

Safety data sheet

Page: 1/19

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

Product: **HB 454 0,5L**

(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

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

1.1. Product identifier

HB 454 0,5L

UFI: Q4T8-3ESK-P00V-U2V6

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

Relevant identified uses: Basecoat product

1.3. Details of the supplier of the safety data sheet

Company:

BASF France SAS
49, avenue Georges Pompidou
92593 Levallois-Perret Cedex, FRANCE

Contact address:

BASF plc
4th and 5th Floors, 2 Stockport Exchange
Railway Road, Stockport, SK1 3GG
UNITED KINGDOM

Telephone: +44 161 475 3000

E-mail address: product-safety-uk-and-ireland@basf.com

1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

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According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

| | |
|------------------------------------|---|
| Skin Corr./Irrit. 2 | H315 Causes skin irritation. |
| Eye Dam./Irrit. 1 | H318 Causes serious eye damage. |
| Skin Sens. 1B | H317 May cause an allergic skin reaction. |
| STOT SE 3 | H336 May cause drowsiness or dizziness. |
| Flam. Liq. 3 | H226 Flammable liquid and vapour. |
| Acute Tox. 4 (Inhalation - vapour) | H332 Harmful if inhaled. |

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Pictogram:



Signal Word:

Danger

Hazard Statement:

| | |
|------|--------------------------------------|
| H226 | Flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| H336 | May cause drowsiness or dizziness. |

Precautionary Statements (Prevention):

| | |
|------|--|
| P280 | Wear protective gloves, protective clothing and eye protection or face protection. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |

Precautionary Statements (Response):

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

Precautionary Statements (Storage):

| | |
|-------------|--|
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
|-------------|--|

Precautionary Statements (Disposal):

| | |
|------|---|
| P501 | Dispose of contents and container to hazardous or special waste collection point. |
|------|---|

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Hazard determining component(s) for labelling: 2-dimethylaminoethanol, 2-butoxyethanol, 2,4,7,9-Tetramethyldec-5-yne-4,7-diol, propylene glycol monoethyl ether

2.3. Other hazards

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

fillers, organic solvent, pigment, polyurethane

Hazardous ingredients (GHS)

2-butoxyethanol

| | |
|---|------------------------------------|
| Content (W/W): >= 20 % - < 25 % | Acute Tox. 4 (Inhalation - vapour) |
| CAS Number: 111-76-2 | Acute Tox. 4 (oral) |
| EC-Number: 203-905-0 | Skin Corr./Irrit. 2 |
| REACH registration number: 01-2119475108-36 | Eye Dam./Irrit. 2 |
| INDEX-Number: 603-014-00-0 | H319, H315, H302 + H332 |

propylene glycol monoethyl ether

| | |
|---|--------------------------------------|
| Content (W/W): >= 15 % - < 20 % | Flam. Liq. 3 |
| CAS Number: 1569-02-4 | STOT SE 3 (drowsiness and dizziness) |
| EC-Number: 216-374-5 | H226, H336 |
| REACH registration number: 01-2119462792-32 | |

butan-2-ol

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

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Date of print 23.10.2023

| | |
|---|---------------------------------------|
| Content (W/W): $\geq 10\%$ - $< 12.5\%$ | Flam. Liq. 3 |
| CAS Number: 78-92-2 | Eye Dam./Irrit. 2 |
| EC-Number: 201-158-5 | STOT SE 3 (drowsiness and dizziness) |
| INDEX-Number: 603-127-00-5 | STOT SE 3 (irr. to respiratory syst.) |
| | H226, H319, H336, H335 |

| | |
|---|-------------------|
| 2,4,7,9-Tetramethyldec-5-yne-4,7-diol | |
| Content (W/W): $\geq 3\%$ - $< 5\%$ | Eye Dam./Irrit. 1 |
| CAS Number: 126-86-3 | Skin Sens. 1B |
| EC-Number: 204-809-1 | Aquatic Chronic 3 |
| REACH registration number: 01-2119954390-39 | H318, H317, H412 |

| | |
|---|---------------------------------------|
| 2-dimethylaminoethanol | |
| Content (W/W): $\geq 0.5\%$ - $< 1\%$ | Flam. Liq. 3 |
| CAS Number: 108-01-0 | Acute Tox. 3 (Inhalation - vapour) |
| EC-Number: 203-542-8 | Acute Tox. 4 (oral) |
| REACH registration number: 01-2119492298-24 | Acute Tox. 4 (dermal) |
| INDEX-Number: 603-047-00-0 | Skin Corr./Irrit. 1B |
| | Eye Dam./Irrit. 1 |
| | STOT SE 3 (irr. to respiratory syst.) |
| | H226, H331, H335, H314, H302 + H312 |

Specific concentration limit:
STOT SE 3, irr. to respiratory syst.: $\geq 5\%$

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Remove affected person from danger area. Immediately remove contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. If symptoms persist, seek medical advice. If breathing is irregular or stopped, administer artificial respiration.

On skin contact:

If symptoms persist, seek medical advice. Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Do NOT use solvents or thinners.

On contact with eyes:

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Date / Revised: 22.10.2023

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Remove contact lenses, if present. Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. Immediate medical attention required.

On ingestion:

Do not induce vomiting. Rinse mouth thoroughly with water, seek medical attention. If adverse health effects develop seek medical attention.

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

Symptoms: allergic symptoms, dazed state, skin irritation, dizziness, Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: No known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, alcohol-resistant foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

Advice: Fire will produce dense black smoke. Inhalation of dangerous decomposition products may cause serious damage to health.

5.3. Advice for fire-fighters

Special protective equipment:

Appropriate breathing apparatus may be required.

Further information:

Cool closed containers in the vicinity of the source of fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours. For non-emergency personnel: Use personal protective clothing. Ensure adequate ventilation. Keep away from sources of ignition. For emergency responders: Advice on product handling can be found in sections 7 and 8 of this safety data sheet. Information regarding personal protective measures, see section 8.

6.2. Environmental precautions

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 22.10.2023

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Do not allow to enter drains or waterways. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency. Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal according with the waste regulations (see section 13). Clean preferably with a detergent; avoid the use of solvents. Ensure adequate ventilation.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Do not return residues to the storage containers. Smoking, eating and drinking are forbidden in application area. For personal protection see section 8. Comply with the health and safety at work laws. When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits. Avoid inhalation of vapour and spray mist. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. Product may charge electrostatically: always use earthing leads when transferring from one container to another and earth containers. It is recommended that operators should wear antistatic clothing and footwear. Solvent vapours are heavier than air and spread along floors. Vapour forms explosive mixtures with air. The relevant fire protection measures should be noted. Use explosion-proof equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from oxidising agents, from strongly alkaline and strongly acid materials.

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Polyethylenetherephtalate (PET), Polypropylene (PP), Carbon steel (Iron), tinned carbon steel (Tinplate)

Further information on storage conditions: Keep container dry. Keep away from heat. Keep in a cool, well-ventilated place. Avoid direct sunlight. Close containers carefully once opened and store them upright in order to prevent any leakage. No smoking. No admission for unauthorised personnel. Always keep in containers of same material as the original one. Observe label precautions. Store protected against freezing.

7.3. Specific end use(s)

Please refer to the technical leaflet for further information.

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

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SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

78-92-2: butan-2-ol

TWA value 308 mg/m³ ; 100 ppm (WEL/EH 40 (UK))
STEL value 462 mg/m³ ; 150 ppm (WEL/EH 40 (UK))
Ceiling limit value/factor: 15 min

108-01-0: 2-dimethylaminoethanol

TWA value 7.4 mg/m³ ; 2 ppm (WEL/EH 40 (UK))
STEL value 22 mg/m³ ; 6 ppm (WEL/EH 40 (UK))
Ceiling limit value/factor: 15 min

111-76-2: 2-butoxyethanol

Skin Designation (WEL/EH 40 (UK))
The substance can be absorbed through the skin.
TWA value 123 mg/m³ ; 25 ppm (WEL/EH 40 (UK))
Skin Designation (OEL (EU))
The substance can be absorbed through the skin.
STEL value 246 mg/m³ ; 50 ppm (OEL (EU))
indicative
TWA value 98 mg/m³ ; 20 ppm (OEL (EU))
indicative
STEL value 246 mg/m³ ; 50 ppm (WEL/EH 40 (UK))
Ceiling limit value/factor: 15 min

Components with biological limit values

111-76-2: 2-butoxyethanol

UKEH40BMGV

Determinant: butoxyacetic acid
Biological Specimen: Creatinine in urine
Sampling time: End of shift
Concentration: 240 mmol/mol

Components with PNEC

78-92-2: butan-2-ol

No PNEC value available.

108-01-0: 2-dimethylaminoethanol

freshwater: 0.066 mg/l
marine water: 0.004 mg/l
intermittent release: 0.661 mg/l
sediment (freshwater): 0.246 mg/kg
sediment (marine water): 0.015 mg/kg

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

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Product: **HB 454 0,5L**

(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

soil: 0.01 mg/kg

STP: 10 mg/l

oral (secondary poisoning):

No PNEC oral derived, as accumulation in organisms is not to be expected.

111-76-2: 2-butoxyethanol

freshwater: 8.8 mg/l

marine water: 0.88 mg/l

intermittent release: 9.1 mg/l

sediment (freshwater): 34.6 mg/kg

sediment (marine water): 3.46 mg/kg

soil: 2.33 mg/kg

STP: 463 mg/l

oral (secondary poisoning): 20 mg/kg

126-86-3: 2,4,7,9-Tetramethyldec-5-yne-4,7-diol

freshwater: 0.04 mg/l

marine water: 0.004 mg/l

intermittent release: 0.4 mg/l

STP: 7 mg/l

sediment (freshwater): 0.32 mg/kg

sediment (marine water): 0.032 mg/kg

soil: 0.028 mg/kg

oral (secondary poisoning):

No PNEC value available.

1569-02-4: propylene glycol monoethyl ether

freshwater: 10 mg/l

STP: 1250 mg/l

sediment (marine water): 3.76 mg/kg

marine water: 1 mg/l

intermittent release: 19 mg/l

sediment (freshwater): 37.6 mg/kg

soil: 1.97 mg/kg

oral (secondary poisoning): 142 mg/kg

Components with DNEL

78-92-2: butan-2-ol

worker: Long-term exposure- systemic effects, dermal: 405 mg/kg

worker: Long-term exposure- systemic effects, Inhalation: 600 mg/m³

consumer: Long-term exposure- systemic effects, dermal: 203 mg/kg

consumer: Long-term exposure- systemic effects, Inhalation: 213 mg/m³

consumer: Long-term exposure- systemic effects, oral: 15 mg/kg

108-01-0: 2-dimethylaminoethanol

worker: Long-term exposure - systemic and local effects, Inhalation: 1.76 mg/m³

worker: Short-term exposure - systemic effects, Inhalation: 5.28 mg/m³

worker: Short-term exposure - local effects, Inhalation: 13.53 mg/m³

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Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

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(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

worker: Long-term exposure- systemic effects, dermal: 0.25 mg/kg
 worker: Short-term exposure - systemic effects, dermal: 1.2 mg/kg
 worker: Short-term exposure - local effects, dermal: 100 µg/cm²
 consumer: Long-term exposure- systemic effects, Inhalation: 0.43 mg/m³
 consumer: Long-term exposure- systemic effects, oral: 0.126 mg/kg

111-76-2: 2-butoxyethanol

worker: Long-term exposure- systemic effects, Inhalation: 98 mg/m³, 20 ppm
 worker: Short-term exposure - systemic effects, Inhalation: 1091 mg/m³
 worker: Short-term exposure - local effects, Inhalation: 246 mg/m³
 consumer: Long-term exposure- systemic effects, oral: 6.3 mg/kg
 consumer: Short-term exposure - systemic effects, oral: 26.7 mg/kg
 consumer: Long-term exposure- systemic effects, Inhalation: 59 mg/m³
 consumer: Short-term exposure - systemic effects, Inhalation: 426 mg/m³
 consumer: Short-term exposure - local effects, Inhalation: 147 mg/m³

126-86-3: 2,4,7,9-Tetramethyldec-5-yne-4,7-diol

worker: Long-term exposure- systemic effects, Inhalation: 2.86 mg/m³
 worker: Long-term exposure- systemic effects, dermal: 0.812 mg/kg
 consumer: Long-term exposure- systemic effects, Inhalation: 0.505 mg/m³
 consumer: Long-term exposure- systemic effects, dermal: 0.29 mg/kg
 consumer: Long-term exposure- systemic effects, oral: 0.29 mg/kg

1569-02-4: propylene glycol monoethyl ether

consumer: Long-term exposure- systemic effects, by inhalation: 127 mg/m³
 Repeated dose toxicity
 consumer: Short-term exposure - systemic effects, by inhalation: 300 mg/m³
 Repeated dose toxicity
 consumer: Long-term exposure- systemic effects, dermal: 44.3 mg/kg
 Repeated dose toxicity
 worker: Short-term exposure - systemic effects, by inhalation: 500 mg/m³
 Repeated dose toxicity
 worker: Long-term exposure- systemic effects, by inhalation: 211 mg/m³
 Repeated dose toxicity
 worker: Long-term exposure- systemic effects, dermal: 74 mg/kg
 Repeated dose toxicity
 consumer: Long-term exposure- systemic effects, oral: 14 mg/kg
 Repeated dose toxicity

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation. This can be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations at the workplace below the occupational exposure limits, appropriate certified respirators must be worn.

Personal protective equipment

Respiratory protection:

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

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(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

Suitable respiratory protection: e.g. half-mask with A1P2 class combination filter When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators. Use A1P2 breathing-protection half mask in case of contact with aerosols.

Hand protection:

Further information on penetration time is available from the manufacturer of the glove.

Data are based on information from the glove manufacturer, the raw material manufacturer or according to specifics of the product components.

The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties).

Follow manufacturer's advice on use, storage, maintenance and replacement of gloves.

The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

Wear protective gloves. Any chemical protection glove certified according to EN ISO 374-1 is suitable: e.g.

nitrile gloves - material thickness: 0,7 mm

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):

Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN ISO 374-1)

Suitable materials against splashes (recommended: At least protective index 1, corresponding > 10 minutes of permeation time according to EN ISO 374-1)

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166), Required when there is a risk of eye contact.

Body protection:

Anti-static protective clothing, Personnel should wear antistatic, flame-retardant clothing made of natural fibres and/or heat-resistant synthetic fibres.

General safety and hygiene measures

Do not breathe vapour/spray. Eye wash fountains and safety showers must be easily accessible.

Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing immediately and dispose of safely. Hands and/or face should be washed before breaks and at the end of the shift. Keep separated from food stuffs and feed stocks.

Environmental exposure controls

For information regarding environmental exposure controls, see Section 6.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|---------|-----------|
| Form: | liquid |
| Colour: | blue |
| Odour: | of glycol |

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

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Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

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(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

| | | |
|---|---|------------|
| pH value: | 6.0 - 9.0 (500.00000 g/l) | |
| Melting point: | not determined | |
| onset of boiling: | not determined | |
| Flash point: | 35 °C | (ISO 3679) |
| Flammability: | Flammable liquid and vapour. | |
| Lower explosion limit: | 36 g/m ³ | |
| Ignition temperature: | > 200 °C | |
| Vapour pressure: | (20 °C) not determined | |
| | (50 °C) not determined | |
| Density: | 0.992 g/cm ³ (20 °C) | |
| Relative vapour density (air): | Heavier than air. | |
| Partitioning coefficient n-octanol/water (log Kow): | not applicable for mixtures | |
| Thermal decomposition: | No decomposition if stored and handled as prescribed/indicated. | |
| Viscosity, kinematic: | 621.6 mm ² /s (23 °C) | |
| | (40 °C) No data available. | |
| Explosion hazard: | not explosive | |
| Fire promoting properties: | not fire-propagating | |

9.2. Other information

| | | |
|-------------------------|--|--|
| Burning rate: | The material doesn't meet the criteria specified in paragraph 33.2.4.4 of UN manual of tests and criteria. | (UN Test N.1 (ready combustible solids)) |
| Self heating ability: | It is not a material capable of spontaneous heating | |
| Miscibility with water: | miscible | |
| Flow time: | > 90 s (23 °C) | (DIN EN ISO 2431; 6 mm) |

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

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Previous version: 6.0

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(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

Vapours may form ignitable mixture with air.

10.4. Conditions to avoid

Avoid heat. Avoid direct sunlight. Avoid all sources of ignition: heat, sparks, open flame. Avoid freezing.

10.5. Incompatible materials

Substances to avoid:

Keep away from highly acidic or alkaline substances as well as oxidants in order to prevent exothermal reactions.

10.6. Hazardous decomposition products

When exposed to high temperatures hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, monomeric isocyanates may be produced., No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

The mixture has been assessed following regulation (EC) No 1272/2008. See sections 2 and 3 for details.

Of moderate toxicity after short-term inhalation.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Repeated and prolonged exposure to solvents at levels significantly above OELs may lead to the development of long-lasting central nervous system disorders such as chronic toxic encephalopathy, signs of toxicity include changes in behaviour and memory. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

| *Information on: 2-dimethylaminoethanol*

| *Experimental/calculated data:*

| *LC50 rat (by inhalation): 6.1 mg/l 1641 ppm 4 h (OECD Guideline 403)*

| *The vapour was tested.*

| *rat (by inhalation): 10 min (IRT)*

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No Mortality within the stated exposition time as shown in animal studies, however, deaths occurred after longer exposure.

Irritation

Assessment of irritating effects:

Skin contact causes irritation. May cause severe damage to the eyes.

Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible.

Germ cell mutagenicity

Assessment of mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity

Assessment of carcinogenicity:

Based on available data, the classification criteria are not met.

Reproductive toxicity

Assessment of reproduction toxicity:

Based on available data, the classification criteria are not met.

Developmental toxicity

Assessment of teratogenicity:

Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Possible narcotic effects (drowsiness or dizziness).

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Based on available data, the classification criteria are not met.

Aspiration hazard

No aspiration hazard expected.

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

Product: **HB 454 0,5L**

(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

There are no test results available for this product. Do not allow to enter drains or waterways. The mixture has been assessed following regulation (EC) No 1272/2008 and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Biological degradability of hazardous substances mentioned in section 3:

Information on: 2,4,7,9-Tetramethyldec-5-yne-4,7-diol

Elimination information:

< 10 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EWG, C.4-C) (aerobic, activated sludge, domestic)

25.4 % DOC reduction (57 d) (OECD Guideline 302 A) (aerobic, activated sludge, domestic)

12.3. Bioaccumulative potential

Bioaccumulation potential:

No data available.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

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Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

Product: **HB 454 0,5L**

(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Do not discharge into drains/surface waters/groundwater.
Observe national and local legal requirements.

Dispose of the substance/product as special waste in accordance with Directive 2008/98/EC.

Waste key:

08 01 11[□] waste paint and varnish containing organic solvents or other hazardous substances

Contaminated packaging:

Containers which are not properly emptied must be disposed pursuant to Directive 2008/98/EC

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14: Transport Information

Land transport

ADR

UN number or ID number: UN1263
UN proper shipping name: PAINT
Transport hazard class(es): 3
Packing group: III
Environmental hazards: no
Special precautions for user: Tunnel code: D/E

RID

UN number or ID number: UN1263
UN proper shipping name: PAINT
Transport hazard class(es): 3
Packing group: III
Environmental hazards: no
Special precautions for user: None known

Inland waterway transport

ADN

UN number or ID number: UN1263
UN proper shipping name: PAINT
Transport hazard class(es): 3

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Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

Product: **HB 454 0,5L**

(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

Packing group: III
 Environmental hazards: no
 Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number or ID number: UN 1263
 UN proper shipping name: PAINT
 Transport hazard class(es): 3
 Packing group: III
 Environmental hazards: no
 Marine pollutant: NO
 Special precautions for user:

Air transport

IATA/ICAO

UN number or ID number: UN 1263
 UN proper shipping name: PAINT
 Transport hazard class(es): 3
 Packing group: III
 Environmental hazards: No Mark as dangerous for the environment is needed
 Special precautions for user: None known

14.1. UN number or ID number

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

Product: **HB 454 0,5L**

(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information

Not dangerous goods of class 3 in packages up to 450 litres capacity (valid for ADR, ADNR, RID, TDG and USDOT).

SECTION 15: Regulatory Information

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

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

| | | |
|--------------|-----------|------------------|
| VOC content: | 52.7 % | organic solvents |
| VOC content: | 53.7 % | calculated |
| VOC content: | 537.0 g/l | |

Prohibitions, Restrictions and Authorizations

UK REACH SI, Annex XVII, Marketing and Use Restrictions

Number on List: 3

UK REACH SI, Annex XVII, Marketing and Use Restrictions

Number on List: 40

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
Listed in above regulation: Flammable liquids, Categories 2 or 3 not covered by P5a and P5b

Details relating to the VOC Directive 2004/42/EC:

Subcategory as indicated in Annex IIB:

d

Limit value for maximum VOC content as specified in Annex IIB:

420 g/l

VOC content of the ready-for-use product according to ISO 11890-2:

419 g/l

BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

Product: **HB 454 0,5L**

(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

SECTION 16: Other Information

For multi-pack systems observe material safety data sheets of all components. Restricted to professional users.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

| | |
|-------------------|--|
| Skin Corr./Irrit. | Skin corrosion/irritation |
| Eye Dam./Irrit. | Serious eye damage/eye irritation |
| Skin Sens. | Skin sensitization |
| STOT SE | Specific target organ toxicity — single exposure |
| Flam. Liq. | Flammable liquids |
| Acute Tox. | Acute toxicity |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic |
| H226 | Flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H319 | Causes serious eye irritation. |
| H302 + H332 | Harmful if swallowed or if inhaled. |
| H335 | May cause respiratory irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H331 | Toxic if inhaled. |
| H314 | Causes severe skin burns and eye damage. |
| H302 + H312 | Harmful if swallowed or in contact with skin. |

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent,

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Date / Revised: 22.10.2023

Version: 7.0

Date previous version: 11.09.2023

Previous version: 6.0

Date / First version: 23.03.2023

Product: **HB 454 0,5L**

(ID no. 50732715/SDS_GEN_GB/EN)

Date of print 23.10.2023

Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.