

# Material Safety Data Sheet

PCR LDPE / LLDPE Regranulate Natural Color

Product Code: 081101

Drawn up in accordance with Commission Regulation (EU) No 2020/878 of June 18, 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

| SECTION 1: IDENTIFICATION OF THE SUBSTANCE                                    |  |
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| Product identifier  | Homogeneous regranulate colorless  |
| Relevant identified uses of the substance or mixture and uses advised against | <p>Identified uses: Regranulate used for film blowing and production of other LDPE and LLDPE plastic products.</p> <p>Uses advised against: Other than those indicated above</p> |

| SECTION 2: RISK IDENTIFICATION  |   |
|---|---|
| <p>Classification according to Regulation (EC) No 1272/2008:</p> <p>Hazards due to physicochemical properties:</p> <p>Health hazards:</p> <p>Environmental hazards:</p> | <p>The mixture is not classified as hazardous due to physicochemical properties.</p> <p>The mixture is not classified as hazardous to health.</p> <p>The mixture is not hazardous to the environment. Under normal conditions of use, no effects on the environment are known or anticipated.</p> |
| Label elements  |   |
| Pictogram   | Not applicable  |
| Signal word   | No warning slogan applies   |
| Hazard statement(s) (H)   | Not applicable  |
| Precautionary statement(s) (P)  | Not applicable  |

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| Other hazards | <p>In molten state [hot product] in contact with skin and eyes may cause severe burns. Ingestion of a small amount should not pose a hazard. Substances contained in the product do not meet the PBT or vPvB criteria according to Annex XIII of the Regulation PBT substances (persistent, bioaccumulative and toxic substances) vPvB substances (substances with very high persistence and very high bioaccumulation potential) REACH. The product does not contain substances on the list established in accordance with Article 59 (1) for endocrine disrupting properties or substances identified as having endocrine disrupting properties in accordance with the criteria set forth in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 in concentrations equal to or greater than 0.1% by weight.</p> |
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## SECTION 3: COMPOSITION / INGREDIENT INFORMATION

| Substances   |                               | Not applicable   |                              |  |                             |
|--|-------------------------------|--|------------------------------|--|-----------------------------|
| Mixtures   |                               | Classification according to Regulation (EC) No 1272/2008 |                              |  |                             |
| Identification numbers   | Chemical name                 | Mass fraction in %                                       | Pictogram, signal word codes | Danger class and category codes              | Codes for hazard statements |
| CAS: 9002-33-7 EC (EINECS): Polymer<br>Index number:<br>REACH number: [1]. | Polythene                     | About 50%  | -                            | the substance is not classified as hazardous | -                           |
| CAS: 25087-34-7 EC (EINECS): Polymer<br>Index number:<br>REACH number: [1] | 1-butene, polymer with ethene | About 50%  | -                            | the substance is not classified as hazardous | -                           |

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[1] Applicable registration number: Substance exempted from registration under Article 2(9) of REACH (polymer). Monomers of [ethylene/ethylene] substance exempted from registration under Article 2(7d) of REACH (recovered substance). Information required under Articles 31 or 32 of REACH relating to a substance that has been registered in accordance with Title II [monomer] is available to the recoverer.

The full wording of the H-phrases is given in section 16 of the Technical Data Sheet.

| SECTION 4: FIRST AID MEASURES                               |   |
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| First aid   | Seek medical advice if symptoms increase.   |
| In case of skin contact                                     | In case of contact with liquid product, cool the burnt area immediately with cold water. Contact a doctor if worrying symptoms occur.   |
| In contact with eyes  | Rinse with plenty of cool water, preferably running water, for at least 15 minutes. Remove contact lenses. Avoid strong jets of water due to the risk of mechanical damage to the cornea. If irritation persists, consult an ophthalmologist. |
| In case of ingestion  | If a large amount is swallowed, do not induce vomiting. Rinse mouth with plenty of water. Never put anything into the mouth of an unconscious person. Consult a doctor.   |
| Inhalation  | In case of exposure to molten product vapours, provide fresh air and keep warm and at rest. Consult a doctor if symptoms persist.   |
| Most important symptoms and effects, both acute and delayed |   |
| On contact with eyes  | During treatment: redness, tearing, burning, mechanical irritation or irritation due to exposure to treated product vapours. In molten state [hot product] in contact with eyes may cause severe burns.                                       |
| When swallowed  | Ingestion of a small amount should not pose a hazard.   |

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| In contact with skin   | Mechanical irritation. Hot product may cause burns.   |
| After inhalation   | During processing: Mechanical irritation, coughing, respiratory irritation due to exposure to vapours of the processed product. |
| Indication of any immediate medical attention and special treatment needed | The decision on treatment is made by the doctor after a thorough assessment of the injured person's condition.                  |

## SECTION 5: FIRE FIGHTING MEASURES

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| Extinguishing agents                                     | Product melts when exposed to temperature Suitable extinguishing media: Extinguish a small fire with a snow extinguisher (CO <sub>2</sub> ) or powder extinguisher (ABC or BC), extinguish a large fire with foam or, as a last resort, with dispersed water currents. Unsuitable extinguishing media: Caution: do not apply compact jets of water to the surface of burning polyethylene. This will cause scattering of the burning substance and spread of fire outbreaks. Cool containers exposed to fire or high temperatures with water and remove from the affected area if possible. |
| Special hazards associated with the substance or mixture | During combustion, mainly carbon dioxide and water vapor are emitted. The product melts under the influence of temperature. Combustion is accompanied by smoke and combustion products of technological additives. The molded parts or hard regranulate burn slowly with low smoke concentration, burning droplets and with the release of carbon monoxide and organic substances.  |
| Information for firefighters                             | Use personal protective equipment appropriate to the fire. Follow normal firefighting procedures. Wear appropriate chemical resistant protective clothing and self-contained breathing apparatus in the   |

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|  | fire area. In case of fire, cool endangered containers with water. Do not allow leakage into surface or ground water. |
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## SECTION 6: HANDLING IN CASE OF UNINTENTIONAL RELEASE INTO THE ENVIRONMENT

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| Personal precautions, protective equipment and emergency procedures                            | For non-emergency personnel: Restrict unauthorized access to the accident area until appropriate cleanup operations are completed. For large spills, isolate the affected area. Avoid direct contact with the releasing product. Avoid inhalation of vapors. Use personal protective equipment. Avoid contact with eyes and skin. Ensure adequate ventilation. Beware of spilled granules, may cause slipping and falling. For emergency responders: Ensure that only trained personnel carry out the removal of the accident and its consequences. Use personal protective equipment. |
| Precautions for environmental protection   | In the event of a significant spill of the product, take appropriate measures to avoid spreading into the environment. Notify the responsible emergency services.  |
| Methods and materials to prevent the spread of contamination and for disposal of contamination | Sweep up the spilled substance and place in suitable containers (suitable bags) or clean containers. Treat the collected material as waste.  |
| References to other  | Personal protective equipment in Section 8. Dispose of as recommended in Section 13.   |

## SECTION 7: HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES AND THEIR STORAGE

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| Precautions for safe handling | Ensure adequate ventilation. Ensure that there is no release into the environment when handling the product. Prevent the |
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|   | product from entering the sewage system, surface and ground water and soil. Work in accordance with safety and hygiene rules. Use personal protective equipment. Do not eat, drink or smoke during use. Wash hands during breaks and after finishing work.                                   |
| Conditions for safe storage, including information on any incompatibilities | Store in original, properly labeled containers, in dry areas. Do not expose the material to prolonged storage at temperatures above 80°C and/or UV rays. Do not store or use with incompatible materials (see subsections 10.3-10.5). Do not store together with foodstuffs and animal feed. |
| Specific end use(s)   | See SDS Section 1.2 No information on other uses   |

## SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENT

|                    |   |
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| Control parameters | <p>PL: dusts not classified for toxicity</p> <p>NDS - inhalable fraction 10mg/m<sup>3</sup></p> <p>Legal basis: Ordinance of the Minister of Family, Labour and Social Policy of 12 June 2018 on the maximum permissible concentrations and intensities of harmful factors for health in the working environment Journal of Laws 2018.1286 of 2018.07.03 as amended[ Journal of Laws 2020.61, dated 17.01.2020]. Ordinance of the Minister of Development, Labour and Technology of 18 February 2021 amending the Ordinance on the maximum permissible concentrations and intensities of factors harmful to health in the working environment [Journal of Laws 2021, item 325].</p> <p>Regulation of the Minister of Health of 2 February 2011 on tests and measurements of harmful factors for health at work (Journal</p> |
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|  | <p>of Laws No. 33, item 166, 2011; amended by Journal of Laws 2022.2662).</p> <p>DNEL/PNEC: No data available</p>  |
| <p>Recommended monitoring procedures</p> | <p>Procedures for monitoring concentrations of hazardous components in air and procedures for control of air cleanliness in the workplace should be applied - if available and justified at the workplace - in accordance with relevant Polish or European Standards taking into account the conditions prevailing at the place of exposure and appropriate measurement methodology adapted to the working conditions. The mode, type and frequency of tests and measurements should meet the requirements contained in the Ordinance of the Ministry of Health of 2 February 2011. (Journal of Laws 2011 No. 33, item 166).</p>   |
| <p>Exposure controls</p>                 | <p>Relevant technical control measures</p> <p>Necessary local exhaust ventilation and general ventilation of the room during production process</p> <p>Individual protection measures, such as personal protective equipment</p> <p>When the concentration of the substance posing a risk is established and known, personal protective equipment should be selected taking into account the concentration of the substance present in the work place, the length of exposure, the activities carried out by the worker and the recommendations given by the manufacturer of the personal protective equipment. In an emergency situation or when the concentration of the substance in the workplace is not known, use personal protective equipment isolating the body (gas-tight suit combined with isolating respiratory protective equipment). Industrial hygiene: General industrial hygiene</p> |

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|                                   | <p>regulations apply. Remove contaminated clothing at the end of work. Wash hands and face before breaks. Do not eat, drink or smoke while working. Keep suitable fire extinguishing agents in close proximity to the work area if heat treatment or high temperature processes are required. Hand and body protection Use protective gloves against mechanical and thermal hazards and work boots and clothing. Use protective aprons and special footwear when handling the product thermally. The resistance of the glove materials must be checked before use. The permeation time of the glove must be obtained from the glove manufacturer and such time must be observed. It is recommended to change gloves regularly and to replace them immediately if there are any signs of wear, damage (tears, perforations) or changes in appearance (colour, elasticity, shape) Eye protection Safety goggles recommended if there is a danger of eye contamination.. Respiratory protection Not required if properly ventilated. In case of working in confined spaces and risk of dust formation, wear a mask with dust filter (type P). Ventilation should be installed wherever melting of the material, grinding or processing of the product takes place, any processes involving the generation of high temperatures (e.g. extrusion)</p> |
| Control of environmental exposure | Prevent entry into municipal water and sewer systems and watercourses. Any emissions from ventilation systems and process equipment should be checked to determine compliance with the requirements of environmental legislation.  |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



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| Physical state                             | Solids Regranulate                               |
| Colour                                     | Transparent                                      |
| Odour                                      | Characteristic of the product                    |
| Melting/freezing point                     | 100-130 °C                                       |
| Boiling point and boiling range:           | No data available                                |
| Flammability of materials                  | Product burns slowly but does not ignite easily  |
| Lower and upper explosion limit            | No data available                                |
| Flash point                                | No data available                                |
| Auto-ignition temperature [gases, liquids] | >300 °C  |
| Decomposition temperature                  | No data available                                |
| pH   | No data available                                |
| Kinematic viscosity [mm <sup>2</sup> /s]   | Not applicable [solid]                           |
| Solubility                                 | Insoluble in water, soluble in xylene at ca.70°C |
| Partition coefficient: n-octanol/water     | No data available                                |
| Vapour pressure                            | No data available                                |
| Relative density                           | 0.918 g/cm <sup>3</sup> [PN-92/C-89035]          |
| Relative vapour density                    | No data available                                |
| Particle characteristics [solids]          | granulate  |
| Information on physical hazard classes     | No data available                                |
| Other safety properties                    | No data available                                |

## SECTION 10: STABILITY and RESPONSIVENESS

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| Reactivity | The product is chemically reactive towards all liquids except hydrofluoric acid. |
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| Chemical stability                 | The product is stable under normal conditions of use and storage.        |
| Possibility of hazardous reactions | No dangerous reactions known.  |
| Conditions to avoid                | Avoid direct sunlight.   |
| Incompatible materials             | Strong oxidisers   |
| Hazardous decomposition products   | See section 5 of the safety data sheet for hazardous combustion products |

| SECTION 11: TOXICOLOGICAL INFORMATION                                    |   |
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| Information on hazard classes as defined in Regulation (EC) No 1272/2008 |   |
| Supplementary information  | The product is not classified as hazardous to health. See section 2 Hazard identification. Inhalation of its dust may cause respiratory irritation. In its molten state in contact with skin and eyes it can cause severe burns. If processed at high temperatures, its vapours may irritate the respiratory organs and eyes. Ingestion of a small amount should not pose a risk. |
| Acute toxicity   | Based on available data, the classification criteria are not met  |
| Skin corrosion/irritation  | Based on available data, the classification criteria are not met In molten state in contact with skin may cause severe burns  |
| Serious eye damage/irritation  | Based on available data, the classification criteria are not met. When molten in contact with the eyes, it may cause serious damage.  |
| Respiratory or skin sensitisation  | Based on available data, the classification criteria are not met  |
| Carcinogenic effect  | Based on available data, the classification criteria are not met  |
| Germ cell mutagenicity   | Based on available data, the classification criteria are not met  |

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| Reproductive toxicity                              | Based on available data, the classification criteria are not met   |
| Toxic effects on target organs - single exposure   | Based on available data, the classification criteria are not met   |
| Toxic effects on target organs - repeated exposure | Based on available data, the classification criteria are not met   |
| Aspiration hazard                                  | <p>Based on available data, the classification criteria are not met</p> <p>Information on likely routes of exposure</p> <p>In contact with eyes: During processing: redness, tearing, burning, mechanical irritation or irritation due to exposure to vapours of the processed product. In molten state [hot product] in contact with eyes may cause severe burns. When swallowed: Ingestion of a small amount should not pose a hazard. In contact with skin: Mechanical irritation. Hot product may cause burns. After inhalation: During processing: Mechanical irritation, coughing, respiratory irritation due to exposure to vapours of the processed product.</p> |
| Information on other hazards                       | <p>Endocrine disrupting properties:</p> <p>The components of the mixture have no endocrine effects according to the assessment criteria of Regulations: (EC) No 1907/2006, (EU) 2017/2100, (EU) 2018/605</p> <p>Other information: Not known</p>   |

## SECTION 12: ENVIRONMENTAL INFORMATION

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| <p>Toxicity</p> <p>Acute toxicity of the mixture</p> | <p>The mixture is not hazardous to the environment. Under normal conditions of use, no environmental effects are known or anticipated. To minimise long-term global pollution, consider:</p> |
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|                                    | <ul style="list-style-type: none"> <li>• Reducing the use of disposable products and packaging</li> <li>• Participate in recycling activities</li> <li>• Do not allow product to enter water, sewage or soil</li> </ul>  |
| Persistence and degradability      | The product decomposes slowly when exposed to UV light.  |
| Bioaccumulative potential          | The mixture is not liable to bioaccumulation.  |
| Mobility in soil                   | The product is not soluble in water therefore its mobility in soil is low. The mobility of the substance depends on its hydrophilic and hydrophobic properties and abiotic and biotic conditions of the soil, including its structure, climatic conditions, season of the year (in Poland, temperate variable climate) and soil organisms, mainly (bacteria, fungi, algae, invertebrates). |
| Results of PBT and vPvB assessment | Does not meet PBT and vPvB criteria  |
| Endocrine disrupting properties    | The ingredients of the product are not included in the list established in accordance with Article 59(1) as having endocrine disrupting properties nor is the ingredient with endocrine disrupting properties according to the criteria set out in Regulation 2017/2100/EU or Regulation 2018/605/EU in concentrations equal to or greater than 0.1%                                       |
| Other adverse effects              | The possibility of other adverse effects of the individual components of the mixture on the environment (e.g. endocrine disrupting capacity, effect on increasing global warming) should be considered).   |

## SECTION 13: WASTE TREATMENT

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| Waste disposal methods | Advice on the product: dispose of in accordance with the regulations in force. Do not dispose of with municipal waste. Store |
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|  | <p>residue in original containers. Recycling recommended if possible.</p> <p>Recommendations for used packaging: Recovery/recycling/disposal of packaging waste should be carried out in accordance with current legislation. Only completely emptied packaging is suitable for recycling.</p> <p>Determine the waste code at the place of manufacture.</p> <p>Legal basis: EU legal acts: Directives of the European Parliament and of the Council: 2008/98/EC as amended, 94/62/EC as amended.</p> <p>National legal acts: on waste Journal of Laws 2013, item 21 with subsequent amendments., On the management of packaging and packaging waste Journal of Laws 2013, item 888 as amended.</p> |
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## SECTION 14: TRANSPORT INFORMATION

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| UN number or ID number                             | The product is not subject to the regulations on the carriage of dangerous goods contained in ADR (road transport), RID (rail transport), IMG (sea transport), ICAO/IATA (air transport) |
| UN proper shipping name                            | Not applicable   |
| Transport hazard class(es)                         | Not applicable   |
| Packing group                                      | Not applicable   |
| Environmental hazards                              | The product does not pose a risk to the environment according to the criteria of the UN Model Regulations.   |
| Special precautions for user                       | No special precautions   |
| Sea transport in bulk according to IMO instruments | Not applicable   |

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## SECTION 15: INFORMATION CONCERNING LEGAL REGULATIONS

Safety, health and environmental regulations specific to the substance or mixture Other Regulations

1. 1907/2006/WE Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Establishing a European Chemicals Agency, Amending Directive 1999/45/EC and Repealing Council Regulation (EEC) No 793/93 and No 1488/94, as well as Council Directive 76/769/EEC and Commission Directive 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
2. 1272/2008/WE Regulation of the European Parliament and of the Council of December 16, 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006.
3. Ordinance of the Minister of Health of April 20, 2012 on the labeling of packages of hazardous substances and hazardous mixtures and some mixtures (Dz.U. 2012 no. 0 item 445). Consolidated text Journal of Laws 2015 item 450.
4. Ordinance of the Minister of the Family, Labor and Social Policy dated June 12, 2018 on the maximum permissible concentrations and intensities of harmful factors for health in the work environment Dz.U.2018.1286 dated 2018.07.03
5. Law of November 24, 2017 on amendments to the Law on Waste and certain other laws Journal of Laws 2017 item 2422
6. Act of October 12, 2017 on amendments to the Law on Packaging and Packaging Waste Management and certain other laws Journal of Laws. 2017 item 2056

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|                            | 7. Law on transportation of dangerous goods dated August 19, 2011 (Journal of Laws 227; item 1367) Consolidated text Journal of Laws 2020 item 154,875 |
| Chemical safety assessment | The supplier has not performed a chemical safety assessment. No safety report is required for the mixture.   |

## SECTION 16: OTHER INFORMATION

Other sources of data:

IUCLID Data Bank (European Commission – European Chemicals Bureau).

ESIS – European Chemical Substances Information System (European Chemicals Bureau).

National regulations, other regulations, limitations and prohibitive regulations :

The information provided in this Material Safety Data Sheet has been based upon the current level of information available, for the purpose of specifying the requirements regarding environment, health and safety in conjunction with the product. They are not to be interpreted as a warranty for specific product characteristics. SINOX takes no responsibility for inappropriate use, processing and handling by purchasers and users of the product. The data provided here is applicable only to the Product sold by SINOX and not to products sold by others. It relates only to the Product and does not relate to its use in combination with any other product or material or in any process. Local laws and regulations and conditions of use and suitability of the product for particular uses are beyond the control of SINOX; all risks of use, storage, handling, transportation and disposal of the Product are therefore assumed by the user and SINOX expressly disclaims all warranties of every kind and nature, including warranties of merchantability

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and fitness for a particular purpose in respect to the use or suitability of the Product.

SINOX shall not be responsible for any damage or injury resulting from abnormal use of the Product, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the Product. Appropriate warnings and safe handling procedures should be provided to all handlers and users.

Classification and procedures used to classify the mixture according to the regulation (EC) 1272/2008 [CLP]

The product is not classified as dangerous

H-phrases (indicating the type of hazard) used in section 2 and 3 of the safety data sheet

No phrases

## Explanation of acronyms and abbreviations

|      |   |
|------|---|
| CEN  | European Committee for Standardisation  |
| C&L  | Classification and marking  |
| CLP  | Regulation on classification, labeling and packaging; Regulation (EC) No. 1272/2008 |
| CAS  | Numer Chemical Abstract Service   |
| COM  | The European Commission   |
| CMR  | Carcinogenic, mutagenic or toxic to reproduction agent                              |
| CSA  | Chemical safety evaluation  |
| CSR  | Chemical security report  |
| DMEL | Derivative level resulting in minimal changes                                       |
| DNEL | Derivative level of unchanged   |



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| DPD    | Dangerous Preparations Directive<br>1999/45/EEC                           |
| DSD    | Directive on hazardous substances<br>67/548/EEC                           |
| EC     | The European Commission   |
| EC50   | The average effective concentration of                                    |
| ECB    | Office of Chemicals   |
| ECHA   | ECHA European Chemicals Agency  |
| EC     | EINECS and ELINCS number (see also<br>EINECS and ELINCS)                  |
| EINECS | European list of existing substances of<br>commercial interest            |
| ELINCS | European list of notified chemical<br>substances                          |
| EN     | European standard   |
| EU     | European Union  |
| GHS    | Globally Harmonized System of<br>Classification and Labeling of Chemicals |
| IC50   | Concentration causing 50 percent inhibition<br>of a given parameter       |
| IUCLID | International Unified Database of Chemicals                               |
| IUPAC  | International Union of Pure and Applied<br>Chemistry                      |
| LC50   | Average lethal concentrations   |
| LD50   | Average lethal dose   |
| MSDS   | Material Safety Data Sheet  |
| PBT    | Persistent, bioaccumulative and toxic<br>substance                        |
| PEC    | Predicted environmental concentrations                                    |

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| PNEC(s)  | Predicted no-effect concentration in the environment  |
| PPE      | Personal protective equipment   |
| REACH    | Regulation (EC) No. 1907/2006 on registration, evaluation, authorization and restriction of chemicals |
| SDS      | Safety Data Sheet   |
| SIEF     | Substance Information Exchange Forum  |
| STOT     | Toxic effects on target organs  |
| (STOT)   | RE Repeated exposure  |
| (STOT)   | SE Single exposure  |
| SVHC     | Substances of particularly high concern   |
| vPvB     | [Substances] very persistent and very bioaccumulative   |
| UN numer | Material identification number according to the ADR agreement   |
| ADR      | International Convention on the Carriage of Dangerous Goods and Cargoes by Road                       |
| RID      | Regulations for the International Carriage of Dangerous Goods by Rail)                                |
| IMGD     | The International Dangerous Goods Code  |
| IATA     | International Association of Air Carriers   |
| ICAO     | International Civil Aviation Organization   |
| MARPOL   | International Convention for the Prevention of Pollution from Ships (MARPOL)                          |
| Ems      | Emergency response procedures for ships carrying dangerous goods                                      |
| NDS      | Maximum workplace concentration limit (TLV-TWA) (OEL-TWA) (PEL-TWA)                                   |

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| NDSch | Maximum transient concentration (TLV-STEL)           |
| NDSP  | The maximum allowable ceiling concentration (TLV-CL) |

### Training courses:

Before working with the product, the user should familiarize himself with health and safety rules for handling chemicals and, in particular, receive appropriate job training.

