## Section 1. Identification



## Section 2. Hazards identification

## OSHA/HCS status

Classification of the substance or mixture
: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
: ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 4
ACUTE TOXICITY (inhalation) - Category 1
SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 1 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 5.6\% (oral), $77.4 \%$ (dermal), $40 \%$ (inhalation)

## GHS label elements

| Product code PS 872 B 1/2 Part A |
| :--- | :--- |
| Product name PS 872 B 1/2 Part A |

## Section 3. Composition/information on ingredients

| Substance/mixture | : Mixture |
| :--- | :--- |
| Product name | : PS 872 B $1 / 2$ Part A |

Product code PS 872 B 1/2 Part A

## Section 3. Composition/information on ingredients

| Ingredient name | $\%$ | CAS number |
| :--- | :--- | :--- |
| manganese dioxide | $\geq 20-\leq 48$ | $1313-13-9$ |
| Terphenyl, hydrogenated | $\geq 20-\leq 50$ | $61788-32-7$ |
| magnesium chromate | $\geq 10-\leq 18$ | $13423-61-5$ |
| Polyphenyls, quater- and higher, partially hydrogenated | $\geq 1.0-\leq 5.0$ | $68956-74-1$ |
| Zeolites | $\geq 1.0-\leq 5.0$ | $1318-02-1$ |
| terphenyl | $\leq 1.9$ | $26140-60-3$ |
| 1,3 -diphenylguanidine | $\leq 1.4$ | $102-06-7$ |

SUB codes represent substances without registered CAS Numbers.
Any concentration shown as a range is to protect confidentiality or is due to batch variation.
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.

## Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

## Description of necessary first aid measures

Eye contact
Inhalation

Skin contact
Ingestion
: 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.
: 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.
: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
: 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/effects, acute and delayed
    Potential acute health effects
    Eye contact : Causes serious eye damage.
    Inhalation : Fatal if inhaled.
    Skin contact : Harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause
    an allergic skin reaction.
    Ingestion : Harmful if swallowed.
Over-exposure signs/symptoms
```

Eye contact

Inhalation
: Adverse symptoms may include the following:
pain
watering
redness
: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

| Product code PS 872 B 1/2 Part A $\quad$ Date of issue 19 June $2021 \quad$ Version 18 |
| :--- | :--- | :--- | :--- |

## Product name PS 872 B 1/2 Part A

## Section 4. First aid measures

| Skin contact | : Adverse symptoms may include the following: <br> pain or irritation <br> redness <br> dryness |
| :--- | :--- |
| cracking |  |
| blistering may occur |  |
| reduced fetal weight |  |
| increase in fetal deaths |  |
| skeletal malformations |  |
| : Adverse symptoms may include the following: |  |
| stomach pains |  |
| reduced fetal weight |  |
| increase in fetal deaths |  |
| skeletal malformations |  |

## Indication of immediate medical attention and special treatment needed, if necessary

## Notes to physician

Specific treatments
Protection of first-aiders
: 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.
: No specific treatment.
: 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.

## See toxicological information (Section 11)

## Section 5. Fire-fighting measures

## Extinguishing media

Suitable extinguishing media
Unsuitable extinguishing media

Specific hazards arising from the chemical Hazardous thermal decomposition products
: Use an extinguishing agent suitable for the surrounding fire.
: None known.
: In a fire or if heated, a pressure increase will occur and the container may burst.
: Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

Special protective actions for fire-fighters

Special protective equipment 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.
: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

| For non-emergency | : No action shall be taken involving any personal risk or without suitable training. <br> personnel <br> Evacuate surrounding areas. Keep unnecessary and unprotected personnel from <br> entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. <br> Provide adequate ventilation. Wear appropriate respirator when ventilation is <br> 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 <br> Section 8 on suitable and unsuitable materials. See also the information in "For non- <br> emergency personnel". |  |
| Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains <br> and sewers. Inform the relevant authorities if the product has caused environmental <br> pollution (sewers, waterways, soil or air). |  |

## Methods and materials for containment and cleaning up

Small spill

## Large spill

: Stop leak if without risk. Move containers from spill area. 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.
: Stop leak if without risk. Move containers from spill area. 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 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.

## Section 7. Handling and storage

## Precautions for safe handling

## Protective measures

Special precautions

Advice on general
occupational hygiene
: 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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.
: Ingestion of product or cured coating may be harmful. Keep away from combustible materials. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
: 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.

## Section 7. Handling and storage

Conditions for safe storage, : Do not store below the following temperature: $5^{\circ} \mathrm{C}\left(41^{\circ} \mathrm{F}\right)$. Store in accordance with including any incompatibilities 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. Store locked up. 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.

## Section 8. Exposure controls/personal protection

## Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
| :---: | :---: |
| manganese dioxide | ACGIH TLV (United States, 3/2020). <br> TWA: $0.1 \mathrm{mg} / \mathrm{m}^{3}$, (as Mn ) 8 hours. Form: Inhalable fraction <br> TWA: $0.02 \mathrm{mg} / \mathrm{m}^{3}$, (as Mn) 8 hours. Form: Respirable fraction OSHA PEL (United States, 5/2018). CEIL: $5 \mathrm{mg} / \mathrm{m}^{3}$, (as Mn ) |
| Terphenyl, hydrogenated | ACGIH TLV (United States, 3/2020). <br> TWA: $4.9 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. <br> TWA: 0.5 ppm 8 hours. |
| magnesium chromate | OSHA PEL Z2 (United States, 2/2013). <br> CEIL: $1 \mathrm{mg} / 10 \mathrm{~m}^{3}$ <br> ACGIH TLV (United States, 3/2020). <br> TWA: $0.0002 \mathrm{mg} / \mathrm{m}^{3}$, (measured as Cr ) 8 hours. Form: Inhalable fraction <br> STEL: $0.0005 \mathrm{mg} / \mathrm{m}^{3}$, (measured as Cr) 15 minutes. Form: Inhalable fraction OSHA PEL (United States, 5/2018). <br> TWA: $0.005 \mathrm{mg} / \mathrm{m}^{3}$, (as Cr ) 8 hours. |
| Polyphenyls, quater- and higher, partially hydrogenated | None. |
| Zeolites | ACGIH TLV (United States, 3/2020). <br> TWA: $1 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Form: Respirable fraction |
| terphenyl | ACGIH TLV (United States, 3/2020). <br> C: $5 \mathrm{mg} / \mathrm{m}^{3}$ <br> C: 0.53 ppm |
|  | OSHA PEL (United States, 5/2018). <br> CEIL: $9 \mathrm{mg} / \mathrm{m}^{3}$ <br> CEIL: 1 ppm |
| 1,3-diphenylguanidine |  |
| Key to abbreviations |  |
| A = Acceptable Maximum Peak | $\mathrm{S}=$ Potential skin absorption |
| ACGIH = American Conference of Governmental Industrial Hygienists. | SR = Respiratory sensitization |
| C $=$ Ceiling Limit | SS = Skin sensitization |
| $F \quad=$ Fume | STEL = Short term Exposure limit values |
| IPEL = Internal Permissible Exposure Limit | TD = Total dust |
| OSHA = Occupational Safety and Health Administration. | TLV = Threshold Limit Value |
| $\mathrm{R}=$ Respirable | TWA = Time Weighted Average |
| Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances |  |

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## Product name PS 872 B 1/2 Part A

## Section 8. Exposure controls/personal protection

## Consult local authorities for acceptable exposure limits.

Recommended monitoring : If this product contains ingredients with exposure limits, personal, workplace procedures

| Appropriate engineering <br> controls | : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or <br> other engineering controls to keep worker exposure to airborne contaminants below any <br> recommended or statutory limits. |
| :--- | :--- |
| Environmental exposure | Emissions from ventilation or work process equipment should be checked to ensure <br> they comply with the requirements of environmental protection legislation. In some <br> cases, fume scrubbers, filters or engineering modifications to the process equipment <br> will be necessary to reduce emissions to acceptable levels. |
| controls |  |

## Individual protection measures

| Hygiene measures | : Wash hands, forearms and face thoroughly after handling chemical products, before <br> eating, smoking and using the lavatory and at the end of the working period. <br> Appropriate techniques should be used to remove potentially contaminated clothing. <br> Contaminated work clothing should not be allowed out of the workplace. Wash <br> contaminated clothing before reusing. Ensure that eyewash stations and safety <br> showers are close to the workstation location. |
| :--- | :--- |
| Eye/face protection <br> Skin protection | Chemical splash goggles and face shield. |
| Hand protection |  |$\quad$| : 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. |

## Section 9. Physical and chemical properties

| Appearance |  |
| :---: | :---: |
| Physical state | Liquid. |
| Color | Black. |
| Odor | Not available. |
| Odor threshold | Not available. |
| pH | Not applicable. |
| Melting point | Not available. |
| Boiling point | $>37.78^{\circ} \mathrm{C}$ (>100 ${ }^{\circ} \mathrm{F}$ ) |
| Flash point | Closed cup: Not applicable. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Flammability (solid, gas) | Not available. |
| Lower and upper explosive (flammable) limits | Not available. |
| Evaporation rate | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | 1.89 |
| Density ( lbs / gal ) | 15.77 |
| Solubility | Insoluble in the following materials: cold water. |
| Partition coefficient: $\mathbf{n}$ octanol/water | Not applicable. |
| Viscosity | Kinematic ( $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ ): $>21 \mathrm{~mm}^{2} / \mathrm{s}(>21 \mathrm{cSt})$ |
| VOC | 0 |
| \% Solid. (w/w) | 100 |

## Section 10. Stability and reactivity

## Reactivity

## Chemical stability

Possibility of hazardous reactions

## Conditions to avoid

Incompatible materials

Hazardous decomposition products
: No specific test data related to reactivity available for this product or its ingredients.
: The product is stable.
: Under normal conditions of storage and use, hazardous reactions will not occur.
: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

## Section 11. Toxicological information

## Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result |  |  | Species | Dose | Exposure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| manganese dioxide <br> Terphenyl, hydrogenated <br> Zeolites <br> terphenyl <br> 1,3-diphenylguanidine | $\begin{array}{\|l\|} \hline \text { LD50 Oral } \\ \text { LD50 Oral } \\ \text { LD50 Oral } \\ \text { LD50 Oral } \\ \text { LD50 Oral } \end{array}$ |  |  | Rat <br> Rat <br> Rat <br> Rat - Female <br> Rat | $3478 \mathrm{mg} / \mathrm{kg}$ $17500 \mathrm{mg} / \mathrm{kg}$ $>5 \mathrm{~g} / \mathrm{kg}$ 2304 mg/kg $323 \mathrm{mg} / \mathrm{kg}$ |  |
| Conclusion/Summary Irritation/Corrosion | : There are no data available on the mixture itself. |  |  |  |  |  |
| Conclusion/Summary <br> Skin <br> Eyes <br> Respiratory | : There are no data available on the mixture itself. <br> : There are no data available on the mixture itself. <br> : There are no data available on the mixture itself. |  |  |  |  |  |
| Sensitization |  |  |  |  |  |  |
| Conclusion/Summary <br> Skin <br> Respiratory | : There <br> : There | no da no da | vailable vailable | he mixture itself. he mixture itself. |  |  |
| Mutagenicity <br> Conclusion/Summary Carcinogenicity | : There | no da | vailable | e mixture itself |  |  |
| Conclusion/Summary Classification | : There are no data available on the mixture itself. |  |  |  |  |  |
| Product/ingredient name | OSHA | IARC | NTP |  |  |  |
| magnesium chromate Zeolites | $+$ | $\begin{aligned} & 1 \\ & 3 \end{aligned}$ | Known to be a human carcinogen. |  |  |  |

Carcinogen Classification code:
IARC: 1, 2A, 2B, 3, 4
NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: +
Not listed/not regulated: -

## Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

## Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.
Specific target organ toxicity (single exposure)

| Name | Category | Route of <br> exposure | Target organs |
| :--- | :--- | :--- | :--- |
| magnesium chromate | Category 3 | - | Respiratory tract <br> irritation <br> Respiratory tract <br> irritation |

## Section 11. Toxicological information

## Specific target organ toxicity (repeated exposure)

| Name | Category | Route of <br> exposure | Target organs |
| :--- | :--- | :--- | :--- |
| manganese dioxide | Category 2 | inhalation | brain |

## Target organs

> : Contains material which causes damage to the following organs: lungs, skin, central nervous system (CNS), nose/sinuses.
> Contains material which may cause damage to the following organs: blood, kidneys, the nervous system, liver, spleen, lymphatic system, upper respiratory tract, bone marrow, eye, lens or cornea.

## Aspiration hazard

Not available.

## Information on the likely routes of exposure

## Potential acute health effects

| Eye contact | $:$ Causes serious eye damage. |
| :--- | :--- |
| Inhalation | $:$ Fatal if inhaled. |
| Skin contact | $:$ Harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause |
|  | an allergic skin reaction. |
| Ingestion | : Harmful if swallowed. |

## Over-exposure signs/symptoms

| Eye contact | : Adverse symptoms may include the following: <br> pain <br> watering <br> redness |
| :--- | :--- |
| Inhalation | Adverse symptoms may include the following: <br> reduced fetal weight <br> increase in fetal deaths |
| skeletal malformations |  |
| Skin contact | : Adverse symptoms may include the following: |
| pain or irritation |  |
| redness |  |
| dryness |  |
| cracking |  |
| blistering may occur |  |
| reduced fetal weight |  |
| increase in fetal deaths |  |
| skeletal malformations |  |

## Delayed and immediate effects and also chronic effects from short and long term exposure

: There are no data available on the mixture itself. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. 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.
Product code PS 872 B 1/2 Part A

## Section 11. Toxicological information

| Short term exposure |
| :--- | :--- |
| Potential immediate <br> effects <br> Potential delayed effects <br> Long term exposure <br> Potential immediate <br> effects <br> Potential delayed effects <br> Potential chronic health effects There are no data available on the mixture itself. |

Potential chronic health effects
General : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity : May cause genetic defects.
Reproductive toxicity : Suspected of damaging fertility or the unborn child.

## Numerical measures of toxicity

Acute toxicity estimates

| Product/ingredient name | Oral (mg/ <br> $\mathbf{k g})$ | Dermal <br> (mg/kg) | Inhalation <br> (gases) <br> (ppm) | Inhalation <br> (vapors) <br> (mg/l) | Inhalation <br> (dusts and <br> mists) (mg/ <br> l) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PS 872 B 1/2 Part A | 386.9 | 1392.2 | N/A | N/A | 0.017 |
| manganese dioxide | 500 | N/A | N/A | N/A | 1.5 |
| Terphenyl, hydrogenated | 17500 | N/A | N/A | N/A | N/A |
| magnesium chromate | 100 | 1100 | N/A | N/A | 0.005 |
| terphenyl | 2304 | N/A | N/A | N/A | N/A |
| 1,3 -diphenylguanidine | 323 | N/A | N/A | N/A | N/A |

## Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
| :--- | :--- | :--- | :--- |
| Zeolites <br> terphenyl | Acute LC50 $>680 \mathrm{mg} / \mathrm{I}$ <br> Acute EC50 $0.022 \mathrm{mg} / \mathrm{I}$ <br> Chronic NOEC $0.00322 \mathrm{mg} / \mathrm{I}$ | Fish <br> Daphnia <br> Daphnia | 96 hours |
|  | 48 hours |  |  |

## Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
| :--- | :--- | :--- | :--- |
| terphenyl | - | - | Not readily |

## Bioaccumulative potential

## Section 12. Ecological information

| Product/ingredient name | LogPow | BCF | Potential |
| :--- | :--- | :--- | :--- |
| 7,3-diphenylguanidine | 2.42 | 19.95 | low |

## Mobility in soil

Soil/water partition : Not available.
coefficient (Koc)

## Section 13. Disposal considerations

: 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures
14. Transport information

|  | DOT | IMDG | IATA |
| :--- | :--- | :--- | :--- |
| UN number | UN3082 | UN3082 | UN3082 |
| UN proper shipping <br> name | ENVIRONMENTALLY <br> HAZARDOUS SUBSTANCE, <br> LIQUID, N.O.S. | ENVIRONMENTALLY <br> HAZARDOUS SUBSTANCE, <br> LIQUID, N.O.S. <br> (Terphenyl, hydrogenated, <br> magnesium chromate) | ENVIRONMENTALLY <br> HAZARDOUS SUBSTANCE, <br> LIQUID, N.O.S. <br> (Terphenyl, hydrogenated, <br> magnesium chromate) |
| Transport hazard class <br> (es) | 9 | 9 | 9 |
| Packing group | III | III | III |
| Environmental hazards <br> Marine pollutant <br> substances | Yes. | Not applicable. | Yes. <br> (Terphenyl, hydrogenated, <br> magnesium chromate) |

## Additional information

DOT
: Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of $\leq 5 \mathrm{~L}$ or $\leq 5 \mathrm{~kg}$, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.
Product code PS 872 B 1/2 Part A

## 14. Transport information

IMDG
IATA
: This product is not regulated as a dangerous good when transported in sizes of $\leq 5 \mathrm{~L}$ or $\leq 5 \mathrm{~kg}$, 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.
: This product is not regulated as a dangerous good when transported in sizes of $\leq 5 \mathrm{~L}$ or $\leq 5 \mathrm{~kg}$, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

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.

Transport in bulk according : Not applicable.
to IMO instruments

## Section 15. Regulatory information

## United States

United States inventory (TSCA 8b) : All components are active or exempted.
United States - TSCA 12(b) - Chemical export notification:
magnesium chromate
Annual notification
TSCA 6 final risk management: magnesium chromate
SARA 302/304
SARA 304 RQ : Not applicable.
Composition/information on ingredients
No products were found.
SARA 311/312
Classification : ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 4
ACUTE TOXICITY (inhalation) - Category 1
SKIN IRRITATION - Category 2
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1
GERM CELL MUTAGENICITY - Category 1
CARCINOGENICITY - Category 1B
TOXIC TO REPRODUCTION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
HNOC - Defatting irritant
HNOC - Avoid contact with organic materials.
Composition/information on ingredients

| Name | $\%$ | Classification |
| :--- | :--- | :--- |
| manganese dioxide | $\geq 20-\leq 48$ | ACUTE TOXICITY (oral) - Category 4 <br> ACUTE TOXICITY (inhalation) - Category 4 <br> SPECIFIC TARGET ORGAN TOXICITY (REPEATED <br> EXPOSURE) - Category 2 |
| magnesium chromate | $\geq 10-\leq 18$ | HNOC - Avoid contact with organic materials. <br> ACUTE TOXICITY (oral) - Category 3 <br> ACUTE TOXICITY (dermal) - Category 4 <br> ACUTE TOXICITY (inhalation) - Category 1 <br> SKIN IRRITATION - Category 2 |

## Section 15. Regulatory information

|  |  | SERIOUS EYE DAMAGE - Category 1 <br> SKIN SENSITIZATION - Category 1B <br> GERM CELL MUTAGENICITY - Category 1B <br> Polyphenyls, quater- and higher, <br> partially hydrogenated <br> $1,3-$ diphenylguanidine |
| :--- | :--- | :--- |
| CARCINOGENICITY - Category 1B |  |  |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) |  |  |
| (Respiratory tract irritation) - Category 3 |  |  |
| HNOC - Defatting irritant |  |  |

## SARA 313

| Supplier notification | $:$Chemical name <br> manganese dioxide | $\frac{\text { CAS number }}{1313-13-9}$ | Concentration |
| :--- | :--- | :---: | :--- |
|  | $13423-61-5$ | $10-30$ |  |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

## California Prop. 65

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

## Section 16. Other information

## Hazardous Material Information System (U.S.A.)

Health : 3 * Flammability : 0 Physical hazards : 1
(*) - Chronic effects
Caution: HMIS® ratings are based on a $0-4$ rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS $®$ ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200 , the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.
National Fire Protection Association (U.S.A.)
Health : 3 Flammability : 0 Instability : 1
Date of previous issue : 4/2/2021
Organization that prepared : EHS
the SDS
Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA $=$ International Air Transport Association
$\mathrm{IBC}=$ Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973
as modified by the Protocol of 1978. ("Marpol" = marine pollution)

Product code PS 872 B 1/2 Part A Date of issue 19 June 2021 Version 18
Product name PS 872 B 1/2 Part A

## Section 16. Other information

N/A = Not available
SGG = Segregation Group
UN $=$ United Nations
$\nabla$ Indicates information that has changed from previously issued version.
Disclaimer
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.

## Section 1. Identification



## Section 2. Hazards identification

## OSHA/HCS status

## Classification of the

 substance or mixture: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
: FLAMMABLE LIQUIDS - Category 3 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 6\% (oral), 62.3\% (dermal), 82\% (inhalation)
This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8).

## GHS label elements

| Product code PS 872 B 1/2 Part B | Date of issue 11 June 2021 | Version 17 |
| :--- | :--- | :--- |
| Product name PS 872 B 1/2 Part B |  |  |
| Section 2. Hazards identification |  |  |

Hazard pictograms
Signal word
Hazard statements
Precautionary statements
Prevention
:

: Warning
: Flammable liquid and vapor.
Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
: 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. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Do not breathe vapor.
: IF exposed or concerned: Get medical advice or attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
: Store locked up. Store in a well-ventilated place. Keep cool.
: Dispose of contents and container in accordance with all local, regional, national and international regulations.
: 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. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.
: Prolonged or repeated contact may dry skin and cause irritation.

Hazards not otherwise classified

Section 3. Composition/information on ingredients

| Substance/mixture | $:$ Mixture |
| :--- | :--- |
| Product name | $:$ PS 872 B $1 / 2$ Part B |


| Ingredient name | $\%$ | CAS number |
| :--- | :--- | :--- |
| calcium carbonate | $\geq 20-\leq 47$ | $471-34-1$ |
| toluene | $\geq 5.0-<10$ | $108-88-3$ |
| titanium dioxide | $\geq 5.0-\leq 10$ | $13463-67-7$ |
| Aluminium powder (stabilized) | $\geq 1.0-\leq 5.0$ | $7429-90-5$ |
| tetrakis(diethyldithiocarbamato-S,S')tellurium | $<1.0$ | $20941-65-5$ |

SUB codes represent substances without registered CAS Numbers.
Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Product code PS 872 B 1/2 Part B
Version 17

## Product name PS 872 B 1/2 Part B

## Section 3. Composition/information on ingredients

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.

## Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

## 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/effects, acute and delayed |  |  |
| :--- | :--- | :---: |
| Potential acute health effects |  |  |
| Eye contact | : No known significant effects or critical hazards. |  |
| Inhalation $:$ <br> Skin contact No known significant effects or critical hazards. <br> Ingestion Defatting to the skin. May cause skin dryness and irritation. | No known significant effects or critical hazards. |  |

## Over-exposure signs/symptoms

| Eye contact | No specific data. |
| :---: | :---: |
| 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 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 medical attention and special treatment needed, if necessary

Notes to physician
Specific treatments
: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
: No specific treatment.

Version 17

## Product name PS 872 B 1/2 Part B

## Section 4. First aid measures

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.

## See toxicological information (Section 11)

## Section 5. Fire-fighting measures

Extinguishing media
Suitable extinguishing : Use dry chemical, $\mathrm{CO}_{2}$, water spray (fog) or foam. media Unsuitable extinguishing : Do not use water jet. media

Specific hazards arising from the chemical

Hazardous thermal decomposition products
: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
: Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides Formaldehyde.

Special protective actions : Promptly isolate the scene by removing all persons from the vicinity of the incident if for fire-fighters

Special protective equipment for fire-fighters 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.
: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 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.
: 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 nonemergency personnel".

Environmental precautions : 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).

Methods and materials for containment and cleaning up

## Section 6. Accidental release measures

Small spill

Large 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.
: 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 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.

## Section 7. Handling and storage

## Precautions for safe handling

Special precautions

Advice on general occupational hygiene
: Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Avoid exposure during pregnancy. 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. 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.
: If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
: 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.

Conditions for safe storage, : Do not store below the following temperature: $5^{\circ} \mathrm{C}\left(41^{\circ} \mathrm{F}\right)$. Store in accordance with including any
incompatibilities
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.

## Product code PS 872 B 1/2 Part B

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## Product name PS 872 B 1/2 Part B

## Section 8. Exposure controls/personal protection

## Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
| :---: | :---: |
| calcium carbonate | ACGIH TLV (United States). <br> TWA: $3 \mathrm{mg} / \mathrm{m}^{3}$ Form: Respirable TWA: $10 \mathrm{mg} / \mathrm{m}^{3}$ Form: Total dust OSHA PEL (United States). <br> TWA: $5 \mathrm{mg} / \mathrm{m}^{3}$ Form: Respirable TWA: $15 \mathrm{mg} / \mathrm{m}^{3}$ |
| toluene | OSHA PEL Z2 (United States, 2/2013). <br> AMP: 500 ppm 10 minutes. <br> CEIL: 300 ppm <br> TWA: 200 ppm 8 hours. <br> ACGIH TLV (United States, 3/2020). <br> TWA: 20 ppm 8 hours. |
| titanium dioxide | OSHA PEL (United States, 5/2018). <br> TWA: $15 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Form: Total dust ACGIH TLV (United States, 3/2020). <br> TWA: $10 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. |
| aluminium powder (stabilised) | ACGIH TLV (United States, 3/2020). <br> TWA: $1 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Form: Respirable fraction <br> OSHA PEL (United States, 5/2018). <br> TWA: $5 \mathrm{mg} / \mathrm{m}^{3}$, (as AI) 8 hours. Form: <br> Respirable fraction <br> TWA: $15 \mathrm{mg} / \mathrm{m}^{3}$, (as AI) 8 hours. Form: Total dust |
| tetrakis(diethyldithiocarbamato-S,S')tellurium | ACGIH TLV (United States, 3/2020). <br> TWA: $0.1 \mathrm{mg} / \mathrm{m}^{3}$, (as Te) 8 hours. OSHA PEL (United States, 5/2018). TWA: $0.1 \mathrm{mg} / \mathrm{m}^{3}$, (as Te) 8 hours. |


|  |  |
| ---: | :--- |
| A | $=$ Acceptable Maximum Peak |
| ACGIH | A American Conference of Governmental Industrial Hygienists. |
| C | $=$ Ceiling Limit |
| F | $=$ Fume |
| IPEL | $=$ Internal Permissible Exposure Limit |
| OSHA | $=$ Occupational Safety and Health Administration. |
| R | $=$ Respirable |
| Z | $=$ OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances |


| S | $=$ Potential skin absorption |
| ---: | :--- |
| SR | $=$ Respiratory sensitization |
| SS | $=$ Skin sensitization |
| STEL | $=$ Short term Exposure limit values |
| TD | $=$ Total dust |
| TLV | $=$ Threshold Limit Value |
| TWA | $=$ Time Weighted Average |

## Consult local authorities for acceptable exposure limits.

Recommended monitoring : If this product contains ingredients with exposure limits, personal, workplace procedures 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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

## Section 8. Exposure controls/personal protection

Appropriate engineering controls

## Environmental exposure controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
: 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.

Individual protection measures

| Hygiene measures | : Wash hands, forearms and face thoroughly after handling chemical products, before <br> eating, smoking and using the lavatory and at the end of the working period. <br> Appropriate techniques should be used to remove potentially contaminated clothing. <br> Wash contaminated clothing before reusing. Ensure that eyewash stations and safety <br> showers are close to the workstation location. |
| :--- | :--- |
| Eye/face protection |  |
| Skin protection |  |
| : Sand protection |  |$\quad$| Safety glasses with side shields. |
| :--- |

## Section 9. Physical and chemical properties

| Appearance | $:$ Liquid. |
| :--- | :--- |
| Physical state | $:$ White. |
| Color | $:$ Not available. |
| Odor | $:$ Not available. |
| Odor threshold | $:$ Not applicable. |
| pH | $:$ Not available. |
| Melting point | $:>37.78^{\circ} \mathrm{C}\left(>100^{\circ} \mathrm{F}\right)$ |
| Boiling point | $:$ Closed cup: $23.33^{\circ} \mathrm{C}\left(74^{\circ} \mathrm{F}\right)$ |
| Flash point | $:$ Not available. |
| Auto-ignition temperature |  |
| Decomposition temperature | $:$ Not available. |
| Flammability (solid, gas) | $:$ Not available. |
| Lower and upper explosive | $:$ Lower: $1 \%$ |
| (flammable) limits | $:$ Not available. |
| Evaporation rate | $:$ Not available. |
| Vapor pressure | $:$ Not available. |
| Vapor density | $: 1.46$ |
| Relative density | $: 12.18$ |
| Density ( lbs / gal ) | $:$ Insoluble in the following materials: cold water. |
| Solubility | $:$ Not applicable. |
| Partition coefficient: $\mathrm{n}-$ | $:$ Kinematic (40 ${ }^{\circ} \mathrm{C}$ (104 $\left.{ }^{\circ} \mathrm{F}\right)$ ): >21 mm ${ }^{2} / \mathrm{s}$ (>21 cSt) |
| octanol/water | $: 93 \mathrm{~g} / \mathrm{l}$ |
| Viscosity | $: 93.63$ |
| voc |  |

## Section 10. Stability and reactivity

## Reactivity

## Chemical stability

Possibility of hazardous reactions

## Conditions to avoid

Incompatible materials

Hazardous decomposition products
: No specific test data related to reactivity available for this product or its ingredients.
: The product is stable.
: Under normal conditions of storage and use, hazardous reactions will not occur.
: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
: Depending on conditions, decomposition products may include the following materials: carbon oxides halogenated compounds Formaldehyde. metal oxide/oxides

## Section 11. Toxicological information

## Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
| :---: | :---: | :---: | :---: | :---: |
| calcium carbonate | LD50 Dermal | Rat | >2000 mg/kg | - |
|  | LD50 Oral | Rat | $6450 \mathrm{mg} / \mathrm{kg}$ | 4 hours |
| toluene | LC50 Inhalation Vapor | Rat | $49 \mathrm{~g} / \mathrm{m}^{3}$ | 4 hours |
|  | LD50 Dermal | Rabbit | $8.39 \mathrm{~g} / \mathrm{kg}$ |  |
|  | LD50 Oral | Rat | $5580 \mathrm{mg} / \mathrm{kg}$ |  |
| titanium dioxide | LC50 Inhalation Dusts and mists LD50 Dermal | Rat Rabbit | >6.82 mg/l | 4 hours |
| aluminium powder (stabilised) | LD50 Oral | Rat | >5000 mg/kg |  |
|  | LC50 Inhalation Dusts and mists | Rat | $>5 \mathrm{mg} / \mathrm{l}$ | 4 hours |
|  | LD50 Oral | Rat | $>15900 \mathrm{mg} / \mathrm{kg}$ | - |
| tetrakis | LD50 Dermal | Rabbit | >16000 mg/kg | - |
|  | LD50 Oral | Rat | >5000 mg/kg | - |

Conclusion/Summary : There are no data available on the mixture itself.
Irritation/Corrosion
Conclusion/Summary

| Skin | $:$ There are no data available on the mixture itself. |
| :--- | :--- |
| Eyes | : There are no data available on the mixture itself. |
| Respiratory | : There are no data available on the mixture itself. |

Sensitization

| Product/ingredient name | Route of <br> exposure | Species | Result |
| :--- | :--- | :--- | :--- |
| tetrakis <br> (diethyldithiocarbamato-S,S') <br> tellurium | skin | Guinea pig | Not sensitizing |

Conclusion/Summary
: There are no data available on the mixture itself.
Respiratory : There are no data available on the mixture itself.
Mutagenicity
Conclusion/Summary : There are no data available on the mixture itself.
Carcinogenicity
Conclusion/Summary : There are no data available on the mixture itself.
Classification

| Product/ingredient name | OSHA | IARC | NTP |
| :--- | :--- | :--- | :--- |
| toluene | - | 3 | - |
| titanium dioxide | - | $2 B$ | - |
| tetrakis | - | 3 | - |
| (diethyldithiocarbamato-S,S') <br> tellurium |  |  |  |

Carcinogen Classification code:

## Section 11. Toxicological information

IARC: 1, 2A, 2B, 3, 4
NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: +
Not listed/not regulated: -

## Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

## Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.
Specific target organ toxicity (single exposure)
\(\left.$$
\begin{array}{|l|l|l|l|}\hline \text { Name } & \text { Category } & \begin{array}{l}\text { Route of } \\
\text { exposure }\end{array} & \begin{array}{l}\text { Target organs } \\
\text { toluene }\end{array}
$$ <br>

Category 3\end{array}\right]\) Narcotic effects | - |
| :--- |

## Specific target organ toxicity (repeated exposure)

| Name | Category | Route of <br> exposure | Target organs |
| :--- | :--- | :--- | :--- |
| toluene | Category 2 | - | - |

## Target organs

: Contains material which causes damage to the following organs: brain, eye, lens or cornea.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, the reproductive system, liver, heart, upper respiratory tract, skin, central nervous system (CNS).

## Aspiration hazard

| Name | Result |
| :--- | :--- |
| toluene | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

| Potential acute health effects |  |
| :---: | :---: |
| Eye contact | No known significant effects or critical hazards. |
| Inhalation | No known significant effects or critical hazards. |
| Skin contact | Defatting to the skin. May cause skin dryness |
| Ingestion | : No known significant effects or critical hazards. |
| Over-exposure signs/symptoms |  |
| Eye contact | : No specific data. |
| 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 dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations |


| Product code PS 872 B 1/2 Part B |
| :--- |
| Product name PS 872 B 1/2 Part B |
| Section 11. Toxicological information |

Ingestion<br>: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure
: There are no data available on the mixture itself. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. This product contains TiO 2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO 2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/ or engineering controls (see Section 8). Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. 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.

## Short term exposure

Potential immediate : There are no data available on the mixture itself.

## effects

Potential delayed effects : There are no data available on the mixture itself.

## Long term exposure

Potential immediate : There are no data available on the mixture itself. effects
Potential delayed effects : There are no data available on the mixture itself.

## Potential chronic health effects

General

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity
Acute toxicity estimates

## Section 11. Toxicological information

| Product/ingredient name | Oral (mg/ <br> $\mathbf{k g})$ | Dermal <br> (mg/kg) | Inhalation <br> (gases) <br> (ppm) | Inhalation <br> (vapors) <br> (mg/l) | Inhalation <br> (dusts and <br> mists) (mg/ <br> l) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PS 872 B 1/2 Part B <br> calcium carbonate <br> toluene <br> tetrakis(diethyldithiocarbamato-S,S')tellurium | N/A | 4189.8 | N/A | N/A | N/A |

## Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
| :--- | :--- | :--- | :--- |
| calcium carbonate <br> titanium dioxide | Acute EC10 $>14 \mathrm{mg} / \mathrm{I}$ <br> Acute LC50 $>100 \mathrm{mg} / \mathrm{I}$ Fresh water | Algae <br> Daphnia - Daphnia magna | 72 hours |
| 48 hours |  |  |  |

## Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
| :--- | :--- | :--- | :--- |
| toluene | - | - | Readily |

## Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
| :--- | :--- | :--- | :--- |
| toluene | 2.73 | 8.32 | low |

Mobility in soil
Soil/water partition
: Not available.
coefficient (Koc)

## Section 13. Disposal considerations

: 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 grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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## Section 13. Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures
14. Transport information

|  | DOT | IMDG | IATA |
| :--- | :--- | :--- | :--- |
| UN number | UN1133 | UN1133 | UN1133 |
| UN proper shipping <br> name | ADHESIVES | ADHESIVES | ADHESIVES |
| Transport hazard class <br> (es) | 3 | 3 | 3 |
| Packing group | III | III | No. |
| Environmental hazards <br> Marine pollutant <br> substances <br> Product RQ (Ibs) <br> RQ substancesNo. <br> Not applicable. <br> 8006.1 <br> (thiram (ISO), toluene) | Not applicable. <br> Not applicable. | Not applicable. <br> Not applicable.. |  |

## Additional information

| DOT | : Package sizes |
| :--- | :--- |
|  | $R Q$ (reportable |
| IMDG | $:$ None identified. |
| IATA | $:$ None identified. |

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.

Transport in bulk according : Not applicable. to IMO instruments

## Section 15. Regulatory information

United States
United States inventory (TSCA 8b) : All components are active or exempted.
SARA 302/304
SARA 304 RQ : Not applicable.
Composition/information on ingredients
No products were found.
SARA 311/312

Product code PS 872 B 1/2 Part B
Date of issue 11 June 2021
Version 17
Product name PS 872 B 1/2 Part B

## Section 15. Regulatory information

| Classification | FLAMMABLE LIQUIDS - Category 3 |
| :--- | :--- |
|  | CARCINOGENICITY - Category 2 |
|  | TOXIC TO REPRODUCTION - Category 2 |
|  | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
|  | HNOC - Defatting irritant |

## Composition/information on ingredients

| Name | $\%$ | Classification |
| :--- | :--- | :--- |
| toluene | $\geq 5.0-<10$ | FLAMMABLE LIQUIDS - Category 2 <br> SKIN IRRITATION - Category 2 <br> TOXIC TO REPRODUCTION - Category 2 <br> SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) <br> (Narcotic effects) - Category 3 <br> SPECIFIC TARGET ORGAN TOXICITY (REPEATED <br> EXPOSURE) - Category 2 <br> ASPIRATION HAZARD - Category 1 <br> HNOC - Defatting irritant <br> CARCINOGENICITY - Category 2 <br> COMBUSTIBLE DUSTS <br> titanium dioxide <br> tetrakis(diethyldithiocarbamato- <br> S,S')tellurium |
|  | $\geq 5.0-\leq 10$ | ACUTE TOXICITY (inhalation) - Category 3 <br> CARCINOGENICITY - Category 2 <br> HNOC - Defatting irritant |

## SARA 313

## Supplier notification <br> Chemical name <br> : toluene Aluminium powder (stabilized)

| CAS number | Concentration |
| :---: | :---: |
| 108-88-3 | 3-7 |
| 7429-90-5 | 1-5 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

## California Prop. 65

\TARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

## Section 16. Other information

## Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 3 Physical hazards : 0
(*) - Chronic effects
Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.
National Fire Protection Association (U.S.A.)
Health : 2 Flammability : 3 Instability : 0
Date of previous issue : 4/6/2021
Organization that prepared : EHS the SDS

Product code PS 872 B 1/2 Part B Date of issue 11 June 2021 Version 17

## Product name PS 872 B 1/2 Part B

## Section 16. Other information

Key to abbreviations
: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973
as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations
$\nabla$ Indicates information that has changed from previously issued version.

## Disclaimer

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.

