2132 NG
The Netherlands
Tel: (1)630-208-2683

1.3.1. Responsible person: Daniel Rafdahl
E-mail: danr@rell.com

1.4. **Emergency telephone number:**

United Kingdom: **National Poisons Information Service (NPIS)**
NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales) – dial 111
In Northern Ireland contact your local GP
Healthcare Professionals: UK NPIS 0344 892 0111

Chemtrec: +44 20 3807 3798

USA: **Chemtrec:** Regional: +44 20 3885 0382
USA Local: +1-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. **Classification of the substance or mixture:**

Classification according to Regulation (EC) No 1272/2008 (CLP):
Acute toxicity (oral), Hazard Category 4 – H302
Serious eye damage/eye irritation, Hazard Category 2 – H319
Reproductive toxicity, Hazard Category 2 – H361
Hazardous to the aquatic environment – Chronic Hazard, Category 2 – H411

Hazard statements:
H302 – Harmful if swallowed.
H319 – Causes serious eye irritation.
H361 – Suspected of damaging fertility or the unborn child.
H411 – Toxic to aquatic life with long lasting effects.

2.2. **Label elements:**

Components that define the hazards: Methyl-1*H*-benzotriazole; 1*H*-Benzotriazole

WARNING

Hazard statements:
H302 – Harmful if swallowed.
H319 – Causes serious eye irritation.
H361 – Suspected of damaging fertility or the unborn child.
H411 – Toxic to aquatic life with long lasting effects.

Precautionary statements:
P102 – Keep out of reach of children.
P202 – Do not handle until all safety precautions have been read and understood.
P273 – Avoid release to the environment.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P308 + P313 – IF exposed or concerned: Get medical advice/attention.
P301 + P312 + P330 – IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P305 + **P351** + **P338** – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 – Dispose of contents/container in accordance with local/national regulations.

2.3. **Other hazards:**
The product has no other known specific hazards for human or environment.
Results of PBT and vPvB assessment: This mixture does not contain any components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1 % or higher in accordance with Annex XIII of Regulation 1907/2006/EC.
Endocrine disrupting property: The mixture does not contain any components considered to have endocrine disrupting properties in accordance with Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. **Substances:**
Not applicable.

3.2. **Mixtures:**

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
					Pictogram, signal word code(s)	Hazard class and category code(s)	Hazard statement code(s)
Methyl-1*H*-benzotriazole* Index number: 613-351-00-5	29385-43-1	249-596-6	-	15 – 25	GHS07 GHS08 GHS09 Warning	Acute Tox. 4 Eye Irrit. 2 Repr. 2 Aquatic Chronic 2	H302 H319 H361 H411
1*H*-Benzotriazole* Index number: 613-350-00-X	95-14-7	202-394-1	-	15 – 25	GHS07 GHS09 Warning	Acute Tox. 4 Eye Irrit. 2 Aquatic Chronic 2	H302 H319 H411
Water	7732-18-5	231-791-2	-	50 - 70	-	not classified	-

*: Classification specified by the manufacturer that includes other classification in addition to the classification specified by Regulation (EC) No 1272/2008.

It does not contain any other substance considered to be hazardous to health or to the environment or its concentration does not reach the level specified in the relevant legislation and therefore it does not need to be included in the safety data sheet.

For the full text of hazard statements, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. **Description of first aid measures:**

General information: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible). IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

INGESTION:

Measures:

- Rinse mouth.
- Do NOT induce vomiting.
- Immediately call a poison centre or doctor.
- If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration.
- Never give anything by mouth to an unconscious person.

INHALATION:

Measures:

- Remove person to fresh air and keep comfortable for breathing.
- Call a poison centre or doctor if you feel unwell.

SKIN CONTACT:

Measures:

- Take off immediately all contaminated clothing.
- Rinse skin with water/shower for at least 15 minutes.
- Call a poison centre or doctor if irritation develops or persists.
- Wash contaminated clothing before reuse.

EYE CONTACT:

Measures:

- Rinse cautiously with water for at least 15 minutes.
- Remove contact lenses, if present and easy to do.
- Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

4.2. **Most important symptoms and effects, both acute and delayed:**

Harmful if swallowed.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.
Inhalation: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing.
Skin: Causes skin irritation. Signs/symptoms may include localized redness, swelling, itching.
Eyes: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing.
Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

4.3. **Indication of any immediate medical attention and special treatment needed:**

No special treatment needed; treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. **Extinguishing media:**

5.1.1. **Suitable extinguishing media:**

CO_2, foam, dry powder; for larger fires, water spray should be used.

5.1.2. **Unsuitable extinguishing media:**

No unsuitable extinguishing media known other than product can splatter above 100°C.

5.2. **Special hazards arising from the substance or mixture:**

Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

Combustion products: Formation of carbon monoxide, carbon dioxide, and other toxic gases in the event of fire, or during thermal decomposition.

5.3. **Advice for firefighters:**

Avoid any skin contact. Effects of contact or inhalation may be delayed.

Wear positive pressure self-contained breathing apparatus (SCBA).

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the product is possible.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Collect contaminated fire extinguishing water separately. This must not be discharged in to drains.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. **Personal precautions, protective equipment and emergency procedures:**

6.1.1. **For non-emergency personnel:**

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. **For emergency responders:**

Wear respiratory protection if necessary.

Avoid breathing gas, mist, vapours, or spray.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

For personal protection see section 8.

6.2. **Environmental precautions:**

Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. **Methods and material for containment and cleaning up:**

Stop leak if you can do it without risk.

Collect the spilled product with absorbent then place into a suitable, closed, properly labelled chemical waste container for removal/disposal.

Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container.

Wash spill area with water. Avoid dust formation.

6.4. **Reference to other sections:**

For further and detailed information see Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. **Precautions for safe handling:**

Observe conventional hygiene precautions.

Obtain special instructions before use.

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

Do not swallow.

Avoid breathing mist, vapours, or spray.

Wash thoroughly after handling.

Do not eat, drink, or smoke when using this product.

Avoid release to the environment.

Collect spillage.

Technical measures:

Use in a well-ventilated area.

For information on personal protective equipment, see Section 8.

Precautions against fire and explosion:
No special measures required.

7.2. **Conditions for safe storage, including any incompatibilities:**
Technical measures and storage condition:
Keep in the original, closed and appropriately labelled container/packaging.
Store away from incompatible materials.
Keep out of reach of children.
Incompatible materials: See Section 10.5.
Packaging material: No special prescriptions.

7.3. **Specific end use(s):**
Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters:**

Occupational exposure limit values (EH40/2005 Workplace exposure limits):
The components of the mixture are not regulated with exposure limit value.

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data

PNEC values		
Compartment	Value	Note(s)
Freshwater	no data	no notes
Marine water	no data	no notes
Freshwater sediment	no data	no notes
Marine water sediment	no data	no notes
Sewage Treatment Plant (STP)	no data	no notes
Intermittent release	no data	no notes
Secondary poisoning	no data	no notes
Soil	no data	no notes

8.2. **Exposure controls:**
In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1. **Appropriate engineering controls:**
In pursuance of work is proper foresight needed to avoid leaking onto clothes and floors and to avoid contact with eyes and skin.

8.2.2. **Individual protection measures, such as personal protective equipment:**

1. **Eye/face protection:** Use appropriate protective glasses (EN ISO 16321-1:2022; EN 166).
2. **Skin protection:**
   a. **Hand protection:** Use appropriate protective gloves (EN 374).
   Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
   b. **Other:** Wear fire/flame resistant and impervious clothing.
3. **Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
4. **Thermal hazards:** No thermal hazards known.

8.2.3. Environmental exposure controls:
Do not let product enter drains.
The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

	Parameter	Value / Test method / Remarks
1.	Physical state	liquid
2.	Colour	clear to light yellow
3.	Odour, odour threshold	characteristic
4.	Melting point/freezing point	ca 0 °C
5.	Boiling point or initial boiling point and boiling range	ca 100 °C
6.	Flammability	non-flammable
7.	Lower and upper explosion limit	no data*
8.	Flash point	no data*
9.	Auto-ignition temperature	no data*
10.	Decomposition temperature	no data*
11.	pH	<10.00
12.	Kinematic viscosity	no data*
13.	Solubility in water in other solvents	completely soluble no data*
14.	Partition coefficient n-octanol/water (log value)	no data*
15.	Vapour pressure	no data*
16.	Density and/or relative density	1.10
17.	Relative vapour density	2.1
18.	Particle characteristics	no data*

9.2. Other information:
9.2.1. Information with regard to physical hazard classes:
No further data available or not applicable for the product.
9.2.2. Other safety characteristics:
Evaporation rate: 1.00

*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet, or the property is not applicable for the product.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:
Contact with incompatible materials. Sources of ignition. Exposure to heat.
10.2. Chemical stability:
Stable under normal conditions.
10.3. Possibility of hazardous reactions:
No hazardous reactions known.
10.4. Conditions to avoid:
Heat, flames, and sparks. Incompatible products. Keep away from open flames, hot surfaces, and sources of ignition.
10.5. Incompatible materials:
Avoid contact with strong acids, strong alkalis, oxidizers, or any other type of reactive material.
10.6. Hazardous decomposition products:
There are no known hazardous decomposition products for this product unless the product is burned in which case undetermined evolution of toxic gases may occur. Does not occur until flash point reached. Exothermic reaction above 160°C.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. **Information on hazard classes as defined in Regulation (EC) No 1272/2008:**

Acute toxicity: Harmful if swallowed.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Suspected of damaging fertility or the unborn child.
STOT-single exposure: Based on available data, the classification criteria are not met.
STOT-repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

11.1.1. **Summaries of the information derived from the test conducted:**

No data available.

11.1.2. **Relevant toxicological properties:**

Information about the product.
Respiratory or skin sensitisation:
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity:
The product is not considered a mutagen. The product has not been tested.
The statement is based on evaluation of data for similar materials or product components.
Carcinogenicity:
The product is not considered a carcinogen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.
Reproductive toxicity:
Suspected of damaging fertility or the unborn child.
The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Information about the components:
Methyl-1*H*-benzotriazole (CAS: 29385-43-1):
Acute toxicity:
LD50 (oral, rat, female): 1060 mg/kg
LD50 (dermal, rabbit): >5000 mg/kg
LC50 (inhalation, rat): 1.75 mg/l
Reproductive toxicity:
This substance is suspected of damaging the unborn child.
1*H*-Benzotriazole (CAS: 95-14-7):
Acute toxicity:
LD50 (oral, rat, female): 560 mg/kg
LD50 (oral, rat, male): 1080 mg/kg
LD50 (dermal, rat): >1000 mg/kg

11.1.3. **Information on likely routes of exposure:**

Ingestion, inhalation, skin contact, eye contact.

11.1.4. **Symptoms related to the physical, chemical and toxicological characteristics:**

Inhalation: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing.
Skin: Causes skin irritation. Signs/symptoms may include localized redness, swelling, itching.
Eyes: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing.
Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

11.1.5. **Delayed and immediate effects as well as chronic effects from short and long-term exposure:**

Harmful if swallowed.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.

11.1.6. **Interactive effects:**

No data available.

11.1.7. **Absence of specific data:**

No information.

11.2. **Information on other hazards:**

Endocrine disrupting properties:
Endocrine disrupting property: The mixture does not contain any components considered to have endocrine disrupting properties in accordance with Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

Other information:
1*H*-Benzotriazole (CAS: 95-14-7): Under assessment as Endocrine Disrupting

SECTION 12: ECOLOGICAL INFORMATION

12.1. **Toxicity:**
Toxic to aquatic life with long lasting effects.
Information about the components:
Methyl-1*H*-benzotriazole (CAS: 29385-43-1):
LC50 (Oncorhynchus mykiss): 21,4 mg/l/96 hours
1*H*-Benzotriazole (CAS: 95-14-7):
EC50 (Daphnia magna): 35.4 mg/l/48 hours
EC50 (Desmodesmus subspicatus): 62 mg/l/72 hours
LC50 (Brachydanio rerio): 10 mg/l/96 hours

12.2. **Persistence and degradability:**
No data available.

12.3. **Bioaccumulative potential:**
No data available.

12.4. **Mobility in soil:**
No data available.

12.5. **Results of PBT and vPvB assessment:**
This mixture does not contain any components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1 % or higher in accordance with Annex XIII of Regulation 1907/2006/EC.
Other information:
Methyl-1*H*-benzotriazole (CAS: 29385-43-1): Under assessment as Persistent, Bioaccumulative and Toxic
1*H*-Benzotriazole (CAS: 95-14-7): Under assessment as Persistent, Bioaccumulative and Toxic

12.6. **Endocrine disrupting properties:**
Endocrine disrupting property: The mixture does not contain any components considered to have endocrine disrupting properties in accordance with Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.
Other information:
1*H*-Benzotriazole (CAS: 95-14-7): Under assessment as Endocrine Disrupting

12.7. **Other adverse effects:**
Water hazard class (WGK, German regulation, self-classification): 2 – hazardous for water.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. **Waste treatment methods:**
Disposal according to the local regulations.

13.1.1. **Information regarding the disposal of the product:**
Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations. Use product for its intended purpose or recycle if possible. This product, if it must be discarded, may meet the criteria of a hazardous waste as defined by international, country, or local laws and regulations.
Chemical waste generators must determine whether a discarded chemical is classified as hazardous waste.
List of Waste Code:
16 01 14* antifreeze fluids containing hazardous substances
*: hazardous waste.

13.1.2. **Information regarding the disposal of the packaging:**
Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

13.1.3. **Physical/chemical properties that may affect waste treatment options shall be specified:**
No data available.

13.1.4. **Sewage disposal:**
No data available.

13.1.5. **Special precautions for any recommended waste treatment:**
No data available.

SECTION 14: TRANSPORT INFORMATION

ADR/RID; ADN; IMDG; IATA:

14.1. **UN number or ID number:**
UN 3082

14.2. **UN proper shipping name:**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. **Transport hazard class(es):**
9

14.4. **Packing group:**
III

14.5. **Environmental hazards:**
Environmentally hazardous.

14.6. **Special precautions for user:**
No relevant information available.

14.7. **Maritime transport in bulk according to IMO instruments:**
Not applicable.

SECTION 15: REGULATORY INFORMATION

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

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The mixture does not contain ≥ 0.1 % of substances on the candidate list for authorisation of substances of very high concern (SVHC) under Regulation (EC) No 1907/2006 (REACH).

15.2. **Chemical safety assessment:** Has not been carried out.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet:
The safety data sheet has been revised according to Regulation (EU) 2020/878 (Section 1-16).
The hazard classification of the mixture was modified compared to the previous version.
The composition of the mixture was not modified compared to the previous version.

This safety data sheet supersedes all previous versions according to Annex II of Regulation (EC) No 1907/2006.

Literature references / data sources:
Previous version of the safety data sheet (November 2022).

Methods used for the classification according to Regulation (EC) No 1272/2008:

Classification	Method
Acute toxicity (oral), Hazard Category 4 – H302	Based on calculation method
Serious eye damage/eye irritation, Hazard Category 2 – H319	Based on calculation method
Reproductive toxicity, Hazard Category 2 – H361	Based on calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 2 – H411	Based on calculation method

Relevant hazard statements (code and full text) of Sections 2 and 3:
H302 – Harmful if swallowed.
H319 – Causes serious eye irritation.
H361 – Suspected of damaging fertility or the unborn child <*state specific effect if known*> <*state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard*>.
H411 – Toxic to aquatic life with long lasting effects.

Training advice: No data available.

Full text of the abbreviations in the safety data sheet:
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
AOX: Adsorbable organic halides.
BCF: Bioconcentration factor.
BOD: Biological Oxygen Demand.
CAS number: Chemical Abstract Service number.
CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
CMR effects: Carcinogenic, mutagenic, reprotoxic effects.
COD: Chemical Oxygen Demand.
CSA: Chemical Safety Assessment.
CSR: Chemical Safety Report.
DNEL: Derived-No-Effect-Level.
ECHA: European Chemical Agency.
EC: European Community.
EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).
EEC: European Economic Community.
EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
EN: European Norm.
EU: European Union.
EuPCS: European Product Categorisation System.
EWC: European Waste Catalogue (replaced by LoW – see below).
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IATA: International Air Transport Association.
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
IMO: International Maritime Organization.
IMSBC: International Maritime Solid Bulk Cargoes.
IUCLID: International Uniform Chemical Information Database.
IUPAC: International Union of Pure and Applied Chemistry.
Kow: n-Octanol - Water Partition Coefficient.
LC_{50}: Lethal concentration resulting in 50 % mortality.
LD_{50}: Lethal dose resulting in 50 % mortality (median lethal dose).
LoW: List of Waste.
LOEC: Lowest Observed Effect Concentration.
LOEL: Lowest Observed Effect Level.
NOEC: No Observed Effect Concentration.
NOEL: No Observed Effect Level.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
OECD: Organization for Economic Cooperation and Development.
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic.
PNEC: Predicted No Effect Concentration.
QSAR: Quantitative Structure Activity Relationship.
REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.
SCBA: Self Contained Breathing Apparatus.
SDS: Safety Data Sheet.
STOT: Specific Target Organ Toxicity.
SVHC: Substances of Very High Concern.

UN: United Nations.
UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products or of Biological Materials.
VOC: Volatile Organic Compound.
vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.
The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.
The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.
Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.
It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

Safety data sheet was prepared by:
MSDS-Europe
International branch of ToxInfo Kft.

Professional help regarding the explanation of the safety data sheet:
+36 70 335 8480; info@msds-europe.com
www.msds-europe.com