

PRODUCT: PolyCYPs Enzyme reagent Kit

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier(s).

Catalogue Number(s): **This MSDS covers the following products:**

Screening Kits: HDPC-001.2 and HDPC-001.2D; Scale-up Kits: HDPC-006, HDPC-152, HDPC-166, HDPC-168, HDPC-194, HDPC-196, HDPC-217, HDPC-235, HDPC-333, HDPC-334, HDPC-349, HDPC-350, HDPC-350, HDPC-353, HDPC-359, HDPC- 483, HDPC- 484. HDPC- 486, HDPC- 488, HDPC- FMO3, and HDPC- AOX1

Trade name/description: *PolyCYPs Enzyme reagent Kits (Screening Kit; Diversification Kit; Scale-up Kit).*

Label Code(s)/Lot#/Batch#: *Lot#: As labelled.*

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS Number: N/A

Relevant identified uses of the substance or mixture and uses advised against.

- Application of the substance / the preparation:
Laboratory reagents (enzymes, cofactors and control chemical)
- Compound/material form: All materials are lyophilised powders in glass vials

Details of the supplier of the safety data sheet.

- Manufacturer/Supplier:
Hypha Discovery Limited
154B Brook Drive, Abingdon,
Oxfordshire, OX14 4SD, United Kingdom
Tel +44 (0) 1235 824 849
mail@hyphadiscovery.com; www.hyphadiscovery.com
- Further information obtainable from:
Department: Hypha Shipping
- Emergency telephone number:
+44 (0) 20 7188 7188 (Medical Toxicology Information Service, UK)

SECTION 2: Hazards identification

Classification of the substance or components of the mixtures:

Classification according to Regulation (EC) No. 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567






Substance	Hazard Classification
Recombinant crude enzyme preparation from <i>E. coli</i>	Respiratory sensitization (Category 1), H334
Potassium Phosphate Monobasic	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Potassium Phosphate Dibasic Trihydrate	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Magnesium Chloride Hexahydrate	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Glycyl-Glycine	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Benzonase Nuclease	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Tris(2-carboxyethyl)phosphine hydrochloride	Skin corrosion (Sub-category 1B), H314 Serious eye damage (Category 1), H318

PRODUCT: PolyCYPs Enzyme reagent Kit



	Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335
PMSF Protease Inhibitor	Acute oral toxicity (Category 3), H301 Skin corrosion/irritation (Category 1B), H314 Serious eye damage/eye irritation (Category 1), H314
D-Glucose 6-phosphate disodium salt hydrate	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
β-Nicotinamide adenine dinucleotide phosphate sodium salt hydrate	Eye irritation (Category 2), H319
Glucose-6-phosphate Dehydrogenase, from baker's yeast (<i>S. cerevisiae</i>)	Respiratory sensitization (Category 1), H334
2-Hydroxypropyl-β-cyclodextrin	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Bosentan hydrate	Long-term (chronic) aquatic hazard (Category 3), H412

Label elements:

Labelling according to Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Substance	Pictogram	Signal Word	Hazard Statement(s)	Precautionary Statement(s)
Recombinant crude enzyme preparation from <i>E. coli</i>		Danger	H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled.	P261 – Avoid breathing dust. P284 – Wear respiratory protection. P501 – Dispose of contents/container to an approved waste disposal plant.
Tris(2-carboxyethyl) phosphine hydrochloride	 	Danger	H314 – Causes severe skin burns and eye damage. H318 – Causes Serious eye damage. H335 – May cause respiratory irritation.	P261 – Avoid breathing mist or vapours. P271 – Use only outdoors or in a well ventilated-area. P280 – Wear protective gloves/protective clothing/eye protection/face protection. P303 + P361 + P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE or doctor. P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
PMSF Protease Inhibitor	 	Danger	H301 – Toxic if swallowed. H314 – Causes severe skin burns and eye damage.	P280 – Wear protective gloves/protective clothing/eye protection/face protection. P260 – Do not breathe dust/fume/gas/mist/vapours/spray P270 – Do not eat, drink or smoke when using this product. P264 – Wash hands thoroughly after handling.

PRODUCT: PolyCYPs Enzyme reagent Kit

				<p>P304 + P340 + P310 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE or doctor.</p> <p>P301 + P310 + P330 + P331 – IF SWALLOW: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor.</p> <p>P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P303 + P361 + P353 + P311 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTRE or doctor.</p> <p>P363 – Wash contaminated clothing before reuse.</p> <p>P501 – Dispose of contents/container to an approved waste disposal plant.</p>
β-Nicotinamide adenine dinucleotide phosphate sodium salt hydrate		Warning	H319 – Causes serious eye irritation.	<p>P280 – Wear eye protection/face protection.</p> <p>P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313 – If eye irritation persists: Get medical advice/attention.</p>
Glucose-6-phosphate Dehydrogenase, from baker's yeast (<i>S. cerevisiae</i>)		Danger	H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled.	<p>P261 – Avoid breathing dust.</p> <p>P284 – Wear respiratory protection.</p> <p>P501 – Dispose of contents/container to an approved waste disposal plant.</p>
2-Hydroxypropyl-β-cyclodextrin	None	None	Not classified	<p>P261 – Avoid breathing dust/fume/gas/mist/vapour/spray.</p> <p>P262 – Do not get in eyes, on skin, or on clothing.</p>
Bosentan hydrate	None	None	H412 – Harmful to aquatic life with long lasting effects.	<p>P273 – Avoid release to the environment.</p> <p>P501 – Dispose of contents/container to an approved waste disposal plant.</p>

Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

PRODUCT: PolyCYPs Enzyme reagent Kit

SECTION 3: Composition/information on ingredients

Chemical characterization: Substances/Mixtures

Component	CAS-No.	EC-No.	Concentration*	Classification
Recombinant Cytochrome P450 crude enzyme preparation from <i>E. coli</i>	-	-	≥ 6% - ≤ 30% (w/v) >65% - < 80% (w/w)	Resp. Sens. 1; H334
Recombinant Human Flavin-containing monooxygenase-3 crude enzyme preparation from <i>E. coli</i>	-	-	≤ 2% (w/v) < 70% (w/w)	Resp. Sens. 1; H334
Recombinant Human aldehyde oxidase crude enzyme preparation from <i>E. coli</i>	-	-	≤ 30% (w/v) < 80% (w/w)	Resp. Sens. 1; H334
Potassium Phosphate Monobasic	7778-77-0	231-913-4	< 0.2% (w/v) < 2% (w/w)	None
Potassium Phosphate Dibasic Trihydrate	16788-57-1	231-834-5	< 2.5% (w/v) < 47% (w/w)	None
Magnesium Chloride Hexahydrate	7791-18-6	232-094-6	< 0.5% (w/v) < 3% (w/w)	None
Glycyl-Glycine	556-50-3	209-127-8	< 0.2% (w/v) < 2% (w/w)	None
Benzonase Nuclease	-	-	< 0.01% (v/v) < 0.05% (w/w)	None
Tris(2-carboxyethyl) phosphine hydrochloride	51805-45-9	-	< 0.1% (v/v) < 0.2% (w/w)	Skin Corr. 1B; H314 Eye Dam. 1; H318
PMSF Protease Inhibitor	329-98-6	-	< 0.001% (w/v) < 0.02% (w/w)	Skin Corr. 1; H314 Eye Dam. 1; H318
D-Glucose 6-phosphate disodium salt hydrate	3671-99-6	222-938-1	< 2% (w/v) < 33% (w/w)	None
β-Nicotinamide adenine dinucleotide phosphate sodium salt hydrate	698999-85-8	-	< 1% (w/v) < 17% (w/w)	Eye Irrit. 2; H319
Glucose-6-phosphate Dehydrogenase, from baker's yeast (<i>S. cerevisiae</i>)	9001-40-5	232-602-6	< 0.05% (w/v) < 0.2% (w/w)	Resp. Sens. 1; H334
2-Hydroxypropyl-β-cyclodextrin	128446-35-5	-	≤ 40% (w/v) < 97% (w/w)	None
Bosentan hydrate	157212-55-0	-	≤ 2.5% (w/v) 100% (w/w)	Aquatic Chronic 3; H412

* %w/v and %v/v refers to concentrations in solution, reconstituted with water
%w/w refers to concentrations in lyophilised powders

RTECS Number: Not applicable

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

Description of first aid measures:

• General information:

If in doubt, involve doctor immediately. Show this material safety data sheet to the doctor in attendance.
Remove breathing equipment only after contaminated clothing have been completely removed.

• After inhalation:

Remove person to fresh air and keep at rest in a position comfortable for breathing.
In case of unconsciousness place patient in stable side position for transportation.
In case of irregular breathing or respiratory arrest provide artificial respiration. It may be dangerous to give mouth-to-mouth resuscitation.
Call a doctor immediately. In the event of any complaints or symptoms, avoid further exposure.

PRODUCT: PolyCYPs Enzyme reagent Kit

- After skin contact:
Immediately wash with water and soap and rinse thoroughly.
Immediately remove any clothing and shoes contaminated by the product.
Wash contaminated clothing and shoes before reuse.
Seek immediate medical advice.
- After eye contact:
Rinse out with plenty of water for at least 20 minutes. Remove contact lenses, if present and easy to do.
Consult a doctor.
- After swallowing:
Make victim drink water (two glasses at most). Do not induce vomiting. Call for medical help immediately.

Information for doctor:

- Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11
- Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

Extinguishing media:

- Suitable extinguishing agents:
Water spray, foam, carbon dioxide (CO₂), dry powder. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture:

Mixture with some combustible components.
Development of hazardous combustion gases or vapours possible in the event of fire, including but not limited to: oxides of phosphorous, phosphorous trihydride (phosphine), potassium oxides, chlorine, magnesium oxides, hydrogen chloride gas, carbon oxide, nitrogen oxides (NO_x), sodium oxides, and sulphur oxides.

Advice for firefighters:

In the event of fire, wear appropriate protective equipment at self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Further information:

Prevent fire extinguishing water from contaminating surface water or the ground water system.
Suppress (knock down) gases/vapours/mists with a water spray jet.

SECTION 6: Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid formation and inhalation of dust. Avoid substance contact. Do not breathe vapours, aerosols. Ensure adequate ventilation. Spray/dampen down with water to eliminate dust hazard.
- Environmental precautions:
Do not let product enter drains.
- Methods and material for containment and cleaning up:
Cover drains. Collect spills. Observe possible material restrictions (see sections 7 and 10). Dispose of waste via a licensed waste disposal contractor. Clean up area.
- Reference to other sections:
For disposal see section 12.

SECTION 7: Handling and storage

Handling:

- Precautions for safe handling:
Always wear recommended Personal Protective Equipment (see section 8 for more detail).
Persons with a history of asthma, allergies, or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

PRODUCT: PolyCYPs Enzyme reagent Kit

As for all powdered enzymes/protein materials, use only with adequate ventilation at the workplace.
Whilst in powder form, product should be handled within appropriate powder handling containment in accordance with end-user's Health & Safety Policies and Practices. Wear appropriate respirator when ventilation is inadequate. Avoid creation of dust when handling; do not crush/break up lyophilized material.
For best practice, addition of dissolution solvent (specified in kit instructions) should be made through the vial septa to eliminate risk of exposure to powdered proteins
Once in solution, the risk of respiratory sensitisation over long-term or multiple handling events is greatly reduced.
Open and handle receptacle with care; metal crimp can have sharp edges when removed.

- Information about fire and explosion protection:
Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities:

- Requirements to be met by storerooms and receptacles:
Keep in original container or an approved alternative made from a compatible material.
Serum vials and septa are part of safe containment control; do not remove lyophilized material from original container until in solution.
- Information about storage in one common storage facility:
Store away from foodstuffs.
- Further information about storage conditions:
Keep container tightly sealed.
Store in dry conditions.
Light sensitive.
- Recommended storage temperature:
< -15 °C, ideally < -70 °C
- Specific end use(s):
Use a laboratory reagent. Biocatalysis.

SECTION 8: Exposure controls/personal protection

Control parameters:

- Ingredients with workplace control parameters:
Contains no substances with occupational exposure limit values.
- Additional information:
The lists valid during the making were used as basis.

Exposure controls:

Appropriate engineering controls:

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Do not attempt to remove lyophilized material from original container until in solution. Keep container sealed unless in use to avoid spills or dust generation.
For best practice, addition of dissolution solvent (specified in kit instructions) should be made through the vial septa to eliminate risk of exposure to powdered proteins

Personal protective equipment:

- Eye/face protection:
Safety glasses. Use equipment for eye protection as tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- Skin protection:
Handle with gloves. Gloves must be inspected prior to use. Observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.
Ensure gloves are suitable for the task: chemical compatibility, dexterity, operational conditions, user susceptibility e.g., sensitisation effects. Also take into consideration the specific local conditions under which the product is used such as the danger of cuts, abrasions.
Remove gloves with care avoiding skin contamination. Dispose of contaminated gloves in accordance with applicable laws and good laboratory practices. Wash and dry hands.

PRODUCT: PolyCYPs Enzyme reagent Kit

- **Body protection:**
Long sleeved protective clothing; laboratory coat.
- **Respiratory protection:**
Required when dusts are generated.
Based on hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used in accordance with a respiratory protection programme to ensure proper fitting, training, and other important aspects of use.
The end-user has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure:
Do not let product enter drains.

General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Store protective clothing separately.
Avoid contact with the eyes and skin.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties													
General Information													
Appearance:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">Form:</td> <td>Lyophilized powder material in vials</td> </tr> <tr> <td>Colour:</td> <td>Various</td> </tr> <tr> <td>Odour:</td> <td>Not determined</td> </tr> <tr> <td>Odour threshold:</td> <td>Not determined</td> </tr> <tr> <td>pH-value:</td> <td>Not determined</td> </tr> </table>	Form:	Lyophilized powder material in vials	Colour:	Various	Odour:	Not determined	Odour threshold:	Not determined	pH-value:	Not determined		
Form:	Lyophilized powder material in vials												
Colour:	Various												
Odour:	Not determined												
Odour threshold:	Not determined												
pH-value:	Not determined												
Change in condition:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">Boiling point/Boiling range:</td> <td>Not applicable</td> </tr> <tr> <td style="padding-right: 20px;">Flash point:</td> <td>Not determined</td> </tr> <tr> <td style="padding-right: 20px;">Flammability (solid, gaseous):</td> <td>Not determined</td> </tr> <tr> <td style="padding-right: 20px;">Ignition temperature:</td> <td>Not determined</td> </tr> <tr> <td style="padding-right: 20px;">Decomposition temperature:</td> <td>Not determined</td> </tr> <tr> <td style="padding-right: 20px;">Self-igniting:</td> <td>Not determined</td> </tr> </table>	Boiling point/Boiling range:	Not applicable	Flash point:	Not determined	Flammability (solid, gaseous):	Not determined	Ignition temperature:	Not determined	Decomposition temperature:	Not determined	Self-igniting:	Not determined
Boiling point/Boiling range:	Not applicable												
Flash point:	Not determined												
Flammability (solid, gaseous):	Not determined												
Ignition temperature:	Not determined												
Decomposition temperature:	Not determined												
Self-igniting:	Not determined												
Danger of explosion:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">Explosion limits:</td> <td></td> </tr> <tr> <td style="padding-right: 20px;">Lower:</td> <td>Not determined</td> </tr> <tr> <td style="padding-right: 20px;">Upper:</td> <td>Not determined</td> </tr> </table>	Explosion limits:		Lower:	Not determined	Upper:	Not determined						
Explosion limits:													
Lower:	Not determined												
Upper:	Not determined												
Other Characteristics:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">Vapour pressure:</td> <td>Not determined</td> </tr> <tr> <td style="padding-right: 20px;">Density:</td> <td>Not determined</td> </tr> <tr> <td style="padding-right: 20px;">Solubility in / Miscibility with water:</td> <td>Not determined</td> </tr> </table>	Vapour pressure:	Not determined	Density:	Not determined	Solubility in / Miscibility with water:	Not determined						
Vapour pressure:	Not determined												
Density:	Not determined												
Solubility in / Miscibility with water:	Not determined												
Viscosity:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">Dynamic:</td> <td>Not applicable</td> </tr> <tr> <td style="padding-right: 20px;">Kinematic:</td> <td>Not applicable</td> </tr> </table>	Dynamic:	Not applicable	Kinematic:	Not applicable								
Dynamic:	Not applicable												
Kinematic:	Not applicable												
Other information:	No further relevant information available												

PRODUCT: PolyCYPs Enzyme reagent Kit

SECTION 10: Stability and reactivity

- Reactivity:
No data available.
- Chemical stability:
No data available.
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- Possibility of hazardous reactions:
No data available.
- Conditions to avoid:
No data available.
- Incompatible materials:
No data available.
- Hazardous decomposition products:
In the event of a fire, see section 5.

SECTION 11: Toxicological information

Information on toxicological effects:

- Acute toxicity:
Oral: No data available.
Inhalation: No data available.
Dermal: No data available.
- Skin corrosion / irritation:
No data available.
- Serious eye damage / eye irritation:
No data available.
- Respiratory or skin sensitization:
Prolonged or repeated exposure may lead to chronic respiratory irritation.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Germ cell mutagenicity:
No data available.
- Carcinogenicity:
No data available.
- Reproductive toxicity:
No data available.
- Specific target organ toxicity – single exposure:
No data available.
- Specific target organ toxicity – repeated exposure:
No data available.
- Aspiration hazard:
No data available.

Additional information:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties cannot be excluded.
Handle in accordance with good industrial / laboratory hygiene and safety practice.

SECTION 12: Ecological information

Aside from Bosentan hydrate, the environmental impact of the components of this product has not been fully investigated.

Toxicity:

- Aquatic toxicity:
Bosentan hydrate: Harmful to aquatic life with long lasting effects. Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant.

PRODUCT: PolyCYPs Enzyme reagent Kit

- Persistence and degradability:
No data available.
- Behaviour in environmental systems:**
- Bioaccumulative potential:
No data available.
- Mobility in soil:
No data available.
- Results of PBT and vPvB assessment:**
- PBT (persistent, bioaccumulative, and toxic):
No data available.
- vPvB (very persistent and very bioaccumulative):
No data available.
- Other adverse effects:
No data available.

SECTION 13 Disposal considerations

Waste treatment methods:

- Recommendation:
Must not be disposed together with general refuse.
The classification of the product may meet the criteria for a hazardous waste.
Dispose by incineration via approved chemical waste routes Do not allow product enter drains.
- European Waste Catalogue (EWC) Code: 07 05 13

Uncleaned packaging:

- Recommendation: Handle like the product itself. Disposal must be made according to official regulations.

SECTION 14 Transport information

	ADR / RID	ADN	IMDG	IATA
UN-Number	Not regulated	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	-	-	-	-

- Special precautions for user:
Transport within user's premises: always transport in closed containers that are upright and secure. Ensure the persons transporting the product know what to do in the event of a spillage.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable.
- Transport/Additional information:
Not applicable.
- UN "Model Regulation":
UN -; Not dangerous goods.

SECTION 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture.
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by UK REACH Regulation SI 2019/758.
- Chemical safety assessment:
A chemical safety assessment has not been carried out for this product.

PRODUCT: PolyCYPs Enzyme reagent Kit**SECTION 16 Other information****Full text of H-statements referred to under sections 2 and 3:**

- H301 – Toxic if swallowed.
- H314 – Causes severe skin burns and eye damage.
- H318 – Causes serious eye damage.
- H319 – Causes serious eye irritation.
- H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 – May cause respiratory irritation.
- H412 – Harmful to aquatic life with long lasting effects.

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 MSDS:
Department: Hypha Shipping
- Abbreviations and acronyms:
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS: Chemical Abstracts Service (division of the American Chemical Society)
EINECS: European Inventory of Existing Commercial Chemical Substances
EN: Europäische Norm (European Standard)
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
IBC code: International Bulk Chemical code
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
IMDG: International Maritime Dangerous Goods Code
MARPOL: International Convention for the Prevention of Pollution from Ships
NIOSH: National Institute for Occupational Safety and Health
PBT: Persistent, Bioaccumulative, and Toxic
vPvB: very Persistent and very Bioaccumulative
RID: Agreement Concerning the International Transport of Dangerous Goods by Rail
RTECS: Registry of Toxic Effects of Chemical Substances