

Jotaguard VA 5002

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

1.1 Product identifier

| | |
|--------------------------------------|-----------------------|
| Product name | : Jotaguard VA 5002 |
| UFI | : JAE0-R0JH-F00S-CRGH |
| Product code | : 16432 |
| Product type | : Powder coating. |
| Other means of identification | : Not available. |

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

Use in coatings - Industrial use

1.3 Details of the supplier of the safety data sheet

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1.4 Emergency telephone number

224 919 293 – Toxikologické informační středisko (TIS)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Eye Dam. 1, H318
Skin Sens. 1, H317
Repr. 1B, H360FD
Aquatic Chronic 1, H410

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.


See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

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SECTION 2: Hazards identification

| | | |
|---|---|---|
| Hazard pictograms | : |  |
| Signal word | : | Danger. |
| Hazard statements | : | H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H360FD - May damage fertility. May damage the unborn child. H410 - Very toxic to aquatic life with long lasting effects. |
| <u>Precautionary statements</u> | | |
| General | : | Not applicable. |
| Prevention | : | P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. P273 - Avoid release to the environment. P261 - Avoid breathing dust. |
| Response | : | P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. |
| Storage | : | Not applicable. |
| Disposal | : | P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Hazardous ingredients | : | phenol, polymer with formaldehyde, glycidyl ether bisphenol a 1h-imidazole, 2-methyl- |
| Supplemental label elements | : | EUH205 - Contains epoxy constituents. May produce an allergic reaction. EUH212 - Warning! Hazardous respirable dust may be formed when used. Do not breathe dust. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : | Restricted to professional users. |
| <u>Special packaging requirements</u> | | |
| Containers to be fitted with child-resistant fastenings | : | Not applicable. |
| Tactile warning of danger | : | Not applicable. |

2.3 Other hazards

| | | |
|--|---|---|
| Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII | : | This mixture does not contain any substances that are assessed to be a PBT or a vPvB. |
| Other hazards which do not result in classification | : | May cause endocrine disruption. |

The mixture may be a skin sensitiser. It may also be a skin irritant and repeated contact may increase this effect.

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SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|--|-----------|--|---|----------------|
| barium sulfate | EC: 231-784-4 CAS: 7727-43-7 | ≥10 - ≤25 | Not classified. | - | [2] |
| phenol, polymer with formaldehyde, glycidyl ether | REACH #: 01-2119454392-40 EC: 701-263-0 CAS: 28064-14-4 | ≤5 | Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | - | [1] |
| bisphenol a | EC: 201-245-8 CAS: 80-05-7 Index: 604-030-00-0 | ≤5 | Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 | M [Acute] = 1 M [Chronic] = 10 | [1] [2] [3] |
| titanium dioxide | EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2 | ≤3 | Carc. 2, H351 (inhalation) | - | [1] [2] [*] |
| 1h-imidazole, 2-methyl- | EC: 211-765-7 CAS: 693-98-1 | <1 | Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Carc. 2, H351 Repr. 1B, H360D See Section 16 for the full text of the H statements declared above. | ATE [Oral] = 500 mg/kg | [1] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance of equivalent concern

[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix. This mixture contains ≥ 1% of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

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SECTION 4: First aid measures

- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. Coating powders can cause localised skin irritation in folds of the skin or under tight clothing.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Contains phenol, polymer with formaldehyde, glycidyl ether, 4,4'-isopropylidenediphenol. May produce an allergic reaction.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced foetal weight
increase in foetal deaths
skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Recommended: alcohol-resistant foam, CO₂ blanket, water spray or mist.

Unsuitable extinguishing media : Do not use water jet.
Do not use inert gas under high pressure (e.g. CO₂).

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous combustion products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
Fine dust clouds may form explosive mixtures with air.

5.3 Advice for firefighters

Special protective actions for fire-fighters : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters : Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Exclude sources of ignition and ventilate the area. Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

: Contain and collect spillage with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not use a dry brush as dust clouds or static can be created.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Advice should be taken from a competent occupational health practitioner on the assessment of employees with skin or respiratory complaints before the individual is exposed to the uncured product.

7.1 Precautions for safe handling

Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational exposure limits.

Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame.

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SECTION 7: Handling and storage

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso Directive - Reporting thresholds**Danger criteria**

| Category | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| E1 | 100 tonne | 200 tonne |

See Technical Data Sheet / packaging for further information.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters**Occupational exposure limits**

Dust Limit : 10 mg/m³ (TWA of total inhalable dust) and 4 mg/m³ (TWA of respirable)

| Product/ingredient name | Exposure limit values |
|-------------------------|--|
| barium sulfate | Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). TWA: 10 mg/m ³ 8 hours. Form: Dust |
| bisphenol a | Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 10/2022). Skin sensitiser. TWA: 2 mg/m ³ 8 hours. Form: dust, aerosol, inhalable fraction STEL: 5 mg/m ³ 15 minutes. Form: dust, aerosol, inhalable fraction |
| titanium dioxide | EU OEL (Europe). TWA: 5 mg/m ³ 8 hours. |

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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SECTION 8: Exposure controls/personal protection

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|-------------------------|-------------------------|-----------------------|-----------------------|--------------------|--------------------|
| bisphenol a | DNEL | Short term Dermal | 0.0019 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.0019 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Oral | 0.004 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Oral | 0.004 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 0.031 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Dermal | 0.031 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 1 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 1 mg/m ³ | General population | Local |
| | DNEL | Short term Inhalation | 1 mg/m ³ | General population | Systemic |
| | DNEL | Short term Inhalation | 2 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 2 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 2 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 2 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 1 mg/m ³ | General population | Systemic |
| | 1h-imidazole, 2-methyl- | DNEL | Long term Oral | 0.02 mg/kg bw/day | General population |
| DNEL | | Long term Dermal | 0.04 mg/kg bw/day | Workers | Systemic |
| DNEL | | Long term Inhalation | 0.3 mg/m ³ | Workers | Systemic |

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Avoid breathing dust. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain exposure to dusts below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

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SECTION 8: Exposure controls/personal protection**Hand protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Gloves

Wear suitable gloves tested to ISO 374-1:2016.

Recommended, gloves(breakthrough time) > 8 hours: butyl rubber (> 0.4 mm), nitrile rubber (> 0.4 mm), neoprene (> 0.35 mm), PVC (> 0.5 mm)

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

- Body protection** : Personnel should wear protective clothing. Care should be taken in the selection of protective clothing to ensure that inflammation and irritation of the skin at the neck and wrists through contact with the powder are avoided.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist. (FFP2 / N95).
- Environmental exposure controls** : Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties**Appearance**

| | |
|--|---|
| Physical state | : Solid. Powder. |
| Colour | : Various. |
| Odour | : Odourless. |
| Odour threshold | : Not applicable. |
| Melting point (dust) | : 85 - 115 °C |
| Initial boiling point and boiling range | : Not applicable. |
| Lower explosion limit (dust) | : 30 g/m ³ (EN 14034-3) |
| Minimum ignition energy (mJ) | : 10 - 30 (EN 13821) |
| Flash point | : Not applicable. |
| Auto-ignition temperature | : > 400°C |
| Decomposition temperature | : >230°C |
| pH | : Not applicable. |
| Viscosity | : Not applicable. |
| Solubility in water | : cold water Not soluble hot water Not soluble |

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SECTION 9: Physical and chemical properties**Partition coefficient: n-octanol/ water** : Not applicable.**Vapour pressure** : Not applicable.**Evaporation rate** : Not applicable.**Density** : 1.4 to 1.5 g/cm³**Vapour density** : Not applicable.**Explosive properties** : Not available.**Oxidising properties** : Not available.**Particle characteristics****Median particle size** : Not available.**9.2 Other information**

No additional information.

SECTION 10: Stability and reactivity**10.1 Reactivity** : Fine dust clouds may form explosive mixtures with air.**10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.**10.4 Conditions to avoid** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).
Take precautionary measures against electrostatic discharges.
To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
Prevent dust accumulation.**10.5 Incompatible materials** : Not applicable.**10.6 Hazardous decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. Coating powders can cause localised skin irritation in folds of the skin or under tight clothing.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Contains phenol, polymer with formaldehyde, glycidyl ether, 4,4'-isopropylidenediphenol. May produce an allergic reaction.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------|---------|------------|----------|
| 1h-imidazole, 2-methyl- | LD50 Oral | Mouse | 1400 mg/kg | - |

Acute toxicity estimates

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SECTION 11: Toxicological information

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| 1h-imidazole, 2-methyl- | 500 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|------------------------|------------------------------|-------|-------------------------|-------------|
| phenol, polymer with formaldehyde, glycidyl ether | Eyes - Mild irritant | Mammal - species unspecified | - | - | - |
| | Skin - Mild irritant | Mammal - species unspecified | - | - | - |
| bisphenol a | Eyes - Irritant | Mammal - species unspecified | - | - | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 250 Micrograms | - |
| | Skin - Mild irritant | Rabbit | - | 250 milligrams | - |
| titanium dioxide | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Skin - Mild irritant | Human | - | 72 hours | - |

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|---|-------------------|------------------------------|-------------|
| phenol, polymer with formaldehyde, glycidyl ether bisphenol a | skin | Mammal - species unspecified | Sensitising |
| | skin | Mammal - species unspecified | Sensitising |

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity**Developmental effects** : May damage the unborn child.**Fertility effects** : May damage fertility.**Teratogenicity**

May damage the unborn child.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------------------|
| bisphenol a | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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

11.2 Information on other hazards

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SECTION 11: Toxicological information**11.2.1 Endocrine disrupting properties**

May cause endocrine disruption.

11.2.2 Other information

Not available.

SECTION 12: Ecological information**12.1 Toxicity**

There are no data available on the mixture itself.

Coating powder residues should not be allowed to enter drains or watercourses or be deposited where they could affect ground or surface waters.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

| Product/ingredient name | Result | Species | Exposure | |
|---|--|---|--|----------|
| phenol, polymer with formaldehyde, glycidyl ether | Acute EC50 3.3 mg/l | Daphnia | 48 hours | |
| | Acute LC50 7.5 mg/l | Fish | 96 hours | |
| | bisphenol a | Acute EC50 1.506 mg/l | Algae - Proocentrum minimum - Exponential growth phase | 72 hours |
| | | Acute EC50 1000 µg/l Marine water | Algae - Skeletonema costatum | 96 hours |
| | Acute EC50 7.75 mg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours | |
| | Acute LC50 1.34 mg/l Marine water | Crustaceans - Americamysis bahia - Larvae | 48 hours | |
| | Acute LC50 3.5 mg/l Marine water | Fish - Rivulus marmoratus - Embryo | 96 hours | |
| | Chronic NOEC 2 mg/l Fresh water | Algae - Chlorobion braunii - Exponential growth phase | 4 days | |
| | Chronic NOEC 0.05 mg/l Fresh water | Crustaceans - Asellus aquaticus - Juvenile (Fledgling, Hatchling, Weanling) | 21 days | |
| | titanium dioxide | Chronic NOEC 30 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 21 days |
| Chronic NOEC 0.2 µg/l Fresh water | | Fish - Carassius auratus - Adult | 90 days | |
| Acute LC50 3 mg/l Fresh water | | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours | |
| 1h-imidazole, 2-methyl- | Acute LC50 6.5 mg/l Fresh water | Daphnia - Daphnia pulex - Neonate | 48 hours | |
| | Acute LC50 >1000000 µg/l Marine water | Fish - Fundulus heteroclitus | 96 hours | |
| | Acute LC50 286000 to 307000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours | |

Conclusion/Summary : This material is very toxic to aquatic life with long lasting effects.**12.2 Persistence and degradability****Conclusion/Summary** : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|------------------|
| phenol, polymer with formaldehyde, glycidyl ether | - | - | Not readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|----------|-----------|
| bisphenol a | 3.4 | 20 to 67 | low |
| 1h-imidazole, 2-methyl- | 0.24 | - | low |

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SECTION 12: Ecological information**12.4 Mobility in soil**

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

May cause endocrine disruption.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods**Product**

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

| Waste code | Waste designation |
|------------|---|
| 08 01 11* | Waste paint and varnish containing organic solvents or other dangerous substances |

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

| Type of packaging | European waste catalogue (EWC) |
|-------------------|--|
| CEPE Guidelines | 15 01 10* packaging containing residues of or contaminated by hazardous substances |

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

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SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|--|--|--|---|--|
| 14.1 UN number or ID number | UN3077 | UN3077 | UN3077 | UN3077 |
| 14.2 UN proper shipping name | Environmentally hazardous substance, solid, n.o.s. (bisphenol a) | Environmentally hazardous substance, solid, n.o.s. (bisphenol a) | Environmentally hazardous substance, solid, n.o.s. (bisphenol a). Marine pollutant (phenol, polymer with formaldehyde, glycidyl ether, bisphenol a) | Environmentally hazardous substance, solid, n.o.s. (bisphenol a) |
| 14.3 Transport hazard class(es) | 9 | 9 | 9 | 9 |
| 14.4 Packing group | III | III | III | III |
| 14.5 Environmental hazards | Yes. | Yes. | Yes. | Yes. |

Additional information

ADR/RID

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

Hazard identification number 90

Tunnel code (-)

ADN

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

IMDG

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

Emergency schedules F-A, S-F

IATA

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

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SECTION 15: Regulatory information

| Intrinsic property | Ingredient name | Status | Reference number | Date of revision |
|--|--|------------------------|-------------------------|------------------|
| Toxic to reproduction | bisphenol a 1h-imidazole, 2-methyl- | Candidate Candidate | - D(2020) 4578-DC | - 25.06.2020 |
| Endocrine disrupting properties for human health | bisphenol a | Recommended | ED/01/2018 | 01.10.2019 |
| Endocrine disrupting properties for environment | bisphenol a | Recommended | ED/01/2018 | 01.10.2019 |

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

| Product/ingredient name | List name | Name on list | Classification | Notes |
|-----------------------------|---|--|----------------|-------|
| 4,4'-isopropylidenediphenol | Government regulation of Czech Republic PEL/NPK-P | 2,2-bis(4-hydroxyfenyl)propan (prach, aerosol); bisfenol A | Repro. T | - |

International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

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SECTION 15: Regulatory information**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.**SECTION 16: Other information**

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 N/A = Not available
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 SGG = Segregation Group
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|-------------------------|--------------------|
| Eye Dam. 1, H318 | Calculation method |
| Skin Sens. 1, H317 | Calculation method |
| Repr. 1B, H360FD | Calculation method |
| Aquatic Chronic 1, H410 | Calculation method |

Full text of abbreviated H statements

| | |
|--------|---|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H360D | May damage the unborn child. |
| H360F | May damage fertility. |
| H360FD | May damage fertility. May damage the unborn child. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |

Full text of classifications [CLP/GHS]

| | |
|-------------------|---|
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Carc. 2 | CARCINOGENICITY - Category 2 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Repr. 1B | REPRODUCTIVE TOXICITY - Category 1B |
| Skin Corr. 1C | SKIN CORROSION/IRRITATION - Category 1C |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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SECTION 16: Other information

Date of issue/ Date of revision : 01.09.2023

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Version : 1.01

Notice to reader

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