Benzene v.p.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 3/17/2023 Version: 1.1

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	Benzene v.p.
EC Index-No.	:	601-020-00-8
EC-No.	:	200-753-7
CAS-No.	:	71-43-2
REACH registration No.	:	01-2119447106-44
Product code	:	CL00.0215
Type of product	:	Pure substance
Formula	:	C6H6
Synonyms	:	annulene / benzene / benzene concentrate, full range / benzene concentrate, heartcut / benzene, heartcut SCF31RAP / benzene, pure / bicarburet of hydrogen / carbon oil / coal naphtha / cyclohexatriene / mineral naphtha / nitration benzene / petroleum benzene / phene / phenyl hydride
BIG No	:	10006

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

1.2.1. Relevant identified uses

Use of the substance/mixture	:	Laboratory chemical

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Chem-Lab nv
Industriezone 'De arend 2'
Zedelgem – Belgium
Belgium
T +32 50 288320
info@chem-lab.be - https://www.chem-lab.be

1.4. Emergency telephone number

Emergency number	:	+32 50 28 83 20

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2	H225
Carcinogenicity, Category 1A	H350
Germ cell mutagenicity, Category 1B	H340
Specific target organ toxicity – Repeated exposure, Category 1	H372
Aspiration hazard, Category 1	H304
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS08 GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H350 - May cause cancer.
H340 - May cause genetic defects.
H372 - Causes damage to organs (blood system) through prolonged or repeated exposure.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P210 - Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 - Do NOT induce vomiting.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Benzene v.p.	CAS-No.: 71-43-2 EC-No.: 200-753-7 EC Index-No.: 601-020-00-8 REACH-no: 01-2119447106-44	100	Flam. Liq. 2, H225 Carc. 1A, H350 Muta. 1B, H340 STOT RE 1, H372 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319

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

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

First-aid measures after inhalation : Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

First-aid measures after skin contact : If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

First-aid measures after ingestion : Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

Symptoms/effects after inhalation : Central nervous system depression. Headache. Feeling of weakness. Nausea. Dizziness. Mental confusion. Excited/restless. Coordination disorders. Disturbances of consciousness. Disturbances of heart rate. Respiratory difficulties. FOLLOWING SYMPTOMS MAY APPEAR LATER: Change in the haemogramme/blood composition.

Symptoms/effects after skin contact : Tingling/irritation of the skin.

Symptoms/effects after eye contact : Irritation of the eye tissue.

Symptoms/effects after ingestion : Risk of aspiration pneumonia. AFTER INGESTION OF HIGH QUANTITIES: Central nervous system depression. Irritation of the gastric/intestinal mucosa. Affection of the renal tissue. Change in urine composition. Symptoms similar to those listed under inhalation.

Chronic symptoms : Red skin. Dry skin. Itching. Cracking of the skin. Change in the haemogramme/blood composition. Impairment of the blood forming system. Affection of the bone marrow. Enlargement of the lymph glands. Weakening of the immune system. Impairment of the nervous system. Feeling of weakness. Paleness. Dizziness. Loss of appetite. Sleeplessness. Impaired memory. Impaired concentration.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (not alcohol-resistant).

Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD: Highly flammable liquid and vapour. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD: May be ignited by sparks. May build up electrostatic charges: risk of ignition. Gas/vapour spreads at floor level: ignition hazard.

Explosion hazard : DIRECT EXPLOSION HAZARD: Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD: may be ignited by sparks.

Hazardous decomposition products in case of fire : Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

Protection during firefighting : Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034). Large spills/in enclosed spaces: self-contained breathing apparatus (EN 136 + EN 137). Large spills/in enclosed spaces: gas-tight suit (EN 943).

Emergency procedures : Keep upwind. Mark the danger area. Consider evacuation. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.

Methods for cleaning up : Prevent evaporation by covering with: foam. Take up liquid spill into a non combustible material e.g.: sand, earth, vermiculite or kieselguhr. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly. Work under local exhaust/ventilation. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep container tightly closed. Handle uncleaned empty containers as full ones. Do not discharge the waste into the drain. Do not use compressed air for pumping over.

Hygiene measures : Observe very strict hygiene - avoid contact.

7.2. Conditions for safe storage, including any incompatibilities

Storage temperature : > 5 °C

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. halogens.

Storage area : Meet the legal requirements. Keep container in a well-ventilated place. Fireproof storeroom. Store only in a limited quantity. Provide for a tub to collect spills. Provide the tank with earthing. Protect against frost. May be stored under inert gas.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: steel. stainless steel. monel steel. iron. glass. polypropylene.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Benzene v.p. (71-43-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	3.25 mg/m³ 1.65 mg/m³ 0.66 mg/m³
IOEL TWA [ppm]	1 ppm 0.5 ppm 0.2 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	3.25 mg/m³
OEL TWA [ppm]	1 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	3.25 mg/m³
VME (OEL TWA) [ppm]	1 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	0.7 mg/m³
TGG-8u (OEL TWA) [ppm]	0.2 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	3.25 mg/m³
WEL TWA (OEL TWA) [2]	1 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	0.5 ppm
ACGIH OEL STEL [ppm]	2.5 ppm

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Benzene v.p. (71-43-2)	
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	0.14 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	80 µg/l
PNEC aqua (marine water)	8 µg/l

Benzene v.p. (71-43-2)	
PNEC (Sediment)	
PNEC sediment (freshwater)	39 mg/kg dwt
PNEC sediment (marine water)	0.136 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.225 mg/kg dwt

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Combined eye and respiratory protection

8.2.2.2. Skin protection

Skin and body protection:
Protective clothing (EN 14605 or EN 13034). Head/neck protection

Hand protection:
Protective gloves against chemicals (EN 374)

Other skin protection

Materials for protective clothing:
Excellent resistance: Polyvinylalcohol (PVA). Polyethylene/ethylenevinylalcohol. Good resistance: Tetrafluoroethylene. Viton. Poor resistance: Butyl rubber. Natural rubber. neoprene (chloroprene rubber). Polyethylene. Polyvinylchloride (PVC). Polyurethane. Nitrile rubber. neoprene/natural rubber

8.2.2.3. Respiratory protection

Respiratory protection:
Full face mask with filter type A. High vapour/gas concentration: self-contained breathing apparatus (EN 136 + EN 137)

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Pure substance: colourless. Unpurified: light yellow.
Appearance	:	Liquid.
Molecular mass	:	78.12 g/mol
Odour	:	Aromatic odour.
Odour threshold	:	Not available

Melting point	:	5 °C (1013 hPa)
Freezing point	:	Not available
Boiling point	:	80 °C (1013 hPa)
Flammability	:	Not available
Oxidising properties	:	Not classified.
Explosive limits	:	1.2 – 7.8 vol % 30 – 270 g/m³
Lower explosion limit	:	1.2 vol %
Upper explosion limit	:	7.8 vol %
Flash point	:	-11 °C (1013 hPa)
Auto-ignition temperature	:	498 °C (1013 hPa, T1)
Decomposition temperature	:	No data available in the literature
pH	:	No data available in the literature
Viscosity, kinematic	:	No data available in the literature
Viscosity, dynamic	:	0.604 mPa.s (25 °C)
Solubility	:	Poorly soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Soluble in tetrachloromethane. Soluble in acetic acid. Soluble in carbondisulfide. Soluble in oils/fats. Water: 0.18 g/100ml (24 °C) Ethanol: complete Ether: complete Acetone: complete
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water (Log Pow)	:	2.13 (Experimental value, 25 °C)
Vapour pressure	:	94 hPa (20 °C, EN 13016-1: Liquid petroleum products – Vapour pressure)
Vapour pressure at 50°C	:	358 hPa
Critical pressure	:	49250 hPa
Saturation concentration	:	320 g/m³
Density	:	876 kg/m³ (20 °C)
Relative density	:	0.88 (20 °C)
Relative vapour density at 20°C	:	2.7
Relative density of saturated gas/air mixture	:	1.2 (20 °C)
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits	:	1.2 – 7.8 vol % 30 – 270 g/m³
Critical temperature	:	289 °C

9.2.2. Other safety characteristics

Minimum ignition energy	:	0.2 mJ
Relative evaporation rate (butylacetate=1)	:	5.1
Relative evaporation rate (ether=1)	:	2.8
Specific conductivity	:	< 0.01 pS/m
VOC content	:	100 %
Other properties	:	Gas/vapour heavier than air at 20°C,Clear,Volatile,Neutral reaction,May generate electrostatic charges

SECTION 10: Stability and reactivity

10.1. Reactivity

Violent to explosive reaction with many compounds e.g.: with (some) halogens, with (strong) oxidizers and with (some) acids. Spontaneously flammable on exposure to some compounds.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Benzene v.p. (71-43-2)	
LD50 oral rat	> 2000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 7 day(s))
LD50 dermal rabbit	> 9.4 ml/kg (21 CFR 191.10, 24 h, Rabbit, Male / female, Experimental value, Damaged skin)
LC50 Inhalation - Rat	43.77 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (vapours), 14 day(s))

Skin corrosion/irritation : Causes skin irritation.
pH: No data available in the literature
Serious eye damage/irritation : Causes serious eye irritation.
pH: No data available in the literature
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : May cause genetic defects.
Carcinogenicity : May cause cancer.
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Causes damage to organs (blood system) through prolonged or repeated exposure.
Aspiration hazard : May be fatal if swallowed and enters airways.

Benzene v.p. (71-43-2)	
Viscosity, kinematic	No data available in the literature

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Odour threshold is well above one of the exposure limits,Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg),May be fatal if swallowed and enters airways,Causes skin irritation,Practically non-toxic by inhalation (LC50 inh, rat > 20 mg/l/4h),Causes serious eye irritation,Caution! Substance is absorbed through the skin

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

Ecology - air : Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water : Toxic to crustacea (Daphnia). Toxic to fishes. Groundwater pollutant. Nitrification of activated sludge is inhibited. Harmful to algae. Inhibits photosynthesis of algae. Harmful to bacteria. Toxic to plankton.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Not rapidly degradable

Benzene v.p. (71-43-2)	
LC50 - Fish [1]	5.3 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	10 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

Benzene v.p. (71-43-2)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	2.18 g O_2/g substance
Chemical oxygen demand (COD)	2.15 g O_2/g substance
ThOD	3.1 g O_2/g substance

12.3. Bioaccumulative potential

Benzene v.p. (71-43-2)	
BCF - Fish [1]	< 10 (OECD 305: Bioconcentration: Flow-Through Fish Test, 3 day(s), Leuciscus idus, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	2.13 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Benzene v.p. (71-43-2)	
Surface tension	29 mN/m (20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.848 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

Benzene v.p. (71-43-2)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Do not discharge into drains or the environment. Dispose of at authorized waste collection point. Do not discharge into surface water (Directive 2000/60/EC, Council Decision 2455/2001/EC). Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

European List of Waste (LoW) code : 15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1114	UN 1114	UN 1114	UN 1114	UN 1114
14.2. UN proper shipping name				
benzene	benzene	benzene	benzene	benzene
Transport document description				
UN 1114 benzene, 3, II, (D/E)	UN 1114 benzene, 3, II	UN 1114 benzene, 3, II	UN 1114 benzene, 3, II	UN 1114 benzene, 3, II
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

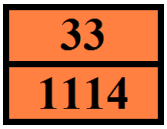
14.6. Special precautions for user

Overland transport

Transport regulations (ADR) : Subject to the provisions

Classification code (ADR) : F1

Hazard identification number (Kemler No.) : 33

Orange plates : 

Tunnel restriction code (ADR) : D/E
EAC code : 3WE

Transport by sea
Transport regulations (IMDG) : Subject to the provisions
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D

Air transport
Transport regulations (IATA) : Subject to the provisions

Inland waterway transport
Classification code (ADN) : F1
Carriage permitted (ADN) : T

Rail transport
Transport regulations (RID) : Subject to the provisions
Classification code (RID) : F1

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Listed on the PIC list (Regulation EU 649/2012): Benzene

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

VOC Directive (2004/42)

VOC content : 100 %

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 4	Hematopathies caused by benzene and all products containing it
RG 4 BIS	Gastrointestinal disorders caused by benzene, toluene, xylenes and all products containing them
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV; ID No. 29).

Storage class (LGK, TRGS 510) : LGK 3 - Flammable liquids.

Joint storage table :

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for : LGK 1, LGK 2A, LGK 4.1A, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1C, LGK 5.2, LGK 6.1B, LGK 6.2, LGK 7.

Joint storage with restrictions permitted for : LGK 5.1B, LGK 6.1D, LGK 11, LGK 10-13.

Joint storage permitted for : LGK 2B, LGK 3, LGK 6.1A, LGK 6.1C, LGK 8A, LGK 8B, LGK 10, LGK 12, LGK 13.

Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : Z(2) - biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/reprotoxicity/bioacumulative potential or toxicity)

SZW-lijst van kankerverwekkende stoffen : benzene is listed

SZW-lijst van mutagene stoffen : benzene is listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Switzerland

Storage class (LK) : LK 3 - Flammable liquids

Chemicals Ordinance (SR 813.11) : Group 1

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
Muta. 1B	Germ cell mutagenicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.