



Benzene

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 9/27/1999 Revision date: 12/12/2022 Version: 11.0

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

1.1. Product identifier

Chemical type : Substance
Trade name : Benzene
Trade name : Benzene
EC Index-No. : 601-020-00-8
EC-No. : 200-753-7
CAS-No. : 71-43-2
REACH registration No : 01-2119447106-44-0040
Product code : 11010043
IUPAC name : benzene
Formula : C₆H₆

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

1.2.1. Relevant identified uses

Main use category : Industrial use
Industrial/Professional use spec : Manufacture of substance
Formulation of substance
Distribution of substance
Use as an intermediate

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SLOVNAFT, a.s. a.s.
Vlčie hrdlo 1
SK- 824 12 Bratislava
Slovakia
T +421-(0)2/4055-1111 - F +421-(0)2/5859-9759
info@slovnaft.sk - www.slovnaft.sk

1.4. Emergency telephone number

Emergency number : Podnikový dispečing 1: ++0421(0)2/4055 3344

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096 Haifa	+972 4 854 1900	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD 2090 Msida	+356 2545 6508	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for healthcare professionals

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Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX Cardiff	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB Newcastle	0344 892 0111	Only for healthcare professionals

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

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)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: 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 (in contact with skin, inhalation, oral).
H350 - May cause cancer (in contact with skin, inhalation, oral).
H372 - Causes damage to organs (haematopoietic system) through prolonged or repeated exposure (in contact with skin, inhalation, oral).

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, open flames, sparks. – No smoking.
P243 - Take precautionary measures against static discharge.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.

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P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P301+P310 - If swallowed, immediately call a doctor.
P331 - Do NOT induce vomiting.
P202 - Do not handle until all safety precautions have been read and understood.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Endocrine disruptors: not yet evaluated

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent
Name : SN / 200-753-7 / benzene
CAS-No. : 71-43-2
EC-No. : 200-753-7
EC Index-No. : 601-020-00-8

Name	Product identifier	%
benzene	CAS-No.: 71-43-2 EC-No.: 200-753-7 EC Index-No.: 601-020-00-8 REACH-no: 05-2114576382-44-0000	≥ 99.9

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Before attempting to rescue casualties, isolate area from all potential sources of ignition including disconnecting electrical supply. Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces. Drench contaminated clothing with water before removing to avoid risk of sparks from static electricity.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If casualty is unconscious and: Not breathing. Ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical advice. Breathing. Place in the recovery position. Administer oxygen if necessary. Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve.

First-aid measures after skin contact : Remove contaminated clothing, contaminated footwear and dispose of safely. Wash affected area with soap and water. Seek medical attention if skin irritation, swelling or redness develops and persists. Do not wait for symptoms to develop. For minor thermal burns, cool the burn. Hold the burned area under cold running water for at least five minutes, or until the pain subsides. Body hypothermia must be avoided.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.

First-aid measures after ingestion : in case of ingestion, always assume that aspiration has occurred. The casualty should be sent immediately to hospital. Do not wait for symptoms to develop. Do not induce vomiting as there is high risk of aspiration. Do not give anything by mouth to an unconscious person.

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

Symptoms/effects after inhalation : Inhalation of vapours may cause headache, nausea, vomiting and an altered state of consciousness.

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Symptoms/effects after skin contact	: Symptoms: reddening, irritation.
Symptoms/effects after eye contact	: Slight eye irritation.
Symptoms/effects after ingestion	: Ingestion (swallowing) of this material may result in an altered state of consciousness and loss of coordination.

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	: Foam (trained personnel only). Water fog (trained personnel only). Dry chemical powder. Carbon dioxide. Other inert gases (subject to regulations). Sand or earth.
Unsuitable extinguishing media	: Do not use direct water jets on the burning product. they could cause splattering and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting	: In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Other information	: Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Antistatic non-skid safety shoes or boots. Work helmet. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection: a half or full-face respirator with filter(s) for organic vapours/H ₂ S, or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
Emergency procedures	: Stop or contain leak at the source, if safe to do so. Avoid direct contact with released material. Stay upwind. In case of large spillages, alert occupants in downwind areas. Keep non-involved personnel away from the area of spillage. Alert emergency personnel. The feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). If required, notify relevant authorities according to all applicable regulations. Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. If necessary dike the product with dry earth, sand or similar non-combustible materials. Do not use direct jets. When inside buildings or confined spaces, ensure adequate ventilation.

6.1.2. For emergency responders

No additional information available

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6.2. Environmental precautions

Prevent product from entering sewers, rivers or other bodies of water, or underground spaces (tunnels, cellars, etc.). Absorb spilled product with suitable non-combustible materials. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters, contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. Contain spillage – ventilate area and allow to evaporate. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.

6.3. Methods and material for containment and cleaning up

For containment : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken.

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 : Obtain special instructions before use. Ensure that all relevant regulations regarding explosive atmospheres, and handling and storage facilities of flammable products, are followed. Risk of explosive mixtures of vapour and air. Keep away from heat/sparks/open flames/hot surfaces. Do not eat, drink or smoke when using this product. Avoid contact with the hot product. Avoid release to the environment. Take precautionary measures against static electricity. Ground/bond containers, tanks and transfer/receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. The vapour is heavier than air. Beware of accumulation in pits and confined spaces. Do not use compressed air for filling, discharging, or handling operations. Avoid contact with skin and eyes. Do not ingest. Do not breathe vapours. Use adequate personal protective equipment as required. Ensure that proper housekeeping measures are in place. Keep away from food and beverages. Wash the hands thoroughly after handling. Change contaminated clothes at the end of working shift.

Handling temperature : 10 – 50 °C

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content and flammability. Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability / explosion hazards. Open slowly in order to control possible pressure release. Empty containers may contain flammable product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.

Storage conditions : Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.

Storage temperature : 5 – 40 °C

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

Storage area : Use and store only outdoors or in a well-ventilated area. Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Store separately from oxidising agents.

Special rules on packaging : If the product is supplied in containers: Keep only in the original container or in a suitable container for this kind of product. Keep containers tightly closed and properly labelled. Protect from the sunlight.

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Packaging materials : Recommended materials: For containers, or container linings use materials specifically approved for use with this product. some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.

7.3. Specific end use(s)

This substance is handled under Strictly Controlled Conditions in accordance with REACH regulation Article 17(3) for on-site isolated intermediates. in case the substance is transported to other sites for further processing, the substance should be handled at these sites under the Strictly Controlled Conditions as specified in REACH regulation Article 18(4). Site documentation to support safe handling arrangements including the selection of engineering, administrative and personal protective equipment controls in accordance with risk-based management systems is available at each manufacturing site. Written confirmation of application of Strictly Controlled Conditions has been received from every affected Distributor and Downstream Processor/User of the Registrant's intermediate.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Benzene (71-43-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	3.25 mg/m ³
IOEL TWA [ppm]	1 ppm
IOEL STEL	16.25 mg/m ³
IOEL STEL [ppm]	5 ppm
benzene (71-43-2)	
EU - Biological Limit Value (BLV)	
Local name	Benzene
BLV	28 µg/l Parameter: benzene - Medium: blood - Sampling time: immediately end of shift 46 µg/g creatinine Parameter: phenylmercapturic - Medium: urine - Sampling time: end of exposure/shift
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	3.25
GVI (OEL TWA) [2]	1
KGVI (OEL STEL) [ppm]	1 ppm
Croatia - Biological limit values	
Remark	4,99 mmol/l u krajnje izdahnutom zraku
Hungary - Occupational Exposure Limits	
Local name	BENZOL
AK (OEL TWA)	3.25 mg/m ³
Remark	k(1A) (rákkeltő), b (Bőrön át is felszívódik), i (ingerlő anyag, amely izgatja a bőrt, nyálkahártyát, szemet vagy mindhármát), BEM (biológiai expozíciós mutató); EU6 (2019/130 EU irányelvben közölt érték); T (Azok az anyagok, amelyek egészségkárosító hatása TARTÓS expozíciót követően jelentkezik)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről

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benzene (71-43-2)	
Hungary - Biological Exposure Indices	
Local name	Benzol
BEI	0.04 mg/g creatinine Biológiai expozíciós (hatás) mutató: S-fenilmerkaptursav - Biológiai minta: vizeletben - Mintavétel ideje: m.v. (műszak végén) 0.22 µmol/mmol Creatinine Biológiai expozíciós (hatás) mutató: S-fenilmerkaptursav - Biológiai minta: vizeletben - Mintavétel ideje: m.v. (műszak végén)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről

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 (71-43-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	234 mg/kg bodyweight/day
Acute - systemic effects, inhalation	3.25 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	0.234 mg/kg bodyweight
Acute - systemic effects, inhalation	0.00325 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	1.9 mg/l
PNEC aqua (intermittent, freshwater)	1.9 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	33 mg/kg dwt
PNEC (Soil)	
PNEC soil	4.8 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	39 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Where hot product is handled in confined spaces, effective local ventilation must be provided.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Protective goggles. Protective clothing. Gas mask with filter type A.

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Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

If contact is likely, a protection (protective shield and/or safety goggles) should be used.

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable coveralls to prevent exposure to the skin. Coveralls should be changed at the end of the work shift and cleaned as necessary to avoid transfer of product to clothes or underwear.

Hand protection:

Wear chemically resistant gloves (tested to EN374) in combination with specific activity training. Gloves must be periodically inspected and changed in case of wear, perforations or contaminations.

8.2.2.3. Respiratory protection

Respiratory protection:

to avoid respiratory tract irritation inhalation exposure should be kept to a minimum. If exposure levels cannot be determined or estimated with adequate confidence, or an oxygen deficiency is possible, only SCBA's should be used. If necessary, approved respiratory protection equipment shall be used when handling hot product in confined spaces: enclosed face mask with cartridge/filter type "A" or self-contained breathing apparatus (SCBA). Change filter cartridge on respirator daily

8.2.2.4. Thermal hazards

Thermal hazard protection:

None in normal conditions.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Store finished products in closed containers (e.g. bulk tanks, drums, cans). Store all VOC-containing wastes in closed, secure containers (e.g. bulk tanks, intermediate bulk containers, drums). Incinerate, absorb, or adsorb vapours stripped from solution whenever necessary. Use vapour recovery units when necessary. Carefully handle the substance to minimise releases.

Consumer exposure controls:

Substance registered as Isolated intermediate under SCC). This substance is handled under Strictly Controlled Conditions in accordance with REACH regulation Article 17(3) for on-site isolated intermediates. In case the substance is transported to other sites for further processing, the substance should be handled at these sites under the Strictly Controlled Conditions as specified in REACH regulation Article 18(4). Site documentation to support safe handling arrangements including the selection of engineering, administrative and personal protective equipment controls in accordance with risk-based management systems is available at each manufacturing site. Written confirmation of application of Strictly Controlled Conditions has been received from every affected Distributor and Downstream Processor/User of the Registrant's intermediate.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: aromatic odour.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 5.49 °C
Freezing point	: No data available
Boiling point	: 80.09 °C
Flash point	: - 11 °C
Auto-ignition temperature	: 498 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 10 kPa at 20 °C

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Relative vapour density at 20°C	: No data available
Relative density	: No data available
Density	: 0.8765 g/m ³ at 20°C
Solubility	: Water: 1.88 g/l at 23,5 °C
Partition coefficient n-octanol/water (Log Pow)	: 2.13 at 25 °C
Partition coefficient n-octanol/water (Log Kow)	: 2.13
Viscosity, kinematic	: 0.604 mm ² /s at 25 °C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 1.1 – 9.5 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

This substance is stable under all ordinary circumstances at ambient temperatures, and if released into the environment.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.

10.4. Conditions to avoid

They may be ignited by heat, sparks, static electricity or flames.

10.5. Incompatible materials

A mixture with nitrates or other strong oxidisers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass.

10.6. Hazardous decomposition products

Combustion (incomplete) will likely generate oxides of carbon, sulphur and nitrogen, as well as additional undetermined organic compounds of the same elements.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Benzene (71-43-2)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 Inhalation - Rat	> 20 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: May cause genetic defects (in contact with skin, inhalation, oral).
Carcinogenicity	: May cause cancer (in contact with skin, inhalation, oral).
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

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STOT-repeated exposure : Causes damage to organs (haematopoietic system) through prolonged or repeated exposure (in contact with skin, inhalation, oral).

benzene (71-43-2)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.

Benzene (71-43-2)	
Viscosity, kinematic	0.604 mm ² /s at 25 °C

SECTION 12: Ecological information

12.1. Toxicity

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

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

Benzene (71-43-2)	
LC50 - Fish [1]	5.3 mg/l
LC50 - Fish [2]	0.8 mg/l
LC50 - Other aquatic organisms [2]	3 mg/l
EC50 - Crustacea [1]	10 mg/l
EC50 - Other aquatic organisms [2]	100 mg/l The 24 hour IC50 for nitrification

12.2. Persistence and degradability

Benzene (71-43-2)	
Persistence and degradability	Easily biodegradable (concerning to the criteria of the OECD).

12.3. Bioaccumulative potential

Benzene (71-43-2)	
Bioconcentration factor (BCF REACH)	1,1 20
Partition coefficient n-octanol/water (Log Pow)	2.13 at 25 °C
Partition coefficient n-octanol/water (Log Kow)	2.13
Bioaccumulative potential	Does not accumulate in organisms.

12.4. Mobility in soil

Benzene (71-43-2)	
Mobility in soil	85

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives. Disposal must be done according to official regulations.
Waste treatment methods	: Contain and dispose of waste according to local regulations. External recovery and recycling of waste should comply with applicable local and/or national regulations. External treatment and disposal of waste should comply with applicable local and/or national regulations. Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended.
Sewage disposal recommendations	: Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Waste disposal recommendations	: Clear up spills immediately and dispose of waste safely.
Additional information	: (*) Hazardous waste according to Directive 91/689/EEC. European Waste Catalogue code(s) (Decision 2001/118/CE): The final user has the responsibility for the attribution of the most suitable code, according to the actual use(s) of the material, contaminations or alterations.
Ecology - waste materials	: Hazardous waste. Avoid any discharge of the product into waste water. Disposal in high-temperature incinerator (> 1200 °C).
EWG (EURAL) code	: 07 06 04* - other organic solvents, washing liquids and mother liquors 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	RID	ADN	IMDG	IATA
14.1. UN number				
1114	1114	1114	1114	1114
14.2. UN proper shipping name				
BENZENE	BENZENE	BENZENE	BENZENE	BENZENE
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	Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
14.6. Special precautions for user				
F1	F1	F1		
No supplementary information available				

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Not listed on REACH Annex XVII

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

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

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

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

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

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

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP)

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

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

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

Netherlands

SZW-lijst van kankerverwekkende stoffen : SN / 200-753-7 / benzene is listed

SZW-lijst van mutagene stoffen : SN / 200-753-7 / benzene is listed

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

SZW-lijst van reprotoxische stoffen –

Vruchtbaarheid

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

Denmark

Class for fire hazard : Class I-1

Store unit : 1 liter

Classification remarks : F <Flam. Liq. 2>; 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

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Switzerland

Storage class (LK) : LK 3 - Flammable liquids

15.2. Chemical safety assessment

No additional information available

Benzene

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 16: Other information

Abbreviations and acronyms:

C&L	Classification and Labelling
CAS	Chemical Abstracts Service. See www.cas.org .
CMR	Carcinogen, Mutagen and Reprotoxic
CONCAWE	CONservation of Clean Air and Water in Europe
CSA	Chemical Safety Assessment
CSR	Chemical Safety Report
DNEL	Derived No-Effect Level
DSD	Dangerous Substance Directive
EC	European Commission
EINECS	European Inventory of Existing Commercial Substances
ELINCS	European List of Notified Chemical Substances
ES	Exposure Scenarios
ESIS	European Substances Information System
GHS	Globally Harmonised System for the Classification and Labelling of Chemicals
LC50	Lethal Concentration, 50%
LD50	Lethal Dose, 50%

Data sources : LOA registration dossier. ESIS : European chemical Substances Information System.
Training advice : Before handling, storing or using the present substance for the first time, employees must be informed.

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

SDS EU (REACH Annex II) MOL

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.