

Safety Data Sheet(SDS)

According to Regulation (EU) No. 2020/878

Version : 3-1

Revision date : 01-06-2026

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

1.1. Product identifier

Product identifier : BZ_BENZENE

Other means of identification : No data

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

○ Relevant identified uses

1.Raw materials and intermediates

○ Uses advised against

Use for recommended use only

Do not use it for weapons manufacturing and related purposes.

1.3. Details of the supplier of the safety data sheet

○ Seller

Company name : Lotte Daesan Petrochem Corporation

Address : 82 Dokgot 1-ro, Daesan-eup, Seosan-si, Chungcheongnam-do

Telephone number : +82-41-689-5114

Fax number : +82-41-689-5985

Email : www.ldpc.co.kr (contact)

1.4. Emergency telephone number

Emergency phone number : (Control Room) +82-41-689-5119

Opening hours : 08:30~17:30 (GMT+9)

Other comments(e.g. language(s) of the phone service) : English

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

- Flammable liquids Category 2
- Skin corrosion/irritation Category 2
- Serious eye damage/eye irritation Category 2
- Carcinogenicity Category 1A
- Germ cell mutagenicity Category 1B
- Specific target organ toxicity - repeated exposure Category 1
- Aspiration hazard Category 1

2.2. Label elements

Hazard pictograms



Signal word

- DANGER

Hazard statements

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.

Precautionary statements

- Prevention

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use only explosion-proof electrical, ventilating, lighting and equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Avoid contact during pregnancy/ while nursing.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

- Response

P301+P310 IF SWALLOWED: Call a POISON CENTER / toxins center / physician.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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

P308+P313 IF exposed or concerned: Get medical advice/ attention.

P314 Get medical advice/attention if you feel unwell.

P321 Specific treatment (see supplemental instructions on the administration of antidotes on this label).

P331 Do NOT induce vomiting.

P332+P313 If skin irritation occurs: Get medical advice/ attention.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

- Storage

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

- Disposal

P501 Discard the contents/containers in accordance with the laws and laws related to waste.

2.3. Other hazards

- No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

| Substance name | 1) CAS No 2) EC No | Classification | 1) Index number 2) SCL 3) M-Factor 4) ATE | Content(wt%) |
|----------------|----------------------------|---|--|--------------|
| Benzene | 1) 71-43-2 2) 200-753-7 | Flam. Liq. 2, Skin Irrit. 2, Eye Irrit. 2, Carc. 1A, Muta. 1B, STOT RE 1, Asp. Tox. 1 | 1) - 2) - 3) - 4) Acute toxicity(Inhalation:Vapours) : 13228.76mg/L | 100 |

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

○ 4.1.1. Eye contact

- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Seek immediate medical assistance.

○ 4.1.2. Skin contact

- For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat.
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
- For minor skin contact, avoid spreading material on unaffected skin.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash skin with soap and water.
- Seek immediate medical assistance.

○ 4.1.3. Inhalation

- Administer oxygen if breathing is difficult.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

- Keep victim warm and quiet.
- Give artificial respiration if victim is not breathing.
- Move to fresh air.
- 4.1.4. If swallowed
 - Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
 - Seek immediate medical assistance.
- 4.2. Most important symptoms and effects, both acute and delayed
 - No data available
- 4.3. Indication of any immediate medical attention and special treatment needed
 - Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
 - Exposures require specialized first aid with contact and medical follow-up .

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media
 - Direct water.
 - For mixtures containing alcohol or polar solvent: Alcohol-resistant foam.
 - Dry chemical.
 - CO₂.
 - Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
 - Water spray.
 - Use dry sand or earth to smother fire.
 - Regular foam.
- Unsuitable extinguishing media
 - Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

- Vapor explosion hazard indoors, outdoors or in sewers.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors and sewers explosion hazards.
- Can decompose at high temperatures forming toxic gases.
- Can form explosive mixtures at temperatures at or above the flashpoint.
- Containers may explode when heated.
- During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- May violently polymerize and result in fire and explosion.
- Runoff may create fire or explosion hazard.
- Some may burn but none ignite readily.

5.3. Advice for firefighters

- Move containers from fire area if you can do it without risk.
- Rescuers should put on appropriate protective gear.
- Substance may be transported hot.
- Substance may be transported in a molten form.

- Cautions ; Most of liquids are lighter than water.
- Dike fire-control water for later disposal; do not scatter the material.
- Evacuate area and fight fire from a safe distance.
- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.
- Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Fire involving Tanks: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
- Fire involving Tanks: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment
 - The wearing of suitable protective equipment to prevent any contamination of skin, eyes and personal clothing.
- Emergency procedures
 - Removal of ignition sources, provision of sufficient ventilation.

6.1.2. For emergency responders

- Wear protective equipment and keep unprotected persons away.
- Avoid dust formation.

6.2. Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

6.3.2. For cleaning up

- Clear spills immediately.
- Don't use a brush or compressed air for cleaning surfaces or clothing.

6.3.3. Other information

- Absorb the liquid and scrub the area with detergent and water.
- Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.
- Dike and collect water used to fight fire.
- Large Spill: Dike far ahead of liquid spill for later disposal.
- Use clean non-sparking tools to collect absorbed material.

6.4. Reference to other sections

- Section 8 (protective equipment), section 13 (disposal instructions)

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Measure atmospheric oxygen concentration and ventilate the area during the operation since low-closed area can cause oxygen deficiency.
- Please note that materials and conditions to be avoided.
- Use care in handling/storage.
- All equipment used when handling the product must be grounded.
- Avoid breathing vapors from heated material.
- Avoid prolonged or repeated contact with skin.
- Caution: Heat.
- Do not enter storage area unless adequately ventilated.
- DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION;.
- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Handling refer to engineering control/personal protection section.
- Loosen closure cautiously before opening.

7.2. Conditions for safe storage, including any incompatibilities

- Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.
- Keep away from food and drinking water.

7.3. Specific end use(s)

- See section 1 for recommended use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Components | Occupational Exposure | ACGIH regulations | Biological limit values | DNEL/DMEL | PNEC-Values |
|------------|---|-------------------|---|-------------------|-------------------|
| Benzene | 0.2 ppm TWA (limit value after 5 April 2026); 0.5 ppm TWA (limit value from 5 April 2024 until 5 April 2026); 1 ppm TWA (limit value until 5 April 2024); 0.66 mg/m ³ TWA (limit value after 5 April 2026); 1.65 mg/m ³ TWA (limit value from 5 April 2024 until 5 April 2026); 3.25 mg/m ³ TWA (limit value until 5 April 2024) | 0.02 ppm TWA | 15 (Methyl Chloroform in Endexhaed Air, Prior to Last Shift of Workweek) 10mg / L (Trichloroacetic Acid in Urine, End of Workweek) | No data available | No data available |

8.2. Exposure controls

8.2.1. Appropriate engineering controls

- Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2. Individual protection measures, such as personal protective equipment

- Eye/face protection
 - If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.
- Skin protection
 - (i) Hand protection
 - Wear chemical safety gloves.
 - (ii) Other
 - No data available
- Respiratory protection
 - If you have a direct contact or exposed to the material, wear the appropriate form of respiratory protection certified.
- Thermal hazards
 - Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

8.2.3. Environmental exposure controls

- Ensure not to cause environmental pollution by discharging into rivers or other waterways.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Property name | Values | Source |
|---|--|--------|
| Physical state | Liquid | |
| Colour | Colourless | |
| Odour | Aromatic | |
| Melting point/freezing point | 5.5°C | |
| Initial boiling point and boiling range(°C) | 80°C | |
| Flammability(solid, gas) | Flammable liquid | |
| Upper/lower flammability or explosive limits | Upper flammability limits : Ca. 8.0 %(V)/ Lower flammability limits : Ca. 1.2 %(V) | |
| Flash point(°C) | -11°C | |
| Auto ignition temperature | 498°C | |
| Decomposition temperature | No data available | |
| pH | No data available | |
| Kinematic viscosity(mm ² /s, 40°C) | 0.604 cP (25°C) | |
| Solubility | 1.88 g/l (23.5°C) | |
| Partition coefficient(n-octanol/water) | logPow 2.13 | |
| Vapour pressure | 10 kPa (20 °C) | |
| Density/Relative density | 0.88 g/cm ³ | |

| | | |
|--------------------------|----------------|--|
| Relative Vapour density | 2.8 (Air=1) | |
| Particle characteristics | Not applicable | |
| Specific gravity | 0.877 (20 °C) | |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

| Property name | Values | Source |
|-------------------|---|--------|
| Flammable liquids | Flash point : -11°C, Initial boiling point and boiling range : 80°C | |

9.2.2. Other safety characteristics

- No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

- Vapor explosion hazard indoors, outdoors or in sewers.
- Vapors may form explosive mixtures with air.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors and sewers explosion hazards.
- Can decompose at high temperatures forming toxic gases.
- Can form explosive mixtures at temperatures at or above the flashpoint.
- Containers may explode when heated.
- Fire may produce irritating, corrosive and/or toxic gases.
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- May violently polymerize and result in fire and explosion.
- Runoff may create fire or explosion hazard.
- Some may burn but none ignite readily.

10.2. Chemical stability

- Vapor explosion hazard indoors, outdoors or in sewers.
- Vapors may form explosive mixtures with air.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors and sewers explosion hazards.
- Can decompose at high temperatures forming toxic gases.
- Can form explosive mixtures at temperatures at or above the flashpoint.
- Containers may explode when heated.
- Fire may produce irritating, corrosive and/or toxic gases.
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- May violently polymerize and result in fire and explosion.
- Runoff may create fire or explosion hazard.
- Some may burn but none ignite readily.

10.3. Possibility of hazardous reactions

- Vapor explosion hazard indoors, outdoors or in sewers.
- Vapors may form explosive mixtures with air.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors and sewers explosion hazards.
- Can decompose at high temperatures forming toxic gases.

- Can form explosive mixtures at temperatures at or above the flashpoint.
- Containers may explode when heated.
- Fire may produce irritating, corrosive and/or toxic gases.
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
- May violently polymerize and result in fire and explosion.
- Runoff may create fire or explosion hazard.
- Some may burn but none ignite readily.

10.4. Conditions to avoid

- Heat.
- Ignition source(heat, spark, flame, etc.).

10.5. Incompatible materials

- Combustibles, reducing material.

10.6. Hazardous decomposition products

- Corrosive/toxic fume.
- During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- Irritating, corrosive and/or toxic gas.

SECTION 11: Toxicological information

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

- Acute toxicity
 - Acute toxicity(Oral)
 - LD50 >2000 mg/kg Experimental species: Rat (number of rats, OECD TG 401)
 - Acute toxicity(Dermal)
 - LD50 >8260 mg/kg Test species: Rabbit ((OECD TG 402))
 - Acute toxicity(Inhalation:Gases)
 - No data available
 - Acute toxicity(Inhalation:Vapours)
 - LC50 10000 ppm 7 hr Test species: Rat (OECD TG 403)
 - Acute toxicity(Inhalation:Dust/mist)
 - No data available
- Skin corrosion/irritation
 - EU-CLP Classifications (Category 2)
 - Result of skin corrosion/irritation test on rabbits, found to be irritating OECD TG 404
- Serious eye damage/eye irritation
 - EU-CLP Classifications (Category 2)
 - Eye damage/irritation test results on rabbits, found to be irritating OECD
- Respiratory sensitization
 - No data available
- Skin sensitization
 - Results of skin sensitization test using mice and guinea pigs, no sensitization
- Carcinogenicity
 - EU-CLP Classifications (Category 1A)
 - 1 (IARC)
 - K (NTP)

A1 (ACGHI)

Specially controlled substances (Occupational Safety and Health Act)

1A (Notification of Ministry of Employment and Labor)

1A (EU CLP)

○ Germ cell mutagenicity

- EU-CLP Classifications (Category 1B)

Results of reverse mutation test using in vitro microorganisms showed a very weak positive effect. OECD TG 471 Result of reverse mutation test using in vitro microorganisms showed negative effect. OECD TG 471 Result of chromosomal abnormality test using in vitro cultured cells of mammalian species, positive. Shows effectiveness OECD TG 473, OECD TG 479 Results of mammalian red blood cell micronucleus test using rats in vivo, Single low dose = 3.2mg/m³ OECD TG 474 Results of chromosomal abnormality test using mammalian bone marrow cells in vivo, shows positive effect 320mg/ m³ OECD TG 475 * Korea Occupational Safety and Health Act Specially controlled substances germ cell mutagenicity * Korea Ministry of Employment and Labor Notice 1B

○ Reproductive toxicity

- ○Developmental toxicity: (maternal toxicity) Spontaneous abortion has been observed and reported in rabbits. (Developmental toxicity) When exposed at a concentration of 500ppm for 7hr/day, a decrease in fetal crown to rump length and delayed growth of the skeleton are reported. In addition, benzene was detected in maternal amniotic fluid and fetal blood when C57BL/6 mice and NZ rabbits were exposed to concentrations of 154 and 308 ppm for 6 to 15 days under 24 HOUR/DAY conditions. At 308 ppm concentration, fetal skeletal delay was observed. As a result of this, it is classified into Category 2 ○ As a result of an inhalational developmental toxicity test using teratogenic rats, no evidence of teratogenicity was observed in the highest aneurysm. NOAEC = 32 mg/m³ air (OECD TG 414, GLP)

○ Specific target organ toxicity single exposure

- Lung and liver bleeding (Congestion) As a result of inhalation toxicity, the number of T lymphocytes in the spleen and the number of B lymphocytes in the bone marrow also decrease. ※Target organ: respiratory system. central nervous system, hematopoietic system

○ Specific target organ toxicity repeated exposure

- EU-CLP Classifications (Category 1)

In humans, cases of death have been reported due to bone marrow hypoplasia, hyperplasia or cytopenia, hematological toxicity, aplastic anemia, transverse myelitis, frequent headaches, fatigue, sleep and memory disturbances, decreased white and red blood cell counts, and average red blood cell count. Increased volume appears, abnormal morphology of circulating red blood cells and neutrophils in experimental animals, decreased number of spleen nucleated cells, circulating red blood cells and lymphocytes, decreased white blood cell count, decreased bone marrow cell integrity, decreased number of bone marrow pluripotent stem cells, red blood cells, white blood cells Blood cells, lymphocytes, and hematocrit decreased, and average red blood cell volume increased. · As a result of repeated oral developmental toxicity tests using female rats, harmful effects on the vascular system were observed. (NOAEL male = 200 mg/kg bw/day, LOAEL female = 25 mg/kg bw/day) (OECD TG 408, GLP) · Repeated inhalation developmental toxicity test results using female rats, hematological effects, thyroid, bone marrow, spleen , observation of histopathological abnormalities in the ovaries and testes. (NOAEC = 96 mg/kg bw/day) (OECD TG 412,413, GLP) ※Target organ: Vascular system

○ Aspiration hazard

- EU-CLP Classifications (Category 1)
Risk of chemical pneumonitis if liquid is swallowed. NLM, viscosity 0.609 cP at 25°C

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

- Benzene
Not applicable

11.2.2. Other information

- Benzene
No other hazards have been identified

SECTION 12: Ecological information

12.1. Toxicity

- Fish
LC50 5.3 mg/l 96 hr *Oncorhynchus mykiss* (OECD Guideline 203)
- Crustaceans
EC50 10 mg/l 48 hr *Daphnia magna* (Water flea toxicity: EC50=20.6ppm, 48h National Institute of Environmental Research OECD TG 202)
- Aquatic algae
EC50 29 mg/L 72 hr *Selenastrum capricornutum* (*Selenastrum capricornutum*, EC50=32 mg/L 72h, ECHA)

12.2. Persistence and degradability

- Degradability
(decomposes under anaerobic conditions)
- Biodegradation
50% 28 days (decomposes under anaerobic conditions (NITE))

12.3. Bioaccumulative potential

- n-octanol water partition coefficient
2.13 log Kow
- Bioconcentration factor(BCF)
43.2 ~ 5.88 (30fresh water, green algae, 3.5 conger, 4.3 gold fish)

12.4. Mobility in soil

134.1 Koc (QSAR)

12.5. Result of PBT and vPvB assessment

Not applicable

12.6. Endocrine disrupting properties

Not applicable

12.7. Other adverse effects

Not applicable

SECTION 13: Disposal considerations

13.1. Waste treatment methods

13.1.1. Product / Packaging disposal

- Empty containers should be taken to an approved waste handling site for recycling or disposal.
- Waste codes / waste designations according to LoW
 - No data available

13.1.2. Waste treatment-relevant information

- Disposal according to local regulations.

13.1.3. Sewage disposal-relevant information

- Disposal according to local regulations and avoid release to the environment.

13.1.4. Other disposal recommendations

- No data available

SECTION 14: Transport information

14.1. UN number or ID number : 1114

14.2. UN proper shipping name : BENZENE

14.3. Transport hazard class(es) : 3

14.4. Packing group : II

14.5. Environmental hazards : Yes

14.6. Special precautions for user :

Emergency measures in case of fire : F-E

Emergency measures in the effluent : S-D

14.7. Maritime transport in bulk according to IMO instruments :

Not applicable

- ADR

· Tunnel restriction code : D/E

- IMDG

· Marine pollutant : Yes

- Air transport(IATA)

· UN No. : 1114

· Proper shipping name : BENZENE

· Class or division : 3

· Packing group : II

SECTION 15: Regulatory information

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

15.1.1. EU regulations

- EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
 - Benzene : Use restricted. See item 72.; Use restricted. See item 5.; Use restricted. See item 28.; Use restricted. See item 29.; Use restricted. See item 75. (E)
- EU - REACH (1907/2006) - Annex XIV - Substances Subject to Authorization
 - Benzene : Not applicable

15.1.2. Other EU regulations

- EU - Persistent Organic Pollutants (POPs) (2019/1021) - Annex III - Substances Subject to Release Reduction Provisions
 - Not applicable
- EU - Persistent Organic Pollutants (POPs) (2019/1021) - Annex I - Substances Subject to Prohibitions
 - Not applicable
- EU - Persistent Organic Pollutants (POPs) (2019/1021) - Annex IV - Waste Management - Concentration Limits
 - Not applicable
- EU - Persistent Organic Pollutants (POPs) (2019/1021) - Annex V - Waste Management - Maximum Concentration Limits
 - Not applicable
- EU - Paints, Varnishes, Vehicle Refinishing Products (2004/42/CE) - Annex II A - WB Phase 1 - VOCs
 - Not applicable
- EU - Paints, Varnishes, Vehicle Refinishing Products (2004/42/CE) - Annex II A - WB Phase 2 - VOCs
 - Not applicable
- EU - Paints, Varnishes, Vehicle Refinishing Products (2004/42/CE) - Annex II B - Vehicles - VOCs
 - Not applicable
- EU - Paints, Varnishes, Vehicle Refinishing Products (2004/42/CE) - Annex II A - SB Phase 1 - VOCs
 - Not applicable
- EU - Paints, Varnishes, Vehicle Refinishing Products (2004/42/CE) - Annex II A - SB Phase 2 - VOCs
 - Not applicable
- EU - Seveso III Directive (2012/18/EU) - Qualifying Quantities of Dangerous Substances - Lower-Tier Requirements
 - Not applicable
- EU - Seveso III Directive (2012/18/EU) - Qualifying Quantities of Dangerous Substances - Higher-Tier Requirements
 - Not applicable
- EU - Export and Import Restrictions (649/2012) - Chemicals Subject to Export Notification Procedure
 - Benzene : Severe restriction as an industrial chemical for public use (except motor fuels subject to Directive

98/70/EC)

- EU - Export and Import Restrictions (649/2012) - Chemicals and Articles Subject to Export Ban
 - Benzene : Not applicable
- EU - Export and Import Restrictions (649/2012) - Chemicals Subject to the PIC Procedure under the Rotterdam Convention
 - Benzene : Not applicable
- EU - Export and Import Restrictions (649/2012) - Chemicals Qualifying for PIC Notification
 - Benzene : Not applicable

15.2. Chemical safety assessment

- A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

16.1. Key literature references and sources for data

NCIS, KOSHA, Montreal Protocol, ECHA, OECD SIDS, EU IUCLID, HSDB(PubChem), NITE, NTP, ACGIH, IARC, NIOSH, ChemIDplus, EPA, EPI Suite, INCHEM

16.2. Issuing date : 26-12-2022

16.3. Indication of changes

- Revision number : 3-1
- Revision date : 01-06-2026

16.4. Abbreviations and acronyms

ACGIH : American Conference of Governmental Industrial Hygienists
ADR : Agreement Concerning the International Carriage of Dangerous Goods by Road
ATE : The Acute Toxicity Estimate
ECHA : European Chemicals Agency
EPA : United States Environmental Protection Agency
EPI Suite : The Estimation Programs Interface for Windows
EU IUCLID : International Uniform Chemical Information Database
HSDB : Hazardous Substances Data Bank
IARC : International Agency for Research on Cancer
IATA : International Air Transport Association
IMDG : International Maritime Dangerous Goods Codes
INCHEM : Internationally Peer Reviewed Chemical Safety Information
M-Factor : The Multiplication Factor
NIOSH : National Institute of Occupational Safety and Health
NITE : National Institute of Technology and Evaluation(JAPAN)
NTP : National Toxicology Program
SCL : Specific Concentration Limit
OECD SIDS : Organization for Economic Co-operation and Development Screening Information Dataset

For explanation of abbreviations see section 16.

- This substance/mixture contain(s) only ingredients which have been registered, or are exempt from registration, according to Regulation (EC) No. 1907/2006 (REACH).

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

EUR/EN