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



date of compilation: 2017-08-21

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3-Nitrophenol ≥99 %, for synthesis

article number: **4533** Version: **2.0 en** Replaces version of: 2021-03-29 Version: (1)

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

1.1 Product identifier

Identification of the substance	3-Nitrophenol ≥99 %, for synthesis
Article number	4533
EC number	209-073-5
CAS number	554-84-7

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

Relevant identified uses:

Laboratory chemical Laboratory and analytical use

Uses advised against:

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	

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
3.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319

For full text of abbreviations: see SECTION 16

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

3-Nitrophenol ≥99 %, for synthesis

article number: 4533

2.2 Label elements

Labelling

Signal word Warning



GHS07



Hazard statements

H302	Harmful if swallowed
H319	Causes serious eye irritation

Precautionary statements

Precautionary statements - prevention

P270Do not eat, drink or smoke when using this productP280Wear protective gloves/eye protection

Precautionary statements - response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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 (ED) at a concentration of $\ge 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	3-Nitrophenol
Molecular formula	$C_6H_5NO_3$
Molar mass	139,1 ^g / _{mol}
CAS No	554-84-7
EC No	209-073-5

Substance, Specific Conc. Limits, M-factors, ATE				
Specific Conc. Limits M-Factors ATE Exposure route				
-	-	328 ^{mg} / _{kg}	oral	



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



3-Nitrophenol ≥99 %, for synthesis

article number: 4533

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 all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Rinse mouth with water (only if the person is conscious). Call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Headache, Cough, Vertigo, Irritation, Dyspnoea

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

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx), 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.

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



3-Nitrophenol ≥99 %, for synthesis

article number: 4533

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. Keep container tightly closed.

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.

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3-Nitrophenol ≥99 %, for synthesis

article number: 4533

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/ m ³]	Nota- tion	Source
GB	dust		WEL	10			i	EH40/2005
GB	dust		WEL	4			r	EH40/2005

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur i Inhalable fraction r_____ Respirable fraction

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

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)

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

3-Nitrophenol ≥99 %, for synthesis

® ROTH

article number: **4533**

other protection measures

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

Respiratory protection



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White). Type: A-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/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	crystalline
Colour	light yellow - yellowish brown
Odour	like: - Phenol
Melting point/freezing point	96 – 98 °C
Boiling point or initial boiling point and boiling range	194 °C at 93 hPa
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	>100 °C
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not applicable
Kinematic viscosity	not relevant
Solubility(ies)	
Water solubility	13,5 ^g / _l at 25 °C
Partition coefficient	
Partition coefficient n-octanol/water (log value):	2 (exp.)
Vapour pressure	not determined
Density and/or relative density	
Density	1,49 ^g / _{cm³} at 20 °C

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

3-Nitrophenol ≥99 %, for synthesis

article number: 4533

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	Relative vapour density	Information on this property is not available.
	Bulk density	~ 640 ^{kg} / _{m³}
	Particle characteristics	No data available.
	Other safety parameters	
	Oxidising properties	none
9.2	Other information	
	Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant
	Other safety characteristics:	There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

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

Danger of explosion: Reducing agents, Sulphuric acid, concentrated, **Risk of ignition:** Alkali hydroxide (caustic alkali), Bases, Acids

10.4 Conditions to avoid

Keep away from heat.

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

Harmful if swallowed.

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	328 ^{mg} / _{kg}	rat		TOXNET

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

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



3-Nitrophenol ≥99 %, for synthesis

article number: 4533

Serious eye damage/eye irritation

Causes serious eye irritation.

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

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

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

Data are not available.

• If in eyes

Causes serious eye irritation

• If inhaled

vertigo, cough, headache, Dyspnoea

• If on skin

Frequently or prolonged contact with skin may cause dermal irritation

Other information

Other adverse effects: Liver and kidney damage, Methaemoglobinaemia, Cardiac arrhythmias, Blood pressure drop, Spasms, Cyanosis (blue coloured blood)

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at 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)



3-Nitrophenol ≥99 %, for synthesis

article number: 4533

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Theoretical Oxygen Demand (without nitrification): 1,15 ^{mg}/_{mg} Theoretical Oxygen Demand (with nitrification): 1,61 ^{mg}/_{mg} Theoretical Carbon Dioxide: 1,898 ^{mg}/_{mg}

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	2 (Exp.)

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

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

12.7 Other adverse effects

Data are not available.

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

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. 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 6 acute toxicity

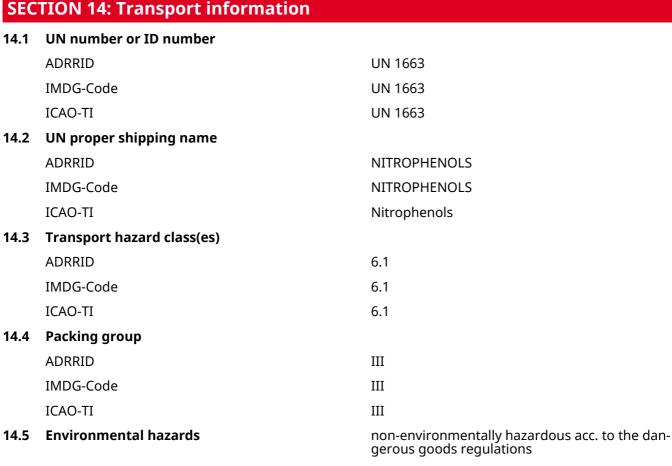
13.3 Remarks

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.

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

3-Nitrophenol ≥99 %, for synthesis

article number: **4533**



14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

Proper shipping name	NITROPHENOLS
Particulars in the transport document	UN1663, NITROPHENOLS, 6.1, III, (E)
Classification code	Т2
Danger label(s)	6.1
Special provisions (SP)	279, 802(ADN)
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	2



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



3-Nitrophenol ≥99 %, for synthesis

number: 4533	
Tunnel restriction code (TRC)	E
Hazard identification No	60
Emergency Action Code	2X
Regulations concerning the International (information	Carriage of Dangerous Goods by Rail (RID)Additional
Classification code	T2
Danger label(s)	6.1
$\langle \rangle$	
Special provisions (SP)	279, 802(ADN)
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	2
Hazard identification No	60
International Maritime Dangerous Goods (Code (IMDG) - Additional information
Proper shipping name	NITROPHENOLS
Particulars in the shipper's declaration	UN1663, NITROPHENOLS, 6.1, III
Marine pollutant	-
Danger label(s)	6.1
Special provisions (SP)	279
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-A
Stowage category	A
International Civil Aviation Organization (l	ICAO-IATA/DGR) - Additional information
Proper shipping name	Nitrophenols
Particulars in the shipper's declaration	UN1663, Nitrophenols, 6.1, III
Danger label(s)	6.1
Special provisions (SP)	A113
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 kg

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



3-Nitrophenol ≥99 %, for synthesis

article number: 4533

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	1.490 ^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)

not listed

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

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

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

3-Nitrophenol ≥99 %, for synthesis

® ROTH

article number: 4533

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
JP	CSCL-ENCS	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

Legend

AIIC	Australian Inventory of Industrial Chemicals
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EÌNEĆS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

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
1.1		EC number: 209-073-5	yes
1.1	EC number: 209-073-5	CAS number: 554-84-7	yes
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.2		Pictograms: change in the listing (table)	yes

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

3-Nitrophenol ≥99 %, for synthesis

article number: 4533



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: Warning		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	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
9.2	Temperature class (EU, acc. to ATEX): T2 (Maximum permissible surface temperature on the equipment: 300°C)		yes
11.1		Acute toxicity: change in the listing (table)	yes
14.1	UN number: 1663	UN number or ID number	yes
14.1		ADRRID: UN 1663	yes
14.1		IMDG-Code: UN 1663	yes
14.1		ICAO-TI: UN 1663	yes
14.2	UN proper shipping name: NITROPHENOLS	UN proper shipping name	yes
14.2	Hazardous ingredients: 3-Nitrophenol		yes
14.2		ADRRID: NITROPHENOLS	yes
14.2		IMDG-Code: NITROPHENOLS	yes
14.2		ICAO-TI: Nitrophenols	yes
14.3	Class: 6.1 (toxic substances)		yes
14.3		ADRRID: 6.1	yes
14.3		IMDG-Code: 6.1	yes
14.3		ICAO-TI: 6.1	yes

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

3-Nitrophenol ≥99 %, for synthesis

article number: 4533



	Former entry (text/value)	Actual entry (text/value)	Safety relev ant
14.4	Packing group: III (substance presenting low danger)	Packing group	yes
14.4		ADRRID: III	yes
14.4		IMDG-Code: III	yes
14.4		ICAO-TI: III	yes
14.5	Environmental hazards: none (non-environmentally hazardous acc. to the dangerous goods regulations)	Environmental hazards: non-environmentally hazardous acc. to the dan- gerous goods regulations	yes
14.8	UN number: 1663		yes
14.8	Class: 6.1		yes
14.8	Packing group: III		yes
14.8	Emergency Action Code: 2X		yes
14.8		Emergency Action Code: 2X	yes
14.8		Regulations concerning the International Car- riage of Dangerous Goods by Rail (RID)Addition- al information	yes
14.8		Classification code: T2	yes
14.8		Danger label(s): 6.1	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Special provisions (SP): 279, 802(ADN)	yes
14.8		Excepted quantities (EQ): E1	yes
14.8		Limited quantities (LQ): 5 kg	yes
14.8		Transport category (TC): 2	yes
14.8		Hazard identification No: 60	yes
14.8	UN number: 1663		yes
14.8	Class: 6.1		yes
14.8	Packing group: III		yes

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

3-Nitrophenol ≥99 %, for synthesis

article number: 4533



Section	Former entry (text/value)	Actual entry (text/value)	Safety relev- ant
14.8	UN number: 1663		yes
14.8	Class: 6.1		yes
14.8	Packing group: III		yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Danger label(s): change in the listing (table)	yes
15.1	• Regulation 649/2012/EU concerning the ex- port and import of hazardous chemicals (PIC): Not listed.		yes
15.1	• Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS): Not listed.		yes
15.1	• Regulation 850/2004/EC on persistent organic pollutants (POP): Not listed.		yes
15.1	Restrictions according to REACH, Annex XVII		yes
15.1		• Restrictions according to REACH, Annex XVII: change in the listing (table)	yes
15.1	• List of substances subject to authorisation (REACH, Annex XIV): not listed		yes
15.1		2012/18/EU (Seveso III): change in the listing (table)	yes
15.1	VOC content: 100 %		yes
15.1		VOC content: 100 %	yes
15.1		VOC content: 1.490 ^g / _l	yes
15.1		Industrial Emissions Directive (IED)	yes
15.1		VOC content: 0 %	yes
15.1		VOC content: 0 ^g / _l	yes
15.1	National inventories: Substance is listed in the following national in- ventories: - EINECS/ELINCS/NLP (Europe) - DSL/NDSL (Canada) - Toxic Substance Control Act (TSCA)		yes
15.1		Regulation on the marketing and use of explos- ives precursors: not listed	yes
15.1		Regulation on drug precursors: not listed	yes

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

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3-Nitrophenol ≥99 %, for synthesis

article number: 4533

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.1		Regulation on substances that deplete the ozone layer (ODS): not listed	yes
15.1		Regulation concerning the export and import of hazardous chemicals (PIC): not listed	yes
15.1		Regulation on persistent organic pollutants (POP): not listed	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	yes
15.1		National inventories: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations	
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)	
ATE	Acute Toxicity Estimate	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)	
Ceiling-C	Ceiling value	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
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)	
ED	Endocrine disruptor	
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	
EmS	Emergency Schedule	
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	
ΙΑΤΑ	International Air Transport Association	

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



3-Nitrophenol ≥99 %, for synthesis

article number: 4533

Abbr.	Descriptions of used abbreviations
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
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
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
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
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

Disclaimer

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