

## Safety Data Sheet

according to UK REACH Regulation

### PANDY's Reagent

Revision date: 26.02.2024

Product code: 15954.xxxxx

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

### 1.1. Product identifier

PANDY's Reagent

UFI: 6R5E-21MP-G00P-7R3C

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

#### Use of the substance/mixture

Use as laboratory reagent.

The product is intended for research, analysis and scientific education.

#### Uses advised against

Any non-intended use.

### 1.3. Details of the supplier of the safety data sheet

Company name: MORPHISTO GmbH  
Street: Schumannstr. 142/144  
Place: D-63069 Offenbach  
Telephone: +49 (0) 69 / 400 3019-60      Telefax: +49 (0) 69 / 400 3019-64  
E-mail: info@morphisto.de  
Contact person: Morphisto GmbH  
E-mail: gefahrstoffmanagement@morphisto.de  
Internet: http://www.morphisto.de

### 1.4. Emergency telephone number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

Acute Tox. 4; H302  
Skin Corr. 1B; H314  
Eye Dam. 1; H318  
Muta. 2; H341  
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### GB CLP Regulation

#### Hazard components for labelling

hydroxybenzene

Signal word: Danger

#### Pictograms:



#### Hazard statements

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H341 Suspected of causing genetic defects.  
H412 Harmful to aquatic life with long lasting effects.

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#### Precautionary statements

P260	Do not breathe mist/vapours/spray.
P273	Avoid release to the environment.
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 or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

#### Labelling of packages where the contents do not exceed 125 ml

**Signal word:** Danger

**Pictograms:**


#### Hazard statements

H314-H341-H412

#### Precautionary statements

P260-P280-P303+P361+P353-P305+P351+P338-P310

#### 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

aqueous solution

##### Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
108-95-2	hydroxybenzene			5 - < 10 %
	203-632-7	604-001-00-2	01-2119471329-32	
	Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, STOT RE 2, Aquatic Chronic 2; H341 H331 H311 H301 H314 H318 H373 H411			

Full text of H and EUH statements: see section 16.

##### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
108-95-2	203-632-7	hydroxybenzene	5 - < 10 %
	inhalation: ATE = 3 mg/l (vapours); inhalation: LC50 = 0,51 mg/l (dusts or mists); dermal: LD50 = 660 mg/kg; oral: LD50 = 100,1 mg/kg Skin Corr. 1B; H314: >= 3 - 100 Skin Irrit. 2; H315: >= 1 - < 3 Eye Irrit. 2; H319: >= 1 - < 3		

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**Further Information**

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated, saturated clothing immediately.

First aider: Pay attention to self-protection!

**After inhalation**

Provide fresh air. Medical treatment necessary. Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Where appropriate artificial ventilation. Call a physician immediately.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

**After ingestion**

Observe risk of aspiration if vomiting occurs. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Do not allow a neutralisation agent to be drunk. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

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

Phenol: The product is skin resorptive.

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

First Aid, decontamination, treatment of symptoms.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. Dry extinguishing powder. alcohol resistant foam. Carbon dioxide (CO<sub>2</sub>). Water spray.

**Unsuitable extinguishing media**

High power water jet.

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

Non-flammable. In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Phenol

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. In case of fire and/or explosion do not breathe fumes.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

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**General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. (refer to chapter 8) Ventilate affected area. Avoid exposure.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Inform competent authorities in case of accidental release. (Larger quantities)

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

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**Other information**

Ventilate affected area. Collect in closed containers for disposal.  
Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation. Avoid exposure - obtain special instructions before use.  
Personal protection equipment (refer to chapter 8 )

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.  
Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

**Further information on handling**

Avoid contact with skin, eyes and clothes.  
General protection and hygiene measures: refer to chapter 8

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep/Store only in original container.  
Protect from direct sunlight. Ensure adequate ventilation of the storage area.  
Make sure spills can be contained, e.g. in sump pallets or kerbed areas.  
Suitable material: ; Refined steel

**Hints on joint storage**

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Radioactive substances. Infectious substances.

**Further information on storage conditions**

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.  
Protect against: UV-radiation/sunlight. heat. frost.  
storage temperature: 15-25 °C

**7.3. Specific end use(s)**

See section 1.

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**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
108-95-2	Phenol	2	7.8		TWA (8 h)	WEL
		4	16		STEL (15 min)	WEL

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
108-95-2	hydroxybenzene			
Worker DNEL, long-term		inhalation	systemic	8 mg/m <sup>3</sup>

**PNEC values**

CAS No	Substance	Value
108-95-2	hydroxybenzene	
Environmental compartment		Value
Freshwater		0,0077 mg/l
Marine water		0,00077 mg/l
Freshwater sediment		0,0915 mg/kg
Marine sediment		0,00915 mg/kg
Micro-organisms in sewage treatment plants (STP)		2,1 mg/l
Soil		0,136 mg/kg

**8.2. Exposure controls**

**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Technical ventilation of workplace. Use the product only under recirculating air conditions.

Optionally pass exhaust air through scrubber.

**Individual protection measures, such as personal protective equipment**
**Eye/face protection**

Suitable eye protection: goggles. Tightly sealed safety glasses. EN 166  
 Face protection umbrella

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Pull-over gloves of rubber. EN ISO 374

Suitable material:

Butyl caoutchouc (butyl rubber) (0,5 mm)

FKM (fluoro rubber) (0,4 mm)

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penetration time (maximum wearing period): 480 min.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

#### Skin protection

Use of protective clothing. Suitable protective clothing: Protective clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Insufficient ventilation.

exceeding exposure limit values

Generation/formation of aerosols

Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type AP-2/3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

The wearing time limitations according to GefStoffV in conjunction with the rules for the use of respiratory protective devices (BGR 190) must be observed.

#### Environmental exposure controls

Do not allow to enter into surface water or drains.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless	
Odour:	characteristic	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		~100 °C
Flammability:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		>60 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		6-7
Viscosity / kinematic:		not determined
Water solubility:		completely miscible
Solubility in other solvents		not determined
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		23 hPa
(at 20 °C)		
Density (at 20 °C):		1,01 g/cm <sup>3</sup>
Relative vapour density:		not determined
Particle characteristics:		not applicable

### 9.2. Other information

#### Information with regard to physical hazard classes

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**Explosive properties**

The product is not: Explosive.

**Sustaining combustion:**

Not sustaining combustion

**Oxidizing properties**

none

**Other safety characteristics**

Evaporation rate:

not determined

Solid content:

not determined

Pour point:

not determined

Viscosity / dynamic:

not determined

Flow time:

not determined

**Further Information**

No information available.

**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

No information available.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

Substances which in contact with water, emit flammable gases.

**10.4. Conditions to avoid**

No information available.

**10.5. Incompatible materials**

Oxidizing agents. aldehydes. Isocyanates. Nitrites. metal. Rubber. various plastics. alloys..

**10.6. Hazardous decomposition products**

 In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Phenol

**SECTION 11: Toxicological information**
**11.1. Information on hazard classes as defined in GB CLP Regulation**
**Acute toxicity**

Harmful if swallowed.

**ATEmix calculated**

ATE (oral) 1434 mg/kg; ATE (dermal) 9456 mg/kg; ATE (inhalation vapour) 42,98 mg/l; ATE (inhalation dust/mist) 7,307 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
108-95-2	hydroxybenzene				
	oral	LD50 mg/kg 100,1	Ratte	suppliers SDS.	
	dermal	LD50 mg/kg 660	Rat	suppliers SDS.	OECD 402
	inhalation vapour	ATE 3 mg/l			
	inhalation (4 h) dust/mist	LC50 0,51 mg/l		suppliers SDS.	

**Irritation and corrosivity**

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Causes severe skin burns and eye damage.

Causes serious eye damage.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing genetic defects. (hydroxybenzene)

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**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.

**11.2. Information on other hazards**
**Endocrine disrupting properties**

This product does not contain any substance that has endocrine disrupting properties in humans as no ingredient meets the criteria.

**Other information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**SECTION 12: Ecological information**
**12.1. Toxicity**

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
108-95-2	hydroxybenzene					
	Acute fish toxicity	LC50	8,9 mg/l	96 h	Onchorhynchus clarki	ECHA-Dossier
	Acute algae toxicity	ErC50	61,1 mg/l	96 h	Pseudokirchneriella subcapitata	ECHA-Dossier
	Acute crustacea toxicity	EC50	3,1 mg/l	48 h	Ceriodaphnia dubia (water flea)	ECHA-Dossier
	Fish toxicity	NOEC	0,077 mg/l	60 d	fish	ECHA-Dossier
	Crustacea toxicity	NOEC	0,16 mg/l	16 d	Daphnia magna (Big water flea)	ECHA-Dossier

**12.2. Persistence and degradability**

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
108-95-2	hydroxybenzene			
	Biologische Abbaubarkeit	62 %	4	OECD 301C
	Easily biodegradable (concerning to the criteria of the OECD)			

**12.3. Bioaccumulative potential**

The product has not been tested.



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**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
108-95-2	hydroxybenzene	1,47

**BCF**

CAS No	Chemical name	BCF	Species	Source
108-95-2	hydroxybenzene	17,5		

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

The product has not been tested.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations**
**13.1. Waste treatment methods**
**Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process. Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

**List of Wastes Code - residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**List of Wastes Code - used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**List of Wastes Code - contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

**Contaminated packaging**

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information**
**Land transport (ADR/RID)**

- 14.1. UN number or ID number:** UN 2821  
**14.2. UN proper shipping name:** PHENOL SOLUTION  
**14.3. Transport hazard class(es):** 6.1

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**14.4. Packing group:**

Hazard label:

III

6.1



Classification code:

T1

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

2

Hazard No:

60

Tunnel restriction code:

E

**Inland waterways transport (ADN)**

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

UN 2821

**14.2. UN proper shipping name:**

PHENOL SOLUTION

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

6.1

**14.4. Packing group:**

III

Hazard label:

6.1



Classification code:

T1

Special Provisions:

802

Limited quantity:

5 L

Excepted quantity:

E1

**Marine transport (IMDG)**

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

UN 2821

**14.2. UN proper shipping name:**

PHENOL SOLUTION

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

6.1

**14.4. Packing group:**

III

Hazard label:

6.1



Special Provisions:

223

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-A

**Air transport (ICAO-TI/IATA-DGR)**

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

UN 2821

**14.2. UN proper shipping name:**

PHENOL SOLUTION

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

6.1

**14.4. Packing group:**

III

Hazard label:

6.1



Special Provisions:

A3

Limited quantity Passenger:

2 L

Passenger LQ:

Y642

Excepted quantity:

E1

IATA-packing instructions - Passenger:

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IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	663
IATA-max. quantity - Cargo:	220 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Acute Toxicity. Refer to section 6-8

**14.7. Maritime transport in bulk according to IMO instruments**

not relevant

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**Additional information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

**15.2. Chemical safety assessment**For the following substances of this mixture a chemical safety assessment has been carried out:  
hydroxybenzene**SECTION 16: Other information****Changes**This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,9,11,12,13,14,15,16.  
Rev. 2,00; 26.02.20254; Individual safety data sheet based on 12802\_collect

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**Abbreviations and acronyms**

Acute Tox: Acute toxicity  
Skin Corr: Skin corrosion  
Eye Dam: Eye damage  
Muta: Germ cell mutagenicity  
STOT RE: Specific target organ toxicity - repeated exposure  
Aquatic Chronic: Chronic aquatic hazard  
ADR: Accord européen sur le transport des marchandises dangereuses par Route  
CAS Chemical Abstracts Service  
DNEL: Derived No Effect Level  
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)  
LOAEL: Lowest observed adverse effect level  
LOAEC: Lowest observed adverse effect concentration  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
NOAEL: No observed adverse effect level  
NOAEC: No observed adverse effect level  
NTP: National Toxicology Program  
N/A: not applicable  
OSHA: Occupational Safety and Health Administration  
PNEC: predicted no effect concentration  
PBT: Persistent bioaccumulative toxic  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail )  
SARA: Superfund Amendments and Reauthorization Act  
SVHC: substance of very high concern  
TRGS Technische Regeln fuerGefahrstoffe  
TSCA: Toxic Substances Control Act  
VOC: Volatile Organic Compounds  
VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe  
WGK: Wassergefaehrdungsklasse  
CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
CAS: Chemical Abstracts Service  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative

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ADR: Accord européen sur le transport des marchandises dangereuses par Route  
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 RID: Regulations concerning the international carriage of dangerous goods by rail  
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation  
 intérieures)  
 EmS: Emergency Schedules  
 MFAG: Medical First Aid Guide  
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
 IBC: Intermediate Bulk Container  
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>  
 For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety  
 assessment, chapter R.20 (Table of terms and abbreviations).  
 EC/EEC: European Community/European Economic Community  
 EU: European Union  
 M-factor: Multiplying factor  
 IATA: International Air Transport Association  
 DGR: Dangerous Goods Regulations  
 ICAO: International Civil Aviation Organization  
 TI: Technical Instructions  
 VOC: volatile organic compound

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Muta. 2; H341	Calculation method
Aquatic Chronic 3; H412	Calculation method

#### Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. Classification according EC regulation 1272/2008 (CLP): -

Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

**Safety Data Sheet**

according to UK REACH Regulation

**PANDY's Reagent**

Revision date: 26.02.2024

Product code: 15954.xxxxx

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*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*