SAFETY DATA SHEET

HI-TEMP 1027 HD GRAY RESIN



Date of issue 3 July 2024

Version 17.19

1. Product and company identification

| | · · |
|---|---|
| Product name | : HI-TEMP 1027 HD GRAY RESIN |
| Product code | : 00436786 |
| Product type | : Liquid. |
| Relevant identified uses of Product use | the substance or mixture and uses advised against Professional applications, Used by spraying. |
| Use of the substance/ mixture | : Coating. |
| Lines advised excinet | Not explicable |

| Uses advised against | : Not applicable. |
|----------------------|-------------------|
| | |

Supplier's details : PPG PMC Japan Co., Ltd., 8F, Shintetsu Bldg., 1-1, Daikaidori 1-chome, Kobe 652-0803 Japan; Tel: +81-78-574-2777

Emergency telephone : 078 574 2777 number

2. Hazards identification

| GHS Classification | : FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 1A TOXIC TO REPRODUCTION - Effects on or via lactation SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category |
|--|---|
| <u>GHS label elements</u> Hazard pictograms | HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 3 |
| Signal word | : Danger |
| Hazard statements | Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause cancer. May damage fertility or the unborn child. May cause harm to breast-fed children. May cause damage to organs. (central nervous system (CNS), kidneys, liver, |
| | respiratory organs) Causes damage to organs through prolonged or repeated exposure. (central |

| Product code 00436786 | Date of issue 3 July 2024 Version 17.19 | |
|---|---|--|
| Product name HI-TEMP 1027 HD GRAY RESIN | | |
| 2. Hazards identifi | ation | |
| | nervous system (CNS), hearing organs, kidneys, nervous system, respiratory organs) Toxic to aquatic life. Harmful to aquatic life with long lasting effects. | |
| Precautionary statements | | |
| Prevention | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Do not breathe vapor. Avoid contact during pregnancy and while nursing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. | |
| Response | IF exposed or concerned: Call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. | |
| Storage | Store locked up. | |
| Disposal | Dispose of contents and container in accordance with all local, regional, national and international regulations. | |
| Other hazards which do not result in classification | Prolonged or repeated contact may dry skin and cause irritation. | |

3. Composition/information on ingredients

: Mixture

CAS number/other identifiers

Substance/mixture

| CAS number | Not applicable. |
|-------------|------------------|
| CSCL number | : Not available. |

| Ingredient name | % | CAS number | CSCL |
|-----------------------------|------------|------------|----------------|
| Mica | 12.5 - <15 | 12001-26-2 | Not available. |
| Toluene | 7 - <10 | 108-88-3 | 3-2; 3-60 |
| Xylene | 3 - <5 | 1330-20-7 | 3-3; 3-60 |
| Ethyl Benzene | 1 - <2 | 100-41-4 | 3-28; 3-60 |
| 1-Butanol | 0.5 - <1 | 71-36-3 | 2-3049 |
| Crystalline silica (quartz) | 0.5 - <1 | 14808-60-7 | 1-548 |
| Vinyltrimethoxysilane | 0.2 - <0.5 | 2768-02-7 | 2-2066 |

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 and hence require reporting in this section.

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

SUB codes represent substances without registered CAS Numbers.

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4. First aid measures

| Description of necessary first aid measures | | |
|---|--|--|
| Eye contact | : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. | |
| 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. | |
| Skin contact | Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. | |
| Ingestion | If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting. | |

| Most important symptoms/ Potential acute health effe | |
|---|--|
| Eye contact | Causes serious eye irritation. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. |
| Ingestion | : May cause damage to organs following a single exposure if swallowed. |
| Over-exposure signs/sym | <u>otoms</u> |
| Eye contact | : Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |
| Skin contact | : Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations |
| Ingestion | : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |
| Indication of immediate me | dical attention and special treatment needed, if necessary |
| Notes to physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : No specific treatment. |
| 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 thereughly with water before remaining it, ar was glaves |

thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

5. Fire-fighting measures

| Extinguishing media | |
|--|--|
| Suitable extinguishing media | : Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | : Do not use water jet. |
| Specific hazards arising from the chemical | : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life. 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 thermal decomposition products | : Decomposition products may include the following materials: carbon oxides metal oxide/oxides Formaldehyde. |
| 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. |
| 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. |

6. Accidental release measures

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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
|--------------------------------|---|
| For emergency responders | : If specialized 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". |
| · | : Avoid dispersal of spilled 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. |
| Methods and materials for co | ntainment and cleaning up |

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6. Accidental release measures

| Large spill | : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). |
|-------------|---|
| | Dispose of via a licensed waste disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

7. Handling and storage

Precautions for safe handling

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Avoid contact during pregnancy or while nursing. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. 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. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|--|
| Toluene | Japan Society for Occupational Health |
| | (Japan, 5/2023). Absorbed through skin. |
| | OEL-M: 188 mg/m ³ 8 hours. |
| | OEL-M: 50 ppm 8 hours. |
| | Industrial Safety and Health Act (Japan, |
| | 6/2020). |
| | TWA: 20 ppm 8 hours. |
| Xylene | Industrial Safety and Health Act (Japan, |
| | 6/2020). [xylene] |
| | TWA: 50 ppm 8 hours. |
| | Japan Society for Occupational Health |
| | (Japan, 5/2023). |
| | OEL-M: 50 ppm 8 hours. |
| | OEL-M: 217 mg/m ³ 8 hours. |
| Ethyl Benzene | Japan Society for Occupational Health |
| | Japan Page: 5/15 |

8. Exposure controls/personal protection

| | iois/personal protection | |
|-----------------------------|--|---|
| | | (Japan, 5/2023). Absorbed through skin. |
| | | OEL-M: 87 mg/m ³ 8 hours. |
| | | OEL-M: 20 ppm 8 hours. Industrial Safety and Health Act (Japan, |
| | | 6/2020). |
| | | TWA: 20 ppm 8 hours. |
| 1-Butanol | | Japan Society for Occupational Health |
| | | (Japan, 5/2023). Absorbed through skin. |
| | | OEL-C: 150 mg/m ³ |
| | | OEL-C: 50 ppm |
| | | Industrial Safety and Health Act (Japan, |
| | | 6/2020). |
| Crystalling siling (quartz) | | TWA: 25 ppm 8 hours. Japan Society for Occupational Health |
| Crystalline silica (quartz) | | (Japan, 5/2023). [Respirable crystalline |
| | | silica] |
| | | OEL-C: 0.03 mg/m ³ Form: Respirable dust |
| Recommended monitoring | : Reference should be made to appropria | - · · |
| procedures | national guidance documents for metho | |
| procession | substances will also be required. | |
| | | |
| Appropriate engineering | : Use only with adequate ventilation. Us | e process enclosures, local exhaust ventilation |
| controls | | orker exposure to airborne contaminants |
| | | mits. The engineering controls also need to |
| | keep gas, vapor or dust concentrations | below any lower explosive limits. Use |
| | explosion-proof ventilation equipment. | |
| Environmental exposure | | cess equipment should be checked to ensure |
| controls | | nvironmental protection legislation. In some eering modifications to the process equipment |
| | will be necessary to reduce emissions | |
| | , , | · |
| Individual protection measu | res | |
| Hygiene measures | : Wash hands, forearms and face thorout | ughly after handling chemical products, before |
| | eating, smoking and using the lavatory | |
| | | I to remove potentially contaminated clothing. |
| | | using. Ensure that eyewash stations and |
| | safety showers are close to the worksta | |
| Eye protection | : Chemical splash goggles. | |
| Skin protection | | |
| Hand protection | | complying with an approved standard should |
| | | mical products if a risk assessment indicates ameters specified by the glove manufacturer, |
| | | ill retaining their protective properties. It |
| | should be noted that the time to breakt | |
| | | ers. In the case of mixtures, consisting of |
| | several substances, the protection time | e of the gloves cannot be accurately |
| | estimated. | |
| Gloves | : For prolonged or repeated handling, us | e the following type of gloves: |
| | Recommended: polyvinyl alcohol (PVA |) Viton® |
| | Not recommended: nitrile rubber | |
| | | |
| | | |

8. Exposure controls/personal protection

| Body protection | : 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. |
|------------------------|--|
| 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 | : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. |

9. Physical and chemical properties

| Appearance | | | |
|------------------|------------------------|-------------|--|
| Physical state | : Liquid. | | |
| Color | : Gray. | | |
| Odor | : Characteristic. | | |
| Boiling point | : >37.78°C (>100°F) | | |
| Flash point | : Closed cup: 4.44°C (| 40°F) | |
| Relative density | : 1.8 | | |
| | Media | Result | |
| Solubility(ies) | cold water | Not soluble | |
| | | | |

10. Stability and reactivity

| - | - |
|------------------------------------|---|
| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : When exposed to high temperatures may produce hazardous decomposition products. |
| Incompatible materials | : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids. |
| Hazardous decomposition products | : Depending on conditions, decomposition products may include the following materials: carbon oxides Formaldehyde. metal oxide/oxides |

Product name HI-TEMP 1027 HD GRAY RESIN

11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure | |
|-------------------------|-----------------------|------------|-------------------------|----------|--|
| Toluene | LC50 Inhalation Vapor | Rat | 49 g/m³ | 4 hours | |
| | LD50 Dermal | Rabbit | 8.39 g/kg | - | |
| | LD50 Oral | Rat | 5580 mg/kg | - | |
| Xylene | LD50 Dermal | Rabbit | 1.7 g/kg | - | |
| - | LD50 Oral | Rat | 4.3 g/kg | - | |
| Ethyl Benzene | LC50 Inhalation Vapor | Rat | 17.8 mg/l | 4 hours | |
| - | LD50 Dermal | Rabbit | 17.8 g/kg | - | |
| | LD50 Oral | Rat | 3.5 g/kg | - | |
| 1-Butanol | LC50 Inhalation Vapor | Rat | 24000 mg/m ³ | 4 hours | |
| | LD50 Dermal | Rabbit | 3400 mg/kg | - | |
| | LD50 Oral | Rat | 790 mg/kg | - | |
| Vinyltrimethoxysilane | LC50 Inhalation Vapor | Rat | 16800 mg/m ³ | 4 hours | |
| | LD50 Dermal | Rabbit | 3158 mg/kg | - | |
| | LD50 Oral | Rat - Male | 6899 mg/kg | - | |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|--------------------|-------------|
| Xylene | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|---------------|---------------------------------------|-------------------|---|
| Toluene | Category 1 | - | central nervous system (CNS) |
| | Category 3 | | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |
| Xylene | Category 1 | - | central nervous system (CNS), kidneys, liver, |
| | Category 3 | | respiratory organs Narcotic effects |
| Ethyl Benzene | Category 3 | - | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |
| 1-Butanol | Category 3 | - | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |
| | · · · · · · · · · · · · · · · · · · · | Ja | pan Page: 8/15 |

| Product code 00436786 Product name HI-TEMP 1027 HD GRAY RESIN | Date of is | Date of issue 3 July 2024 | | |
|--|--------------------------|---------------------------|---|--|
| 1. Toxicological information | | | | |
| Vinyltrimethoxysilane | Category 2 Category 3 | - | central nervous system (CNS) Narcotic effects | |
| Specific target organ toxicity (repeated expos | ure) | | | |
| Name | Category | Route of exposure | Target organs | |
| Mica Toluene | Category 1 Category 1 | - | respiratory organs central nervous system (CNS), kidneys | |
| Xylene | Category 1 | - | nervous system, respiratory organs | |
| Ethyl Benzene | Category 1 | - | hearing organs, nervous system | |
| 1-Butanol | Category 1 | - | central nervous system (CNS), hearing organs | |
| Crystalline silica (quartz) | Category 1 | - | immune system, kidneys, respiratory organs | |
| Vinyltrimethoxysilane | Category 2 | - | bladder | |

| Name | Result |
|---------------|--------------------------------|
| Toluene | ASPIRATION HAZARD - Category 1 |
| Xylene | ASPIRATION HAZARD - Category 1 |
| Ethyl Benzene | ASPIRATION HAZARD - Category 1 |

| Information on the likely routes of exposure : Not available. Potential acute health effects : Causes serious eye irritation. Inhalation : No known significant effects or critical hazards. Skin contact : May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. Ingestion : May cause damage to organs following a single exposure if swallowed. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations Skin contact : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations | | Japan Page: 9/1 |
|---|-----------------------------|--|
| routes of exposure Potential acute health effects Eye contact : Causes serious eye irritation. Inhalation : No known significant effects or critical hazards. Skin contact : May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. Ingestion : May cause damage to organs following a single exposure if swallowed. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations | SKIN CONTACT | irritation redness dryness cracking reduced fetal weight increase in fetal deaths |
| routes of exposure Potential acute health effects Eye contact : Causes serious eye irritation. Inhalation : No known significant effects or critical hazards. Skin contact : May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. Ingestion : May cause damage to organs following a single exposure if swallowed. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: pain or irritation watering redness Inhalation : Adverse symptoms may include the following: | Skin contact | increase in fetal deaths skeletal malformations |
| routes of exposure Potential acute health effects Eye contact : Causes serious eye irritation. Inhalation : No known significant effects or critical hazards. Skin contact : May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. Ingestion : May cause damage to organs following a single exposure if swallowed. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : Adverse symptoms may include the following: | Inhalation | redness Adverse symptoms may include the following: |
| routes of exposure Potential acute health effects Eye contact : Causes serious eye irritation. Inhalation : No known significant effects or critical hazards. Skin contact : May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. Ingestion : May cause damage to organs following a single exposure if swallowed. Symptoms related to the physical, chemical and toxicological characteristics | Eye contact | |
| routes of exposurePotential acute health effectsEye contact: Causes serious eye irritation.Inhalation: No known significant effects or critical hazards.Skin contact: May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. | | |
| routes of exposure Potential acute health effects Eye contact : Causes serious eye irritation. Inhalation : No known significant effects or critical hazards. Skin contact : May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. Defatting to the skin. | Ingestion | : May cause damage to organs following a single exposure if swallowed. |
| routes of exposure Potential acute health effects Eye contact : Causes serious eye irritation. | | Causes skin irritation. Defatting to the skin. |
| routes of exposure Potential acute health effects | Inhalation | : No known significant effects or critical hazards. |
| routes of exposure | Eye contact | : Causes serious eye irritation. |
| | Potential acute health effe | uts |
| | | : Not available. |

| Product code 00436786 | | Date of issue 3 July 2024 Version 17.19 |
|--------------------------------|-----|--|
| Product name HI-TEMP 1027 | HC | GRAY RESIN |
| 11. Toxicological | n | formation |
| Ingestion | : | Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |
| Delayed and immediate effect | ts | and also chronic effects from short and long term exposure |
| Short term exposure | | |
| Potential immediate effects | : | Not available. |
| Potential delayed effects | 1 | Not available. |
| <u>Long term exposure</u> | | |
| Potential immediate effects | : | Not available. |
| Potential delayed effects | : | Not available. |
| Potential chronic health eff | ect | <u>s</u> |
| General | : | Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. |
| Carcinogenicity | : | May cause cancer. Risk of cancer depends on duration and level of exposure. |
| Mutagenicity | : | No known significant effects or critical hazards. |
| Reproductive toxicity | : | May damage fertility or the unborn child. May cause harm to breast-fed children. |

Numerical measures of toxicity

Acute toxicity estimates

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|----------------------------|------------------|-------------------|--------------------------------|----------------------------------|--|
| HI-TEMP 1027 HD GRAY RESIN | N/A | 13329.1 | N/A | 74.7 | N/A |
| Toluene | 5580 | 8390 | N/A | 11 | N/A |
| Xylene | 4300 | 1700 | N/A | 11 | N/A |
| Ethyl Benzene | 3500 | 17800 | N/A | 17.8 | N/A |
| 1-Butanol | N/A | 3400 | N/A | 24 | N/A |
| Vinyltrimethoxysilane | 6899 | 3158 | N/A | 16.8 | N/A |

Other information

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60C (140F). Avoid contact with skin and clothing.

12. Ecological information

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|---|---|------|--|
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| | <u>, , , , , , , , , , , , , , , , , , , </u> | | |
| | | | |

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|--|---|---------------|
| Ethyl Benzene | Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water | Daphnia Daphnia - Ceriodaphnia dubia | 48 hours - |
| 1-Butanol | Acute LC50 1376 mg/l | Fish | 96 hours |

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12. Ecological information

| Persistence/degradability | | | | | | |
|------------------------------------|-------------------|------------|-----------------|------|-------------------------------|------------|
| Product/ingredient name | Test | Result | | Dose | | Inoculum |
| Ethyl Benzene | - | 79 % - Rea | idily - 10 days | - | | - |
| Product/ingredient name | Aquatic half-life |) | Photolysis | | Biodeg | radability |
| Toluene Xylene Ethyl Benzene | - - - | | - - - | | Readily Readily Readily | / |

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-------------|-----------|
| Toluene | 2.73 | 8.32 | Low |
| Xylene | 3.12 | 7.4 to 18.5 | Low |
| Ethyl Benzene | 3.6 | 79.43 | Low |
| 1-Butanol | 1 | - | Low |

| <u>Mobility in soil</u> | |
|--|---|
| Soil/water partition coefficient (Koc) | : Not available. |
| Mobility | : Not available. |
| Other adverse effects | : No known significant effects or critical hazards. |

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or arind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

| | UN | IMDG | IATA |
|----------------------------|--------|--------|------------|
| UN number | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | PAINT | PAINT | PAINT |
| Transport hazard class(es) | 3 | 3 | 3 |
| Packing group | II | I | II |
| Packing group | II | II | Japan Page |

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|--|--------------|----------------------|--|-----------------|
| 14. Transp | ort infor | mation | | |
| Environmental hazards | | No. | No. | No. |
| Marine pollutan substances | t I | Not applicable. | Not applicable. | Not applicable. |
| Additional inform | mation | | | |
| UN | : None ider | ntified. | | |
| IMDG | : None ider | ntified. | | |
| IATA | : None ider | ntified. | | |
| Special precauti | ons for user | - | user's premises: always transpor . Ensure that persons transporting cident or spillage. | |
| Transport in bul | | : Not applicable. | | |

to IMO instruments

15. Regulatory information

Fire Service Law

| Category | Substance name/Type | Danger category | Signal word | Designated quantity |
|-------------|---------------------|--------------------|----------------------------|---------------------|
| Category IV | Class I petroleums | II | Flammable - Keep Fire Away | 200 L |

Pollutant Release and Transfer Registers (PRTR)

| Ingredient name | % | Status | Reference number |
|-----------------|-----|---------|---------------------|
| Toluene | 9.2 | Class 1 | 300 |
| Xylene | 4.7 | Class 1 | 80 |
| Ethylbenzene | 1.3 | Class 1 | 53 |

Industrial Safety and Health Act

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

| Ingredient name | % | | Reference number |
|-----------------|-----|--------------------------|---------------------|
| ethyl benzene | ≤10 | Special Organic Solvents | 3-3 |

Substance(s) requiring labelling

| Ingredient name | % | Status | Reference number |
|--------------------|-----|--------|---------------------|
| Toluene | ≤10 | Listed | 407 |
| Xylene | | Listed | 136 |
| Ethylbenzene | | Listed | 70 |
| Crystalline silica | | Listed | 165-2 |

Chemicals requiring notification

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15. Regulatory information

| Ingredient name | % | Status | Reference number |
|------------------------|------------|------------------|---------------------|
| Toluene | ≤10 <10 | Listed | 407 136 |
| Xylene Ethylbenzene | ≤10 ≤10 | Listed Listed | 70 |
| Butanol | ≤10 | Listed | 477 |
| Crystalline silica | ≤10 | Listed | 165-2 |

Carcinogens based on Article 577-2 of the Ordinance on ISH

| Ingredient name | % | | Reference number |
|-----------------|-----|--------|---------------------|
| quartz | ≤10 | Listed | - |

<u>Mutagen</u>

None of the components are listed.

| Corrosive liquid | : Not listed |
|---|----------------------------|
| Occupational Safety and Health Law | : Inflammable, Combustible |
| Regulations on the Prevention of Tetraalkyl Lead Poisoning | : Not listed |
| Harmful Substances Subject to Obtaining Permission for Manufacturing | : Not listed |
| Harmful Substances, Prohibited for Manufacturing | : Not listed |
| ISHL Enforcement Order Appendix 1 - Dangerous Substances | : Inflammable, Combustible |
| Lead regulation | : Not listed |
| Organic solvents poisoning prevention | : Class 2 |

Poisonous and Deleterious Substances

None of the components are listed.

Chemical Substances Control Law (CSCL)

| Ingredient name | % | Status | Reference number |
|---------------------------------------|-----|---------------------|---------------------|
| Toluene | ≤10 | Priority assessment | 46 |
| Xylene | ≤10 | Priority assessment | 125 |
| Ethylbenzene | ≤10 | Priority assessment | 50 |
| 1-Butanol | ≤10 | Priority assessment | 124 |
| Propane-1,2-diol | ≤10 | Priority assessment | 106 |
| Isopropyl alcohol | ≤10 | Priority assessment | 102 |
| 2,2,4,4,6,6,8,8-Octamethyl- | ≤10 | Monitoring | 40 |
| 1,3,5,7,2,4,6,8-tetraoxatetrasilocane | | Ũ | |
| Benzene | ≤10 | Priority assessment | 45 |
| Cumene | ≤10 | Priority assessment | 126 |

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|---|---|----------------|---------------|
| 15. Regulatory inf | ormation | | |
| High Pressure Gas Control Law | : Not available. | | |
| Explosives Control Law | | | |
| None of the components are | isted. | | |
| Law concerning prevention of pollution of the ocean | : Not available. | | |
| Maritime Safety Law Notification Regulating Trar None of the components are | sportation of Dangerous Materials by Sea isted. | | |
| Container class None of the components are | isted | | |
| JSOH Carcinogen | : Group 1 | | |
| List of Specially Controlled Industrial Waste | : Not listed | | |
| Japan inventory | : All components are listed or exempted. | | |
| Road law | : Not available. | | |
| 16. Other informa | tion | | |
| History | | | |
| Date of issue/Date of revision | : 3 July 2024 | | |
| Date of previous issue | : 7/1/2024 | | |
| Version | : 17.19 | | |
| Prepared by | : EHS | | |
| Key to abbreviations | : ADN = European Provisions concerning the I Goods by Inland Waterway ADR = The European Agreement concerning Dangerous Goods by Road ATE = Acute Toxicity Estimate | Ū | Ū. |

BCF = Bioconcentration Factor

by Rail

Indicates information that has changed from previously issued version.

UN = United Nations

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

MARPOL = International Convention for the Prevention of Pollution From Ships,

RID = The Regulations concerning the International Carriage of Dangerous Goods

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

Notice to reader

Product name HI-TEMP 1027 HD GRAY RESIN

16. Other information

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.