

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830



Article No.: 2 05701 B0000 epple 5701
Print date 11.04.2022 Revision date 03.03.2022
Version 7.3 Issue date 03.03.2022

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

1.1. Product identifier

Article No. (manufacturer/supplier): 2 05701 B0000
Trade name/designation epple 5701
Adhesive
Component B

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

Relevant identified uses

Adhesive for the gluing of most diverse substrates.

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

E. Epple & Co. GmbH
Hertzstr. 8
71083 Herrenberg

Telephone: +49 7032 / 9771-17
Telefax: +49 7032 / 9771-60
www.epple-chemie.de

Department responsible for information:

laboratory

E-mail (competent person)

labor@epple-chemie.de

1.4. Emergency telephone number

Information center against poisoning Bonn

+49 (0) 228 / 19 240 (Advice in German)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Skin Irrit. 2 / H315

Skin corrosion/irritation

Causes skin irritation.

Eye Irrit. 2 / H319

Serious eye damage/eye irritation

Causes serious eye irritation.

Resp. Sens. 1 / H334

Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sens. 1 / H317

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Carc. 2 / H351

Carcinogenicity

Suspected of causing cancer.

STOT SE 3 / H335

STOT-single exposure

May cause respiratory irritation.

STOT RE 2 / H373

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

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

Hazard pictograms



Danger

Hazard statements

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317

May cause an allergic skin reaction.

H351

Suspected of causing cancer.

H335

May cause respiratory irritation.

H373

May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260

Do not breathe vapour.

P280

Wear protective gloves.

P308 + P313

IF exposed or concerned: Get medical advice/attention.

P333 + P313

If skin irritation or rash occurs: Get medical advice/attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

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P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.

Hazard components for labelling

Diphenylmethane Diisocyanate, isomers and homologues
Diphenylmethane-4,4'-diisocyanate
Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and
Diphenylmethan-2,2'-diisocyanate

Supplemental hazard information

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3. **Other hazards**

No information available.

SECTION 3: Composition/information on ingredients

3.2. **Mixtures**

Description aromatic polyisocyanates

Hazardous ingredients

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

EC No. CAS No. Index No.	REACH No. Designation classification: // Remark	weight-%
618-498-9 9016-87-9	Diphenylmethane Diisocyanate, isomers and homologues Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Resp. Sens. 1 H334 / Skin Sens. 1 H317 / Carc. 2 H351 / STOT SE 3 H335 / STOT RE 2 H373	74,9 - 100
202-966-0 101-68-8 615-005-00-9	01-2119457014-47 Diphenylmethane-4,4'-diisocyanate Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Resp. Sens. 1 H334 / Skin Sens. 1 H317 / Carc. 2 H351 / STOT SE 3 H335 / STOT RE 2 H373 Specific concentration limit (SCL): Eye Irrit. 2 H319 >= 5 / Skin Irrit. 2 H315 >= 5 / Resp. Sens. 1 H334 >= 0,1 / STOT SE 3 H335 >= 5	9,9 - 19,9
227-534-9 5873-54-1 615-005-00-9	01-2119480143-45 Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate Carc. 2 H351 / Acute Tox. 4 H332 / STOT RE 2 H373 / Eye Irrit. 2 H319 / STOT SE 3 H335 / Skin Irrit. 2 H315 / Resp. Sens. 1 H334 / Skin Sens. 1 H317 Specific concentration limit (SCL): Eye Irrit. 2 H319 >= 5 / Skin Irrit. 2 H315 >= 5 / Resp. Sens. 1 H334 >= 0,1 / STOT SE 3 H335 >= 5	9,9 - 19,9

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. **Description of first aid measures**

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek

medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device.

Additional information

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Use appropriate container to avoid environmental contamination. Fouled surfaces must be immediately cleaned with suitable solvents, Useable as such (flammable): water 45 vol.% ethanol or i-propanol 50 vol. % ammonia solution (density= 0.88) 5 vol.%

Alternative (non-flammable): sodium carbonate 5 vol.% water 95 vol.%.

Take up spilled residuals with the same agent and leave them for a few days in unclosed containers until there is no further reaction. Then, close the containers and dispose of them in accordance with the regulations for waste removal (refer to section 13).

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.

People who spray this preparation should have regular pulmonary function tests.

7.1. Precautions for safe handling

Advices on safe handling

Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSIVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers. Keep away from amines, alcohols and water.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.

People who spray this preparation should have regular pulmonary function tests.

8.1. Control parameters

Occupational exposure limit values

not applicable

DNEL:

Diphenylmethane-4,4'-diisocyanate

Index No. 615-005-00-9 / EC No. 202-966-0 / CAS No. 101-68-8

DNEL short-term oral (acute), Workers:

DNEL acute dermal, short-term (local), Workers: 28,7 mg/kg

DNEL acute dermal, short-term (systemic), Workers: 50 mg/kg

DNEL acute inhalative (local), Workers: 0,1 mg/m³

DNEL acute inhalative (systemic), Workers: 0,1 mg/m³

DNEL long-term inhalative (local), Workers: 0,05 mg/m³

DNEL long-term inhalative (systemic), Workers: 0,05 mg/m³

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate

Index No. 615-005-00-9 / EC No. 227-534-9 / CAS No. 5873-54-1

DNEL short-term oral (acute), Workers:

DNEL long-term oral (repeated), Workers:

DNEL acute dermal, short-term (local), Workers: 28,7 mg/kg

DNEL acute dermal, short-term (systemic), Workers: 50 mg/kg

DNEL acute inhalative (local), Workers: 0,1 mg/m³

DNEL acute inhalative (systemic), Workers: 0,1 mg/m³

DNEL long-term inhalative (local), Workers: 0,05 mg/m³

DNEL long-term inhalative (systemic), Workers: 0,05 mg/m³

PNEC:

Diphenylmethane-4,4'-diisocyanate

Index No. 615-005-00-9 / EC No. 202-966-0 / CAS No. 101-68-8

PNEC aquatic, freshwater: > 1 mg/L

PNEC aquatic, marine water: > 0,1 mg/L

PNEC, soil: > 1 mg/kg

PNEC sewage treatment plant (STP): > 1 mg/L

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate

Index No. 615-005-00-9 / EC No. 227-534-9 / CAS No. 5873-54-1

PNEC aquatic, freshwater: > 1 mg/L

PNEC aquatic, marine water: > 0,1 mg/L

PNEC, soil: > 1 mg/kg

PNEC sewage treatment plant (STP): > 1 mg/L

8.2. Exposure controls

Personal protection equipment

Respiratory protection

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.

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Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Appearance: Liquid
Colour: brown

Odour: earthy

Odour threshold: not applicable

pH at 20 °C: not applicable

Melting point/freezing point: -24 °C

Source: Diphenylmethane Diisocyanate, isomers and homologues

Initial boiling point and boiling range: not applicable

Flash point: > 200 °C

Evaporation rate: not applicable

flammability

Burning time: not applicable

Upper/lower flammability or explosive limits:

Lower explosion limit: not applicable

Upper explosion limit: not applicable

Vapour pressure at 20 °C: not applicable

Vapour density: not applicable

Relative density:

Density at 20 °C: 1,22 g/cm³

Solubility(ies):

Water solubility at 20 °C: insoluble

Partition coefficient: n-octanol/water: see section 12

Auto-ignition temperature: not applicable

Decomposition temperature: not applicable

Viscosity at °C: 0,1 - 0,2 Pa*s

Explosive properties: not applicable

Oxidising properties: not applicable

9.2. Other information

Solid content: 100 weight-%

solvent content:

Organic solvents: 0 weight-%

Water: 0 weight-%

Solvent separation test: < 3 weight-% (ADR/RID)

SECTION 10: Stability and reactivity

10.1. Reactivity

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No information available.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strongly acidic and alkaline materials as well as oxidizers. Keep away from amines, alcohols and water. Reacts with water, forming carbon dioxide, producing bursting hazard in closed containers due to build-up of pressure.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

Thermal decomposition: at > 260 °C:.

10.5. Incompatible materials

not applicable

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

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

11.1.* Information on toxicological effects *

Acute toxicity

Diphenylmethane-4,4'-diisocyanate

oral, LD50, Rat: > 2000 mg/kg

Method: Directive 84/449/EWG, B.1

Toxicological study on a comparable product

dermal, LD50, Rabbit: > 9400 mg/kg

Method: OECD 402

Investigation on a comparable product

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and

Diphenylmethan-2,2'-diisocyanate

oral, LD50, Rat: > 2000 mg/kg

Method: Directive 84/449/EWG, B.1

Toxicological study on a comparable product

dermal, LD50, Rabbit: > 9400 mg/kg

Method: OECD 402

Investigation on a comparable product

Diphenylmethane Diisocyanate, isomers and homologues

oral, LD50, Rat: > 10000 mg/kg

Method: OECD 401

dermal, LD50, Rabbit: > 9400 mg/kg

Method: OECD 402

inhalative (dust and mist), LC50, Rat: 0,31 mg/L (4 h)

Method: OECD 403

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye irritation.

Diphenylmethane-4,4'-diisocyanate

Skin, Rabbit: Evaluation irritant.

Method: OECD 404

Toxicological study on a comparable product

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate

Skin, Rabbit: Evaluation irritant.

Method: OECD 404

Toxicological study on a comparable product

Diphenylmethane Diisocyanate, isomers and homologues

Skin: Rabbit: Evaluation mild irritant.

Method: OECD 404

Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Diphenylmethane-4,4'-diisocyanate

Skin, Mouse: ; Evaluation positive

Method: OECD 429

Respiratory system, Guinea pig: ; Evaluation positive

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate

Skin, Mouse: ; Evaluation positive

Method: OECD 429

Toxicological study on a comparable product

Respiratory system, Guinea pig: ; Evaluation positive

Toxicological study on a comparable product

Diphenylmethane Diisocyanate, isomers and homologues

Skin, Mouse: ; Evaluation positive

Method: OECD 429

May cause sensitization by skin contact.

Respiratory system, Rat: ; Evaluation positive

May cause sensitization by skin contact.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Suspected of causing cancer.

Diphenylmethane-4,4'-diisocyanate

Carcinogenicity; Evaluation Occurrence of tumors in the highest dose group

Method: OECD 453

inhalative; Investigation on a comparable product

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate

Carcinogenicity; Evaluation Occurrence of tumors in the highest dose group

Method: OECD 453

inhalative; Investigation on a comparable product

Diphenylmethane Diisocyanate, isomers and homologues

Carcinogenicity; Evaluation Occurrence of tumors in the highest dose group

Method: OECD 453

Reproductive toxicity; Evaluation Does not show teratogenic effects in animal experiments

Method: OECD 414

STOT-single exposure; STOT-repeated exposure

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Diphenylmethane-4,4'-diisocyanate

Specific target organ toxicity (single exposure), Irritation Evaluation May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) Evaluation May cause damage to organs through prolonged or repeated exposure.

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate

Specific target organ toxicity (single exposure), Irritation Evaluation May cause respiratory irritation.

inhalative; Respiratory system

Specific target organ toxicity (repeated exposure) Evaluation May cause damage to organs through prolonged or repeated exposure if inhaled

inhalative; Respiratory system

Diphenylmethane Diisocyanate, isomers and homologues

Specific target organ toxicity (single exposure), Irritation Evaluation May cause respiratory irritation.

Respiratory system; inhalative

Specific target organ toxicity (repeated exposure) Evaluation May cause damage to organs through prolonged or repeated exposure if inhaled

Respiratory system; inhalative

Aspiration hazard

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

Practical experience/human evidence

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified according to the toxicological dangers. See chapters 2 and 15 for details.

SECTION 12: Ecological information

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

Do not allow to enter into surface water or drains.

12.1. Toxicity

Diphenylmethane-4,4'-diisocyanate

Fish toxicity, LC50, Danio rerio : > 1000 mg/L (96 h)

Method: OECD 203

Investigation on a comparable product

Algae toxicity, ErC50, Scenedesmus subspicatus: > 1640 mg/L (72 h)

Method: OECD 201

Investigation on a comparable product

Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 1000 mg/L (24 h)

Method: OECD 202

Investigation on a comparable product

Bacteria toxicity, EC50, Activated sludge: > 100 mg/L (3 h)

Method: OECD 209

Investigation on a comparable product

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate

Fish toxicity, LC50, Danio rerio : > 1000 mg/L (96 h)

Method: OECD 203

Investigation on a comparable product

Algae toxicity, ErC50, Scenedesmus subspicatus: > 0 mg/L (72 h)

Method: OECD 201

Investigation on a comparable product

Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 1000 mg/L (24 h)

Method: OECD 202

Investigation on a comparable product

Bacteria toxicity, EC50, Activated sludge: > 100 mg/L (3 h)

Method: OECD 209

Investigation on a comparable product

Diphenylmethane Diisocyanate, isomers and homologues

Fish toxicity, LC50, Danio rerio : > 1000 mg/L (96 h)

Method: OECD 203

Algae toxicity, ErC50, Scenedesmus subspicatus: > 1640 mg/L (72 h)

Method: OECD 201

Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 1000 mg/L (24 h)

Method: OECD 202

Bacteria toxicity, EC50, Activated sludge: > 100 mg/L (3 h)

Method: OECD 209

Long-term Ecotoxicity

Diphenylmethane-4,4'-diisocyanate

Fish toxicity, LC50 (96 h)

Method: OECD 202

Investigation on a comparable product

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate

Daphnia toxicity, NOEC, Daphnia magna (Big water flea): > 0 mg/L (21 d)

Method: OECD 202

Investigation on a comparable product

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Diphenylmethane Diisocyanate, isomers and homologues
Daphnia toxicity, NOEC, Daphnia magna (Big water flea): > 0 mg/L (21 d)
Method: OECD 202

12.2. Persistence and degradability *

Diphenylmethane-4,4'-diisocyanate
Biodegradation:: (28 d)Evaluation not potentially degradable
Method: OECD 302C
Investigation on a comparable product

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate
Biodegradation:: (28 d)Evaluation not potentially degradable
Method: OECD 302C
Investigation on a comparable product

Diphenylmethane Diisocyanate, isomers and homologues
Biodegradation:, aerobic: (28 d)Evaluation Not readily biodegradable (according to OECD criteria)
Method: OECD 302C

12.3. Bioaccumulative potential *

Diphenylmethane Diisocyanate, isomers and homologues
Partition coefficient: n-octanol/water: < 14 ; Evaluation Accumulation in aquatic organisms is not expected.
Method: OECD 305 C
The substance hydrolyzes rapidly in water

Bioconcentration factor (BCF)

Diphenylmethane-4,4'-diisocyanate
Bioconcentration factor (BCF), Cyprinus carpio (Common Carp): 200 ; Evaluation Accumulation in aquatic organisms is not expected.
Method: OECD 305 E

Diphenylmethan-2,4'-diisocyanate; mixtures with Diphenylmethan-4,4'-diisocyanate and Diphenylmethan-2,2'-diisocyanate
Bioconcentration factor (BCF), Cyprinus carpio (Common Carp): 200 ; Evaluation Accumulation in aquatic organisms is not expected.
Method: OECD 305 E
Investigation on a comparable product

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. Handle contaminated packages in the same way as the substance itself. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

160508* discarded organic chemicals consisting of or containing hazardous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

No dangerous good in sense of this transport regulation.

14.1. UN number

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not applicable

14.2. **UN proper shipping name**

14.3. **Transport hazard class(es)**

not applicable

14.4. **Packing group**

not applicable

14.5. **Environmental hazards**

Land transport (ADR/RID)

not applicable

Marine pollutant

not applicable

14.6. **Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

tunnel restriction code

-

Sea transport (IMDG)

EmS-No.

not applicable

Air transport (ICAO-TI / IATA-DGR)

14.7. **Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L): 0

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Substance/product listed in the following inventories:

AICS no informtion

DSL no information

IECSC no information

KECI no information

MITI no information

PICCS no information

TSCA listet

15.2. **Chemical Safety Assessment**

For the following substances of this mixture a chemical safety assessment has been carried out:

*

EC No. CAS No.	Designation	REACH No.
202-966-0 101-68-8	Diphenylmethane-4,4'-diisocyanate	01-2119457014-47
227-534-9 5873-54-1	Diphenylmethan-2,4'-diisocyanate; Diphenylmethan-4,4'-diisocyanate Diphenylmethan-2,2'-diisocyanate	mixtures with and 01-2119480143-45

SECTION 16: Other information

*

Full text of classification in section 3:

Acute Tox. 4 / H332

Acute toxicity (inhalative)

Harmful if inhaled.

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Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Resp. Sens. 1 / H334	Respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Carc. 2 / H351	Carcinogenicity	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Skin Irrit. 2	Skin corrosion/irritation	Calculation method.
Eye Irrit. 2	Serious eye damage/eye irritation	Calculation method.
Resp. Sens. 1	Respiratory or skin sensitisation	Calculation method.
Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
Carc. 2	Carcinogenicity	Calculation method.
STOT SE 3	STOT-single exposure	Calculation method.
STOT RE 2	STOT-repeated exposure	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Abbreviations and acronyms

n.a. = not applicable
 n.b. = not determined

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830



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EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version