

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Section 1: Identification

Product name : KD BOND + SEAL WHITE 300ML
Product code : 0890 100 1

Manufacturer or supplier's details

Company : Wurth NewZealand Ltd
Address : 42 Hobill Ave
Manukau City 2104
Telephone : +64 9 262 3040
Emergency telephone number : 0800 764 766
E-mail address : prodsafe@wuerth.com
Telefax : +64 9 262 3030

Recommended use of the chemical and restrictions on use

Recommended use : Adhesives
Sealant

Section 2: Hazard identification**GHS Classification**

Flammable liquids : Category 4
Respiratory sensitisation : Category 1
Specific target organ toxicity - repeated exposure : Category 2 (Central nervous system)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H227 Combustible liquid.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
 Date of first issue: 18.07.2012

Precautionary statements : **Prevention:**
 P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
 No smoking.
 P260 Do not breathe mist or vapours.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P284 Wear respiratory protection.

Response:
 P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

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

Disposal:
 P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).
 Vapours may form explosive mixture with air.

Section 3: Composition/information on ingredients

Substance / Mixture : Mixture

Components

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|------------|-----------------------|
| Limestone | 1317-65-3 | >= 10 -< 30 |
| polyvinyl chloride | 9002-86-2 | < 10 |
| Titanium dioxide | 13463-67-7 | >= 1 -< 10 |
| Xylene | 1330-20-7 | < 10 |
| Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | 64742-82-1 | >= 1 -< 10 |
| 4,4'-Diphenylmethane diisocyanate | 101-68-8 | >= 0.1 -< 1 |

Section 4: First-aid measures

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
 When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.
 If not breathing, give artificial respiration.
 If breathing is difficult, give oxygen.
 Get medical attention.

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

- In case of skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
- In case of eye contact : Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
- If swallowed : If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause damage to organs through prolonged or repeated exposure. Respiratory symptoms, including pulmonary edema, may be delayed. Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
- Notes to physician : Treat symptomatically and supportively.

Section 5: Fire-fighting measures

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
Water spray in large fire situations
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.
Flash back possible over considerable distance.
Vapours may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.
If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
- Hazardous combustion products : Carbon oxides
Metal oxides
Nitrogen oxides (NO_x)
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.
Use personal protective equipment.
Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions : Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapours/mists with a water spray jet.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
After approximately one hour, transfer to waste container and do not seal, due to evolution of carbon dioxide.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

Section 7: Handling and storage

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing.
Avoid inhalation of vapour or mist.
Do not swallow.
Avoid contact with eyes.

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
 Date of first issue: 18.07.2012

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment

Keep container tightly closed.

Keep away from water.

Protect from moisture.

Already sensitised individuals should consult their physician regarding working with respiratory irritants or sensitisers.

Keep away from heat and sources of ignition.

Take precautionary measures against static discharges.

Take care to prevent spills, waste and minimize release to the environment.

- Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.
 When using do not eat, drink or smoke.
 Wash contaminated clothing before re-use.
- Conditions for safe storage : Keep in properly labelled containers.
 Protect from moisture.
 Keep in a cool, well-ventilated place.
 Store in accordance with the particular national regulations.
 Keep away from heat and sources of ignition.
- Materials to avoid : Do not store with the following product types:
 Strong oxidizing agents
- Storage period : 12 Months

Section 8: Exposure controls/personal protection**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|------------|-------------------------------------|--|--------|
| Limestone | 1317-65-3 | WES-TWA | 10 mg/m ³ (Calcium carbonate) | NZ OEL |
| polyvinyl chloride | 9002-86-2 | TWA (Respirable particulate matter) | 1 mg/m ³ | ACGIH |
| Titanium dioxide | 13463-67-7 | WES-TWA | 10 mg/m ³ | NZ OEL |
| | | TWA | 10 mg/m ³ (Titanium dioxide) | ACGIH |
| Xylene | 1330-20-7 | WES-TWA | 50 ppm 217 mg/m ³ | NZ OEL |
| | | TWA | 100 ppm | ACGIH |
| | | STEL | 150 ppm | ACGIH |
| Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | 64742-82-1 | WES-TWA | 300 ppm 890 mg/m ³ | NZ OEL |

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
 Date of first issue: 18.07.2012

| | | | | |
|-----------------------------------|---|----------|------------------------------------|--------|
| | | WES-STEL | 500 ppm 1,480 mg/m ³ | NZ OEL |
| 4,4'-Diphenylmethane diisocyanate | 101-68-8 | WES-TWA | 0.02 mg/m ³ (NCO) | NZ OEL |
| | Further information: Sensitiser, These values apply to all isocyanates, including prepolymers, present in the workplace air as vapours, mist or dust. | | | |
| | | WES-STEL | 0.07 mg/m ³ (NCO) | NZ OEL |
| | Further information: Sensitiser, These values apply to all isocyanates, including prepolymers, present in the workplace air as vapours, mist or dust. | | | |
| | | TWA | 0.005 ppm | ACGIH |

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Titanium dioxide

Biological occupational exposure limits

| Components | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|-----------------------------------|-----------|----------------------|---------------------|--|---------------------------|-----------|
| Xylene | 1330-20-7 | Methylhippuric acid | Urine | End of shift | 1.5 g/l | NZ BEI |
| | | Methylhippuric acids | Urine | End of shift (As soon as possible after exposure ceases) | 1.5 g/g creatinine | ACGIH BEI |
| 4,4'-Diphenylmethane diisocyanate | 101-68-8 | 4,4-Diaminodiphenyl | Urine | End of exposure or end of shift | 10 g/g creatinine | NZ BEI |

Engineering measures : Processing may form hazardous compounds (see section 10).
 Ensure adequate ventilation, especially in confined areas.
 Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type : Combined particulates and organic vapour type

Hand protection

Material : Fluorinated rubber
 Break through time : > 30 min
 Glove thickness : 0.4 mm

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

- Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.
- Eye protection : Wear the following personal protective equipment:
Safety glasses
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment:
If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
-

Section 9: Physical and chemical properties

- Appearance : paste
- Colour : white
- Odour : characteristic
- Odour Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : No data available
- Flash point : 76 °C
- Evaporation rate : No data available
- Flammability (solid, gas) : Not applicable
- Flammability (liquids) : No data available
- Upper explosion limit / Upper flammability limit : No data available

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

| | | |
|--|---|--|
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density | : | No data available |
| Density | : | ca. 1.26 g/cm ³ (20 °C) |
| Solubility(ies) Water solubility | : | insoluble |
| Partition coefficient: n-octanol/water | : | Not applicable |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity Viscosity, kinematic | : | > 20.5 mm ² /s (40 °C) |
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |
| Particle size | : | Not applicable |

Section 10: Stability and reactivity

| | | |
|------------------------------------|---|--|
| Reactivity | : | Not classified as a reactivity hazard. |
| Chemical stability | : | Stable if used as directed. Follow precautionary advice and avoid incompatible materials and conditions. Polymerises at high temperatures with evolution of carbon dioxide. |
| Possibility of hazardous reactions | : | Combustible liquid. Vapours may form explosive mixture with air. Isocyanates react with many materials and the rate of reaction increases with temperature as well as increased contact; these reactions can become violent. Contact is increased by stirring or if the other material mixes with the isocyanate. Exothermic reaction with acids, amines and alcohols Reacts with water to form carbon dioxide and heat Isocyanates are not soluble in water and sink to the bottom, but react slowly at the interface. The reaction forms carbon dioxide gas and a layer of solid polyurea. Hazardous decomposition products will be formed upon contact with water or humid air. |
| Conditions to avoid | : | Exposure to moisture Heat, flames and sparks. |

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Incompatible materials : Oxidizing agents
Acids
Bases
Water
Alcohols
Amines
Ammonia
Aluminium
Zinc
Brass
Tin
Copper
Galvanised metals
Humid air

Hazardous decomposition products : No hazardous decomposition products are known.

Section 11: Toxicological information

Exposure routes : Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Components:**Limestone:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 420
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

Titanium dioxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Acute inhalation toxicity : LC50 (Rat): > 6.82 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Xylene:

Acute oral toxicity : LD50 (Rat): 3,523 mg/kg
Method: Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : LC50 (Rat): 27.571 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 4,200 mg/kg

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Acute oral toxicity : LD50 (Rat): > 15,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 13.1 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rat): > 3,400 mg/kg

4,4'-Diphenylmethane diisocyanate:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 2.24 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Components:**Limestone:**

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation
Remarks : Based on data from similar materials

Titanium dioxide:

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Species : Rabbit
Result : No skin irritation

Xylene:

Species : Rabbit
Result : Skin irritation

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Assessment : Repeated exposure may cause skin dryness or cracking.

4,4'-Diphenylmethane diisocyanate:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation
Remarks : Based on data from similar materials

Serious eye damage/eye irritation

Not classified based on available information.

Components:**Limestone:**

Species : Rabbit
Result : No eye irritation
Method : OECD Test Guideline 405
Remarks : Based on data from similar materials

Titanium dioxide:

Species : Rabbit
Result : No eye irritation

Xylene:

Species : Rabbit
Result : Irritation to eyes, reversing within 21 days

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Species : Rabbit
Result : No eye irritation
Method : OECD Test Guideline 405

4,4'-Diphenylmethane diisocyanate:

Result : Irritation to eyes, reversing within 7 days
Remarks : Based on harmonised classification in EU regulation 1272/2008, Annex VI

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Respiratory or skin sensitisation**Skin sensitisation**

Not classified based on available information.

Respiratory sensitisation

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

Components:**Limestone:**

Test Type : Local lymph node assay (LLNA)
Exposure routes : Skin contact
Species : Mouse
Method : OECD Test Guideline 429
Result : negative
Remarks : Based on data from similar materials

Titanium dioxide:

Test Type : Local lymph node assay (LLNA)
Exposure routes : Skin contact
Species : Mouse
Result : negative

Xylene:

Test Type : Local lymph node assay (LLNA)
Exposure routes : Skin contact
Species : Mouse
Result : negative

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Test Type : Maximisation Test
Exposure routes : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : negative

4,4'-Diphenylmethane diisocyanate:

Test Type : Buehler Test
Exposure routes : Skin contact
Species : Guinea pig
Result : positive

Assessment : Probability or evidence of skin sensitisation in humans

: Inhalation
: Rat
: positive
Remarks : Based on data from similar materials

: Probability of respiratory sensitisation in humans based on animal testing

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Chronic toxicity**Germ cell mutagenicity**

Not classified based on available information.

Components:**Limestone:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative
Remarks: Based on data from similar materials

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative
Remarks: Based on data from similar materials

Titanium dioxide:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Result: negative

Xylene:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Test Type: Chromosome aberration test in vitro
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Result: negative

Test Type: In vitro sister chromatid exchange assay in mammalian cells
Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)
Species: Mouse
Application Route: Skin contact
Result: negative

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Result: negative

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Ingestion
Result: negative
Remarks: Based on data from similar materials

4,4'-Diphenylmethane diisocyanate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Rat
Application Route: inhalation (dust/mist/fume)
Method: OECD Test Guideline 474
Result: negative

Carcinogenicity

Not classified based on available information.

Components:**Titanium dioxide:**

Species : Rat
Application Route : inhalation (dust/mist/fume)
Exposure time : 2 Years
Method : OECD Test Guideline 453
Result : positive
Remarks : The mechanism or mode of action may not be relevant in humans.

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in inhalation studies with animals.

Xylene:

Species : Rat
Application Route : Ingestion
Exposure time : 103 weeks
Result : negative

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Species : Rat
Application Route : inhalation (vapour)
Exposure time : 105 weeks
Result : negative
Remarks : Based on data from similar materials

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

4,4'-Diphenylmethane diisocyanate:

| | | |
|----------------------------------|---|---|
| Species | : | Rat |
| Application Route | : | inhalation (dust/mist/fume) |
| Exposure time | : | 2 Years |
| Result | : | positive |
| Remarks | : | Based on data from similar materials |
| Carcinogenicity - Assessment | : | Limited evidence of carcinogenicity in animal studies |

Reproductive toxicity

Not classified based on available information.

Components:**Limestone:**

| | | |
|-----------------------------------|---|--|
| Effects on fertility | : | Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat Application Route: Ingestion Method: OECD Test Guideline 422 Result: negative Remarks: Based on data from similar materials |
| Effects on foetal development | : | Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat Application Route: Ingestion Method: OECD Test Guideline 422 Result: negative Remarks: Based on data from similar materials |

Xylene:

| | | |
|-----------------------------------|---|---|
| Effects on fertility | : | Test Type: One-generation reproduction toxicity study Species: Rat Application Route: inhalation (vapour) Result: negative |
| Effects on foetal development | : | Test Type: Embryo-foetal development Species: Rat Application Route: inhalation (vapour) Result: negative |

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

| | | |
|-----------------------------------|---|--|
| Effects on fertility | : | Test Type: One-generation reproduction toxicity study Species: Rat Application Route: inhalation (vapour) Result: negative Remarks: Based on data from similar materials |
| Effects on foetal development | : | Test Type: Embryo-foetal development Species: Rat Application Route: inhalation (vapour) |

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Result: negative

4,4'-Diphenylmethane diisocyanate:

Effects on foetal development : Test Type: Embryo-foetal development
Species: Rat
Application Route: inhalation (dust/mist/fume)
Result: negative
Remarks: Based on data from similar materials

STOT - single exposure

Not classified based on available information.

Components:**Xylene:**

Assessment : May cause respiratory irritation.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Assessment : May cause drowsiness or dizziness.

4,4'-Diphenylmethane diisocyanate:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

Components:**Xylene:**

Exposure routes : inhalation (vapour)
Target Organs : Auditory system
Assessment : Shown to produce significant health effects in animals at concentrations of >0.2 to 1 mg/l/6h/d.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Exposure routes : Inhalation
Target Organs : Central nervous system
Assessment : Causes damage to organs through prolonged or repeated exposure.

4,4'-Diphenylmethane diisocyanate:

Exposure routes : inhalation (dust/mist/fume)
Target Organs : Respiratory Tract
Assessment : Shown to produce significant health effects in animals at concentrations of >0.02 to 0.2 mg/l/6h/d.

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Repeated dose toxicity**Components:****Limestone:**

Species : Rat
NOAEL : > 300 mg/kg
Application Route : Ingestion
Exposure time : 28 Days
Method : OECD Test Guideline 422
Remarks : Based on data from similar materials

Titanium dioxide:

Species : Rat
NOAEL : 24,000 mg/kg
Application Route : Ingestion
Exposure time : 28 Days

Species : Rat
NOAEL : 10 mg/m³
Application Route : inhalation (dust/mist/fume)
Exposure time : 2 yr

Xylene:

Species : Rat
LOAEL : > 0.2 - 1 mg/l
Application Route : inhalation (vapour)
Exposure time : 13 Weeks
Remarks : Based on data from similar materials

Species : Rat
LOAEL : 150 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Species : Rat
NOAEL : 1,056 mg/kg
Application Route : Ingestion
Exposure time : 90 Days

Species : Rat
NOAEL : 3.950 mg/l
LOAEL : 7.400 mg/l
Application Route : Inhalation
Exposure time : 90 Days

4,4'-Diphenylmethane diisocyanate:

Species : Rat
NOAEL : 0,2 mg/m³
LOAEL : 1 mg/m³
Application Route : inhalation (dust/mist/fume)

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

Exposure time : 2 yr
 Remarks : Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

Components:**Xylene:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Experience with human exposure**Components:****Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):**

Inhalation : Symptoms: central nervous system effects

Section 12: Ecological information**Ecotoxicity****Components:****Limestone:**

| | | |
|---|---|---|
| Toxicity to fish | : | LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 203 Remarks: Based on data from similar materials |
| Toxicity to daphnia and other aquatic invertebrates | : | LL50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 202 Remarks: Based on data from similar materials |
| Toxicity to algae/aquatic plants | : | EL50 (Desmodesmus subspicatus (green algae)): > 14 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 201 Remarks: No toxicity at the limit of solubility Based on data from similar materials |
| | | EL10 (Desmodesmus subspicatus (green algae)): > 14 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction |

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Method: OECD Test Guideline 201
Remarks: No toxicity at the limit of solubility
Based on data from similar materials

Toxicity to microorganisms : EC50: > 100 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
Remarks: Based on data from similar materials

Titanium dioxide:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Skeletonema costatum (marine diatom)): > 10,000 mg/l
Exposure time: 72 h

Toxicity to microorganisms : EC50: > 1,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Xylene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 13.5 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EC50 (Skeletonema costatum (marine diatom)): 10 mg/l
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): > 0.1 - < 1 mg/l
Exposure time: 35 d
Method: OECD Test Guideline 210
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EL10 (Daphnia magna (Water flea)): > 1 - 10 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

Toxicity to microorganisms : NOEC: > 100 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
Remarks: Based on data from similar materials

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 30 mg/l

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

- Exposure time: 96 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10 - 22 mg/l
Exposure time: 48 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): 4.1 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 201
- NOELR (Pseudokirchneriella subcapitata (green algae)): 0.76 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 201
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.097 mg/l
Exposure time: 21 d
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

4,4'-Diphenylmethane diisocyanate:

- Toxicity to fish : LC50 (Oryzias latipes (Orange-red killifish)): > 3,000 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 129.7 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 1,640 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- NOEC (Desmodesmus subspicatus (green algae)): 1,640 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 10 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials
- Toxicity to microorganisms : EC50: > 100 mg/l
Exposure time: 3 h

KD BOND + SEAL WHITE 300ML

Version 8.9 Revision Date: 24.04.2020 SDS Number: 317040-00004 Date of last issue: 04.10.2019
Date of first issue: 18.07.2012

Method: OECD Test Guideline 209
Remarks: Based on data from similar materials

Persistence and degradability**Components:****polyvinyl chloride:**

Biodegradability : Result: Not readily biodegradable.

Xylene:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 70 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Biodegradability : Result: Readily biodegradable.
Biodegradation: 75.9 %
Exposure time: 31 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

4,4'-Diphenylmethane diisocyanate:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 302
Remarks: Based on data from similar materials

Bioaccumulative potential**Components:****Xylene:**

Partition coefficient: n-octanol/water : log Pow: 3.16
Remarks: Calculation

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%):

Partition coefficient: n-octanol/water : Pow: > 4

4,4'-Diphenylmethane diisocyanate:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 200

Partition coefficient: n-octanol/water : log Pow: 4.51

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

Mobility in soil

No data available

Other adverse effectsNo data available

Section 13: Disposal considerations**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.
If not otherwise specified: Dispose of as unused product.

Section 14: Transport information**International Regulations****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**NZS 5433**Not regulated as a dangerous good

Section 15: Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****HSNO Approval Number**

HSR002657 Surface Coatings and Colourants Combustible Group Standard 2017

HSW Controls

Certified handler certificate not required.

Tracking hazardous substance not required.

Refer to the Health and Safety at Work (Hazardous Substances) Regulations 2017, for further information.

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

The components of this product are reported in the following inventories:

NZIoC : All ingredients listed or exempt.

Section 16: Other information
Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
 ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
 NZ BEI : New Zealand. Biological Exposure Indices
 NZ OEL : New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

ACGIH / TWA : 8-hour, time-weighted average
 ACGIH / STEL : Short-term exposure limit
 NZ OEL / WES-TWA : Workplace Exposure Standard - Time Weighted average
 NZ OEL / WES-STEEL : Workplace Exposure Standard - Short-Term Exposure Limit

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods;

KD BOND + SEAL WHITE 300ML

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04.10.2019 |
| 8.9 | 24.04.2020 | 317040-00004 | Date of first issue: 18.07.2012 |

vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

NZ / EN