acc. to Regulation (EC) No. 1907/2006 (REACH)

® Roth

date of compilation: 2015-08-28

Revision: 2023-07-19

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: **5781** Version: **4.0 en** Replaces version of: 2021-08-05 Version: (3)

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

1.1 Product identifier

Identification of the substance	Benzoic acid ≥99,5 %, Ph.Eur., USP, BP
Article number	5781
Index No (GB CLP)	607-705-00-8
EC number	200-618-2
CAS number	65-85-0
Alternative name(s)	Phenylformic acid

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feedingstuffs.

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

e-mail (competent person):

sicherheit@carlroth.de

1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

acc. to Regulation (EC) No. 1907/2006 (REACH)



Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.9	Specific target organ toxicity - repeated exposure	1	STOT RE 1	H372

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

Labelling

Signal word Danger

Pictograms

GHS05, GHS08



Hazard statements

H315	Causes skin irritation
H318	Causes serious eye damage
H372	Causes damage to organs (lung) through prolonged or repeated exposure (if in- haled)

Precautionary statements

Precautionary statements - prevention

P260	Do not breathe dust
P280	Wear protective gloves/eye protection

Precautionary statements - response

P302+P352	IF ON SKIN: Wash with plenty of water
	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

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\ge 0,1\%$.

acc. to Regulation (EC) No. 1907/2006 (REACH)

® Roth

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

3.1

SECTION 3: Composition/information on ingredients

Substances	
Name of substance	Benzoic acid
Molecular formula	$C_7H_6O_2$
Molar mass	122,1 ^g / _{mol}
CAS No	65-85-0
EC No	200-618-2
Index No (GB CLP)	607-705-00-8

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

Following eye contact

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.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Irritation, Cough, Headache, Gastrointestinal complaints, Nausea, Vomiting, Diarrhoea, Dyspnoea, Risk of serious damage to eyes, Risk of blindness

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water, foam, alcohol resistant foam, dry extinguishing powder, ABC-powder

acc. to Regulation (EC) No. 1907/2006 (REACH)

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP



article number: 5781

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe dust.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

Advice on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Avoid dust formation.

Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities Store in a dry place.

acc. to Regulation (EC) No. 1907/2006 (REACH)

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP



article number: 5781

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Ventilation requirements

Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Identifi- er	TWA [mg/ m³]	STEL [mg/ m³]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
GB	dust		WEL	10			i	EH40/2005
GB	dust		WEL	4			r	EH40/2005

Notation

Ceiling-CCeiling value is a limit value above which exposure should not occuriInhalable fractionrRespirable fractionSTELShort-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-
minute period (unless otherwise specified)TWATime-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8
hours time-weighted average (unless otherwise specified)

Human health values

Relevant DN	Relevant DNELs and other threshold levels					
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time		
DNEL	3 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects		
DNEL	0,1 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects		
DNEL	62,5 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects		

Environmental values

Relevant PNECs and other threshold levels						
End- point	Threshold level	Organism	Environmental com- partment	Exposure time		
PNEC	0,331 ^{mg} / _l	aquatic organisms	water	intermittent release		
PNEC	0,34 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)		

acc. to Regulation (EC) No. 1907/2006 (REACH)

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP



article number: 5781

Г

Relevant	Relevant PNECs and other threshold levels						
End- point	Threshold level	Organism	Environmental com- partment	Exposure time			
PNEC	0,034 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)			
PNEC	100 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)			
PNEC	1,75 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)			
PNEC	0,175 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)			
PNEC	0,151 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)			

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. 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. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a consider-able reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

NBR (Nitrile rubber)

material thickness

>0,11 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

acc. to Regulation (EC) No. 1907/2006 (REACH)

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	solid
Form	powder, crystalline
Colour	white
Odour	characteristic
Melting point/freezing point	122,4 °C (ECHA)
Boiling point or initial boiling point and boiling range	249 °C at 1.013 hPa (ECHA)
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	121 °C (c.c.)
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	2,5 – 3,5 (20 °C) (aqueous solution of the sub- stance)
Kinematic viscosity	not relevant
Solubility(ies)	
Water solubility	3,5 ^g / _l at 25 °C (ECHA)
Partition coefficient	
Partition coefficient n-octanol/water (log value):	1,88 (ECHA)
Soil organic carbon/water (log KOC)	1,191 (ECHA)
Vapour pressure	0,001 hPa at 20 °C
Density and/or relative density	0,001 hPa at 20 °C
Density and/or relative density Density	0,001 hPa at 20 °C 1,321 ^g / _{cm³} at 20 °C (ECHA)
Density and/or relative density	0,001 hPa at 20 °C



acc. to Regulation (EC) No. 1907/2006 (REACH)

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781



Particle characteristics	No data available.
Other safety parameters	
Oxidising properties	none
Other information	
Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics:	
Surface tension	67,5 ^{mN} / _m (20 °C) (ECHA)

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser, Fluorine, Nitrites, Reducing agents, Oxygen, Strong alkali

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4. May be harmful if swallowed, in contact with skin or if inhaled.

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	2.360 ^{mg} / _{kg}	rat		ECHA
inhalation: dust/ mist	LC50	>12.200 ^{mg} / _{m³} /4h	rat		ECHA
dermal	LD50	>2.000 ^{mg} / _{kg}	rabbit		ECHA

acc. to Regulation (EC) No. 1907/2006 (REACH)

® Foth

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Causes damage to organs (lung) through prolonged or repeated exposure (if inhaled).

Hazard category	Target organ	Exposure route
1	lung	if inhaled

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

gastrointestinal complaints, nausea, vomiting, diarrhoea

• If in eyes

Causes serious eye damage, risk of blindness

• If inhaled

irritant effects, cough, headache, Dyspnoea, varying degrees of pulmonary injury

• If on skin

causes skin irritation

Other information

none

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\ge 0,1\%$.

11.3 Information on other hazards

There is no additional information.

acc. to Regulation (EC) No. 1907/2006 (REACH)



Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) Exposure time Endpoint Value **Species** Source 252 ^{mg}/_l EC50 **ECOTOX** Database 48 h Tetrahymena pyriformis 44,6 ^{mg}/_l LC50 bluegill ECHA 96 h ErC50 >33,1 ^{mg}/_l algae ECHA 72 h Aquatic toxicity (chronic)

Endpoint	Value	Species	Source	Exposure time
EC50	>120 ^{mg} / _l	rainbow trout (Onco- rhynchus mykiss)	ECHA	28 d
EC50	>25 ^{mg} / _l	daphnia magna	ECHA	21 d

12.2 Persistence and degradability

Theoretical Oxygen Demand: 1,965 ^{mg}/_{mg} Theoretical Carbon Dioxide: 2,523 ^{mg}/_{mg}

Process of degradability			
Process	Degradation rate	Time	
biotic/abiotic	>70 %	5 d	
carbon dioxide generation	89,5 %	35 d	

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

	n-octanol/water (log KOW)	1,88 (ECHA)	
12.4	Mobility in soil		
	The Organic Carbon normalised adsorption	1,191 (ECHA)	

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of \ge 0,1%.

12.7 Other adverse effects

coefficient

Data are not available.

acc. to Regulation (EC) No. 1907/2006 (REACH)

® Roth

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Properties of waste which render it hazardous

- **HP 4** irritant skin irritation and eye damage
- HP 5 specific target organ toxicity (STOT)/aspiration toxicity

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number	r
-----------------------------	---

- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards

not subject to transport regulations

not assigned

none

not assigned

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information Not subject to ICAO-IATA.

acc. to Regulation (EC) No. 1907/2006 (REACH)

® Foth

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Seveso Directive

2012/18/EU (Seveso III)				
Νο	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements	Notes	
	not assigned			

Deco-Paint Directive

VOC content	100 %
VOC content	1.321 ^g / _l

Industrial Emissions Directive (IED)

VOC content	0 %
VOC content	0 ^g / _l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Water Framework Directive (WFD)

ist of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Benzoic acid	Substances and preparations, or the breakdown products of such, which have been proved to pos- sess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine- related functions in or via the aquatic environment		a)	

Legend

A)

Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

acc. to Regulation (EC) No. 1907/2006 (REACH)

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP



Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

Regulation on persistent organic pollutants (POP)

not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list not listed

Restrictions according to GB REACH, Annex 17

not listed

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

Legend

Australian Inventory of Industrial Chemicals
Chemical Inventory and Control Regulation
List of Existing and New Chemical Substances (CSCL-ENCS)
Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China
National Inventory of Chemical Substances
Korea Existing Chemicals Inventory
National Chemical Inventory
New Zealand Inventory of Chemicals
Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH registered substances
Taiwan Chemical Substance Inventory
Toxic Substance Control Act



acc. to Regulation (EC) No. 1907/2006 (REACH)

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.	yes
14.8	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional in- formation: Not subject to ADR, RID and ADN.		yes
15.1	Restrictions according to REACH, Annex XVII		yes
15.1		Dangerous substances with restrictions (REACH, Annex XVII): change in the listing (table)	yes
15.1	List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list: Not listed.		yes
15.1	VOC content: 100 % 1.321 ^g / _l	VOC content: 100 %	yes
15.1		VOC content: 1.321 ^g / _l	yes
15.1		National regulations(GB)	yes
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: not listed	yes
15.1		Restrictions according to GB REACH, Annex 17: not listed	yes
15.1		Other information: Directive 94/33/EC on the protection of young people at work. Observe employment restric- tions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.	yes
15.1		National inventories: change in the listing (table)	yes



acc. to Regulation (EC) No. 1907/2006 (REACH)

Benzoic acid ≥99,5 %, Ph.Eur., USP, BP



article number: 5781

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations		
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concer ing the International Carriage of Dangerous Goods by Road)		
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substance		
Ceiling-C	Ceiling value		
DGR	Dangerous Goods Regulations (see IATA/DGR)		
DNEL	Derived No-Effect Level		
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causi 50 % changes in response (e.g. on growth) during a specified time interval		
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)		
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)		
EINECS	European Inventory of Existing Commercial Chemical Substances		
ELINCS	European List of Notified Chemical Substances		
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in ei growth (EbC50) or growth rate (ErC50) relative to the control		
GB CLP	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)		
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)		
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na tions		
IATA	International Air Transport Association		
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)		
ICAO	International Civil Aviation Organization		
IMDG	International Maritime Dangerous Goods Code		
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008		
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval		
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval		
NLP	No-Longer Polymer		
PBT	Persistent, Bioaccumulative and Toxic		
PNEC	Predicted No-Effect Concentration		
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals		
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula tions concerning the International carriage of Dangerous goods by Rail)		
STEL	Short-term exposure limit		
TWA	Time-weighted average		
VOC	Volatile Organic Compounds		

acc. to Regulation (EC) No. 1907/2006 (REACH)



Benzoic acid ≥99,5 %, Ph.Eur., USP, BP

article number: 5781

Abbr.	Descriptions of used abbreviations
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H372	Causes damage to organs (lung) through prolonged or repeated exposure (if inhaled).	

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.