

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET

YE051F INT 820 GLOSS YELLOW 257 SN 15KG

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

1.1 Product identifier

Product name : YE051F INT 820 GLOSS YELLOW 257 SN 15KG
SDS code : 8053510
YE051F/15KG
UFI : RFK0-R0UQ-Y002-V873

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

| Identified uses |
|----------------------|
| Industrial use |
| Uses advised against |
| Consumer use |

Product use : Electrostatic coating for use in industrial plants

1.3 Details of the supplier of the safety data sheet

Akzo Nobel Powder Coatings GmbH
Zur alten Ruhr 4
59755 Arnsberg
Deutschland
Tel: +49 - 2932-6299-0

e-mail address of person responsible for this SDS : sdsfellinguk@akzonobel.com

National contact

+49 228 19 240

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : +44 (0)344 892 0111

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 Irrit. 2, H319

Skin Sens. 1, H317

Aquatic Chronic 3, H412

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.

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1/17

AkzoNobel

SECTION 2: Hazards identification

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

2.2 Label elements

| | |
|--|--|
| Hazard pictograms | :  |
| Signal word | : Warning |
| Hazard statements | : H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects. |
| Precautionary statements | |
| Prevention | : P280 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment. P261 - Avoid breathing dust. |
| Response | : 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 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention. |
| Storage | : Not applicable. |
| Disposal | : P501 - Dispose of contents and container in accordance with all local, regional, national or international regulations. |
| Hazardous ingredients | : Reaction mass of bis (2,3-epoxypropyl) terephthalate and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate |
| Supplemental label elements | : 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 | : |
| Special packaging requirements | |
| 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 | : None known. |

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|--|-----------|--|---|---------|
| titanium dioxide | REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 | ≥10 - ≤15 | Carc. 2, H351 (inhalation) | - | [1] [*] |
| Reaction mass of bis (2,3-epoxypropyl) terephthalate and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate | REACH #: 01-2120065788-39 EC: 940-592-6 | <3 | Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361f STOT RE 2, H373 (central nervous system (CNS)) (oral) Aquatic Chronic 2, H411 | ATE [Oral] = 1000 mg/kg | [1] |
| 3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane | REACH #: 01-2119977073-34 EC: 247-952-5 CAS: 26741-53-7 | ≤1 | Aquatic Chronic 1, H410 | M [Chronic] = 1 | [1] |
| tetrabutylammonium bromide | REACH #: 01-2119943706-31 EC: 216-699-2 CAS: 1643-19-2 | ≤0.3 | Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above. | ATE [Oral] = 2000 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 physical, health or environmental hazard

[*] 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.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

SECTION 4: First aid measures

- Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
- Skin contact

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. 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

Over-exposure signs/symptoms

- Eye contact

: Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation

: No specific data.
- Skin contact

: Adverse symptoms may include the following:
irritation
redness
- Ingestion

: No specific data.

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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media

: None known.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

- Hazards from the substance or mixture

: This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products

: Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
metal oxide/oxides
- 5.3 Advice for firefighters
- Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- 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

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

- Small spill

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill

: Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

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.

7.1 Precautions for safe handling

- Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| titanium dioxide | EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 4 mg/m³ 8 hours. Form: respirable TWA: 10 mg/m³ 8 hours. Form: total inhalable |

- Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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.

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---|------|----------------------|-------------------|--------------------|----------|
| Reaction mass of bis (2,3-epoxypropyl) terephthalate and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate | DNEL | Long term Inhalation | 28 µg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 170 µg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 0.025 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 0.05 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Oral | 0.39 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.39 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0.68 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 0.78 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 2.75 mg/m³ | Workers | Systemic |
| | DNEL | Long term Oral | 0.3 mg/kg bw/day | General population | Systemic |
| tetrabutylammonium bromide | DNEL | Long term Dermal | 0.3 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0.522 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 0.84 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 2.96 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | | | |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|---|------------------------|-------------------|--------------------------|
| Reaction mass of bis (2,3-epoxypropyl) terephthalate and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate | Fresh water | 0.003 mg/l | Assessment Factors |
| | Marine water | 0 mg/l | Assessment Factors |
| | Sewage Treatment Plant | 32 mg/l | Assessment Factors |
| | Fresh water sediment | 0.044 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 0.004 mg/kg dwt | Equilibrium Partitioning |
| | Soil | 0.007 mg/kg dwt | Equilibrium Partitioning |
| | Fresh water | 0.002 mg/l | Assessment Factors |
| | Sewage Treatment Plant | 42 mg/l | Assessment Factors |
| | Fresh water sediment | 2000000 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 200000 mg/kg dwt | Equilibrium Partitioning |
| 3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane | Soil | 1 mg/kg dwt | Assessment Factors |
| | | | |
| | | | |

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

SECTION 8: Exposure controls/personal protection

| | |
|---------------------------------|---|
| 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 with an approved standard 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. |
| Skin protection | |
| Hand protection | <p>: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.</p> <p>When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time >480 minutes according to EN374) is recommended. Recommended gloves: Viton ® or Nitrile, thickness ≥ 0.38 mm. When only brief contact is expected, a glove with protection class of 2 or higher (breakthrough time >30 minutes according to EN374) is recommended. Recommended gloves: Nitrile, thickness ≥ 0.12 mm. Gloves should be replaced regularly and if there is any sign of damage to the glove material.</p> <p>The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.</p> <p>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.</p> |
| Body protection | <p>: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</p> <p>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.</p> |
| 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 | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Wear a respirator conforming to EN140 with type A/P2 filter or better. Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used. |
| Environmental exposure controls | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

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. |
| Colour | : Yellow. |
| Odour | : Odourless. |
| Odour threshold | : Not available. |
| Melting point/freezing point | : Not available. |
| Boiling point, initial boiling point, and boiling range | : Not applicable. |
| Flammability | : Not available. |
| Lower and upper explosion limit | : 20 - 70 g/m3 |
| Flash point | : Not applicable. |
| Auto-ignition temperature | : 450 to 600°C (842 to 1112°F) |
| Decomposition temperature | : Not available. |
| pH | : Not applicable. [DIN EN 1262] |
| Viscosity | : Kinematic (room temperature): Not applicable. [DIN EN ISO 3219] Kinematic (40°C): Not applicable. [DIN EN ISO 3219] |
| Solubility(ies) | : |

| Media | Result |
|------------|-----------------------------|
| cold water | Not soluble [OECD (TG 105)] |

Partition coefficient: n-octanol/ water : Not applicable.

| | |
|------------------|------------------------------|
| Vapour pressure | : Not available. |
| Relative density | : 1.2 to 1.9 [ISO 8130-2/-3] |
| Vapour density | : Not applicable. |

Particle characteristics

| | |
|---|------------------|
| Median particle size | : Not available. |
| Percentage of particles with aerodynamic diameter ≤ 10 µm | : 0 |

9.2 Other information

| | |
|------------------------------|-------------------|
| Minimum ignition energy (mJ) | : 5 to 20 |
| Fundamental burning velocity | : Not applicable. |
| SADT | : Not available. |
| Heat of combustion | : Not available. |

Aerosol product

| | |
|-----------------|-------------------|
| Type of aerosol | : Not applicable. |
|-----------------|-------------------|

SECTION 10: Stability and reactivity

- 10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability : The product is stable.
- 10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid : No specific data.
- 10.5 Incompatible materials : No specific data.
- 10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|-----------|--------------|------------|----------|
| Reaction mass of bis (2,3-epoxypropyl) terephthalate and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate 3,9-bis(2,4-di-tert-butylphenoxy) -2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5] undecane tetrabutylammonium bromide | LD50 Oral | Rat | 1000 mg/kg | - |
| | LD50 Oral | Rat | 5580 mg/kg | - |
| | LD50 Oral | Rat - Female | 2000 mg/kg | - |

Conclusion/Summary : Not available.

Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| Product as-supplied Reaction mass of bis (2,3-epoxypropyl) terephthalate and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate tetrabutylammonium bromide | 64641.2 | N/A | N/A | N/A | N/A |
| | 1000 | N/A | N/A | N/A | N/A |
| | 2000 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|------------------------|---------|-------|----------|-------------|
| 3,9-bis(2,4-di-tert-butylphenoxy) -2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5] undecane | Skin - Severe irritant | Rabbit | - | 0.5 gm | - |

SECTION 11: Toxicological information

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Developmental toxin | Species | Dose | Exposure |
|---|-------------------|-----------|---------------------|--------------------|-----------------|----------|
| Reaction mass of bis (2,3-epoxypropyl) terephthalate and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate | - | Positive | - | Rat - Male, Female | Oral: 3 mg/kg | - |
| tetrabutylammonium bromide | - | - | - | Rat | Oral: 600 mg/kg | - |

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|------------|-------------------|------------------------------|
| Reaction mass of bis (2,3-epoxypropyl) terephthalate and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate | Category 2 | oral | central nervous system (CNS) |

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

- Eye contact : Causes serious eye irritation.
- Inhalation : No known significant effects or critical hazards.
- Skin contact : May cause an allergic skin reaction.
- Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation : No specific data.
- Skin contact : Adverse symptoms may include the following:
irritation
redness
- Ingestion : No specific data.

SECTION 11: Toxicological information

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

No additional information.

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 |
|---|-----------------------------------|--|----------|
| titanium dioxide | Acute LC50 15.9 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| | Acute LC50 >1000 mg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| | EC50 97 mg/l | Algae | 72 hours |
| 3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane | LC50 70.7 mg/l | Fish | 96 hours |

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Not available.

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

Not available.

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 : The classification of the product may meet the criteria for a hazardous waste.
- 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 |
|--------------|-----------------------|
| EWC 08 02 01 | waste coating powders |

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.

SECTION 13: Disposal considerations

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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA |
|---------------------------------|----------------|----------------|----------------|
| 14.1 UN number or ID number | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - |
| 14.4 Packing group | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. |

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 Transport in bulk according to IMO instruments : Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
UK (GB) /REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.
on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

VOC : Not applicable.
VOC for Ready-for-Use Mixture : Not applicable.

SECTION 15: Regulatory information

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 is not controlled under the Seveso Directive.

National regulations
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.

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]

| SECTION 16: Other information | |
|---|--|
| Classification | Justification |
| Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412 | Calculation method Calculation method Calculation method |

Full text of abbreviated H statements

| | |
|---|---|
| H302 H315 H317 H318 H319 H351 H361 H361f H373 H410 H411 H412 | Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects. |
|---|---|

Full text of classifications [CLP/GHS]

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

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Notice to reader

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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

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