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

n-Pentane ≥95 %, extra pure

article number: **3747** Version: **6.0 en** Replaces version of: 2022-12-19 Version: (5)

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

1.1 Product identifier

Identification of the substance	n-Pentane ≥95 %, extra pure
Article number	3747
Index No (GB CLP)	601-006-00-1
EC number	203-692-4
CAS number	109-66-0

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

sicherheit@carlroth.de

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):

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



date of compilation: 2016-07-05 Revision: 2024-03-02

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Classification acc. to GHS

Section	n Hazard class		Hazard class and category	Hazard statement
2.6	Flammable liquid	2	Flam. Liq. 2	H225
3.8D	Specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336
3.10	Aspiration hazard	1	Asp. Tox. 1	H304
4.1C	Hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

Supplemental hazard information

Code	Supplemental hazard information
EUH066	repeated exposure may cause skin dryness or cracking

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling

Signal word Danger

Pictograms



Hazard statements

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects

Precautionary statements

Precautionary statements - prevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P273
- Avoid release to the environment

Precautionary statements - response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor
P331	Do NOT induce vomiting

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

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2.3 Other hazards

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	n-Pentane
Molecular formula	C ₅ H ₁₂
Molar mass	72,15 ^g / _{mol}
CAS No	109-66-0
EC No	203-692-4
Index No (GB CLP)	601-006-00-1

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.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Call a physician immediately. Observe aspiration hazard if vomiting occurs.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects, Aspiration hazard, Dizziness, Drowsiness, Narcosis

4.3 Indication of any immediate medical attention and special treatment needed

none



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SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings! water spray, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapourair mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may 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. Do not allow firefighting water to enter drains or water courses. 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

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

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6.4 Reference to other sections

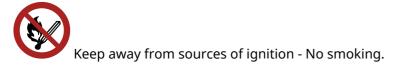
Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation.

Measures to prevent fire as well as aerosol and dust generation



Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Ground/bond container and receiving equipment.

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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SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
EU	pentane	109-66-0	IOELV	1.00 0	3.000						2006/15/ EC
GB	pentane	109-66-0	WEL	600	1.800						EH40/ 2005

Notation

TWA

Ceiling-C STEL

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

Human health values

Relevant DNELs and other threshold levels								
Endpoint	Threshold level	Used in	Exposure time					
DNEL	3.000 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects				
DNEL	432 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects				

Environmental values

Relevant	Relevant PNECs and other threshold levels							
End- point	Threshold level	Organism	Organism Environmental com- partment					
PNEC	230 ^{µg} / _l	aquatic organisms	freshwater	short-term (single instance)				
PNEC	230 ^{µg} / _l	aquatic organisms	marine water	short-term (single instance)				
PNEC	3.600 ^{µg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)				
PNEC	1,2 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)				
PNEC	1,2 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)				
PNEC	0,55 ^{mg} / _{kg}	terrestrial organisms	soil	short-term (single instance)				

8.2 **Exposure controls**

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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

>0,3 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.

Flame-retardant protective clothing.

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: AX (gas filters and combined filters against low-boiling point organic compounds, colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.



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SECTION 9: Physical and chemical properties

9.1	Information on basic physical and chemical properties				
	Physical state	liquid			
	Colour	colourless			
	Odour	characteristic - like: - Gasoline			
	Melting point/freezing point	-130 °C			
	Boiling point or initial boiling point and boiling range	35 – 36 °C			
	Flammability	flammable liquid in accordance with GHS criteria			
	Lower and upper explosion limit	1,4 vol% (LEL) - 8 vol% (UEL)			
	Flash point	-40 °C (ECHA)			
	Auto-ignition temperature	260 °C (ECHA)			
	Decomposition temperature	not relevant			
	pH (value)	not determined			
	Kinematic viscosity	0,35 ^{mm²} / _s at 25 °C			
	Dynamic viscosity	0,22 mPa s at 25 °C			
	Solubility(ies)				
	Water solubility	<0,1 ^g / _l at 20 °C			
	Partition coefficient				
	Partition coefficient n-octanol/water (log value):	3,45 (pH value: 7, 25 °C) (ECHA)			
	Soil organic carbon/water (log KOC)	2,9 (ECHA)			
	Vapour pressure	570 hPa at 20 °C			
	Density and/or relative density				
	Density	0,63 ^g / _{cm³} at 20 °C (ECHA)			
	Relative vapour density	2,49 (air = 1)			
	Particle characteristics	not relevant (liquid)			
	Other safety parameters				
	Oxidising properties	none			
9.2	Other information				
	Information with regard to physical hazard classes:	There is no additional information.			



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Other safety characteristics:

Gas group (explosion group)

IIA Maximum Experimental Safe Gap value; MESG > 0,9 mm

Maximum explosion pressure

SECTION 10: Stability and reactivity

10.1 Reactivity

It's a reactive substance. Risk of ignition. Vapours may form explosive mixtures with air.

If heated

Risk of ignition.

10.2 Chemical stability

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

9,5 bar

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser, Halogens, Nitric acid, => Explosive properties

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

Rubber articles, different plastics

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 inhaled.

Acute toxicity

Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	>5.000 ^{mg} / _{kg}	rat		ECHA
inhalation: vapour	LC50	>25,3 ^{mg} / _l /4h	rat		ECHA

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation



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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

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

aspiration hazard

• If in eyes

causes slight to moderate irritation

If inhaled

headache, vertigo, dizziness, fatigue, narcosis

• If on skin

irritation and significant inflammation of the skin (dermatitis) due to the defatting properties of the product may be caused by repeated or prolonged exposure

Other information

none

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.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)				
Endpoint	Value	Species	Source	Exposure time
LC50	4,26 ^{mg} / _l	rainbow trout (Onco- rhynchus mykiss)	ECHA	96 h
EC50	2,7 ^{mg} / _l	daphnia magna	ECHA	48 h



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12.2 Persistence and degradability

Theoretical Oxygen Demand: 3,548 ^{mg}/_{mg} Theoretical Carbon Dioxide: 3,05 ^{mg}/_{mg}

Biodegradation

The substance is readily biodegradable.

Process of degradability			
Process	Degradation rate	Time	
oxygen depletion	87 %	28 d	

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	3,45 (pH value: 7, 25 °C) (ECHA)
BCF	171 (ECHA)

12.4 Mobility in soil

The Organic Carbon normalised adsorption coefficient	2,9 (ECHA)
--	------------

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. Avoid release to the environment. Refer to special instructions/safety data sheets.

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.

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Properties of waste which render it hazardous

HP 3 flammable

HP 5 specific target organ toxicity (STOT)/aspiration toxicityHP 14 ecotoxic

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.

SEC	SECTION 14: Transport information				
14.1	UN number or ID number				
	ADRRID	UN 1265			
	IMDG-Code	UN 1265			
	ICAO-TI	UN 1265			
14.2	UN proper shipping name				
	ADRRID	PENTANES			
	IMDG-Code	PENTANES			
	ICAO-TI	Pentanes			
14.3	Transport hazard class(es)				
	ADRRID	3			
	IMDG-Code	3			
	ICAO-TI	3			
14.4	Packing group				
	ADRRID	II			
	IMDG-Code	II			
	ICAO-TI	II			
14.5	Environmental hazards	hazardous to the aquatic environment			

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	PENTANES
Particulars in the transport document	UN1265, PENTANES, 3, II, (D/E), environmentally hazardous
Classification code	F1
Danger label(s)	3, "Fish and tree"

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	Environmental hazards	YES (hazardous to the aquatic environment)
	Excepted quantities (EQ)	E2
	Limited quantities (LQ)	1 L
	Transport category (TC)	2
	Tunnel restriction code (TRC)	D/E
	Hazard identification No	33
	Emergency Action Code	3YE
	Regulations concerning the International Carria information	age of Dangerous Goods by Rail (RID)Additional
	Classification code	F1
	Danger label(s)	3, "Fish and tree"
	Environmental hazards	Yes Hazardous to water
	Excepted quantities (EQ)	E2
	Limited quantities (LQ)	1 L
	Transport category (TC)	2
	Hazard identification No	33
	International Maritime Dangerous Goods Code	(IMDG) - Additional information
	Proper shipping name	PENTANES
	Particulars in the shipper's declaration	UN1265, PENTANES, 3, II, -40°C c.c., MARINE POL- LUTANT
	Marine pollutant	Yes (hazardous to the aquatic environment)
	Danger label(s)	3, "Fish and tree"
	Special provisions (SP)	-
	Excepted quantities (EQ)	E2
	Limited quantities (LQ)	1 L
	EmS	F-E, S-D
	Stowage category	E

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International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information		
Proper shipping name	Pentanes	
Particulars in the shipper's declaration	UN1265, Pentanes, 3, II	
Environmental hazards	Yes (hazardous to the aquatic environment)	
Danger label(s)	3	
Excepted quantities (EQ)	E2	
Limited quantities (LQ)	1 L	

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	
E2	environmental hazards (hazardous to the aquatic en- vironment, cat. 2)	200 500	57)	

Notation

57) Hazardous to the Aquatic Environment in category Chronic 2

Deco-Paint Directive

VOC content	100 %
VOC content	630 ^g /l

Industrial Emissions Directive (IED)

VOC content	100 %
VOC content	630 ^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

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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

Dangerous substances with restrictions (GB REACH, Annex 17)				
Name of substance	Name acc. to inventory	CAS No	Νο	
n-Pentane	this product meets the criteria for classi- fication in accordance with Regulation No 1272/2008/EC		3	
n-Pentane	flammable / pyrophoric		40	

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

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LegendAIICAustralian Inventory of Industrial ChemicalsCICRChemical Inventory and Control RegulationCSCL-ENCSList of Existing and New Chemical Substances (CSCL-ENCS)DSLDomestic Substances List (DSL)ECSIEC Substance Inventory (EINECS, ELINCS, NLP)IECSCInventory of Existing Chemical SubstancesINSQNational Inventory of Chemical SubstancesKECIKorea Existing Chemicals InventoryNZIOCNew Zealand Inventory of ChemicalsPICCSPhilippine Inventory of Chemicals and Chemical Substances (PICCS)REACH Reg.REACH registered substancesTCSITaiwan Chemical Substance InventoryTSCAToxic Substance Control Act	na
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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
2.3	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
15.1	VOC content: 100 % 630 ^g / _l	VOC content: 100 %	yes
15.1		VOC content: 630 ^g / _l	yes
15.1		National inventories: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2006/15/EC	Commission Directive establishing a second list of indicative occupational exposure limit values in imple- mentation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)
BCF	Bioconcentration factor
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)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 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)

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



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Abbr.	Descriptions of used abbreviations
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 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
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
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
IOELV	Indicative occupational exposure limit value
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
LEL	Lower explosion limit (LEL)
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
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
UEL	Upper explosion limit (UEL)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

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

n-Pentane ≥95 %, extra pure



article number: 3747

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
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

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