Date of issue 12/4/2022 (month/day/year)
Version 2
Section 1. Chemical product and company identification
A. Product name : SIGMADUR 550 BASE APS 7030

Product code : 00427121
B. Relevant identified uses of the substance or mixture and uses advised against

Product use : Professional applications, Used by spraying.
Use of the substance/ : Coating. mixture
Uses advised against : Product is not intended, labelled or packaged for consumer use.
C. Supplier's or Importer's
: PPG SSC
information
(680-090)
19, Yeocheon-ro 217beon-gil, Nam-gu,
Ulsan, Korea
Tel: +82-52-210-8222
Email Address
Korea.MSDS@PPG.COM
Emergency telephone : +82-52-210-8222 number:

## Section 2. Hazards identification

A. Hazard classification
: FLAMMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3
This product is classified in accordance with the Industrial Safety and Health Act and the Chemical Control Act.
B. GHS label elements, including precautionary statements Symbol


Signal word : Danger
Product code $00427121 \quad$ Date of issue 12/4/2022 (month/day/year) Version 2

## Section 2. Hazards identification

| Hazard statements | : H226-Flammable liquid and vapor. <br> H315-Causes skin irritation. <br> H319-Causes serious eye irritation. <br> H336 - May cause drowsiness or dizziness. <br> H351 - Suspected of causing cancer. <br> H372 - Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys, liver) <br> H412 - Harmful to aquatic life with long lasting effects. |
| :---: | :---: |
| Precautionary statements |  |
| Prevention | : P202 - Do not handle until all safety precautions have been read and understood. <br> P280 - Wear protective gloves, protective clothing and eye or face protection. <br> P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. <br> P241 - Use explosion-proof electrical, ventilating or lighting equipment. <br> P242-Use non-sparking tools. <br> P243 - Take action to prevent static discharges. <br> P273 - Avoid release to the environment. <br> P260 - Do not breathe vapor. <br> P270 - Do not eat, drink or smoke when using this product. <br> P264 - Wash thoroughly after handling. |
| Response | : P308 + P313 - IF exposed or concerned: Get medical advice or attention. <br> P304 + P312-IF INHALED: Call a POISON CENTER or doctor if you feel unwell. <br> P362 + P364-Take off contaminated clothing and wash it before reuse. <br> P302 + P352-IF ON SKIN: Wash with plenty of water. <br> P305 + P351 + P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. <br> P337 + P313 - If eye irritation persists: Get medical advice or attention. |
| Storage | : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235-Keep cool. |
| Disposal | : P501-Dispose of contents and container in accordance with all local, regional, national and international regulations. |

C. Other hazards which do : Prolonged or repeated contact may dry skin and cause irritation. not result in classification

## Section 3. Composition/information on ingredients

## CAS number/other identifiers

CAS number : Not applicable.


## 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

A. Eye contact
B. Skin contact
C. Inhalation
D. Ingestion
E. Notes to physician

Specific treatments
Protection of first-aiders
: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
: 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.
: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
: No specific treatment.
: Wo 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.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

A. Extinguishing media

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

Hazardous thermal decomposition products carbon oxides
: 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 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.
: Decomposition products may include the following materials: sulfur oxides metal oxide/oxides

## Section 5. Fire-fighting measures

C. Special equipment for fire-fighting

Fire-fighting procedures : 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.

## Section 6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

## B. Environmental precautions

: 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.
: 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.

## C. Methods and materials for containment and cleaning up

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 noncombustible, 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

A. Precautions for safe handling
: Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. 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.

## Section 7. Handling and storage

B. Conditions for safe storage, including any incompatibilities
: Store between the following temperatures: 0 to $35^{\circ} \mathrm{C}\left(32\right.$ to $\left.95^{\circ} \mathrm{F}\right)$. 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.

## Section 8. Exposure controls/personal protection

A. Occupational exposure limits

| Ingredient name | Exposure limits |
| :---: | :---: |
| Xylene | Ministry of Employment and Labor (Republic of Korea, 1/2020). [Xylene] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. |
| titanium dioxide | Ministry of Employment and Labor (Republic of Korea, 1/2020). <br> TWA: $10 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Form: total dust with less than $1 \%$ of free SiO 2 |
| n-butyl acetate | Ministry of Employment and Labor (Republic of Korea, 1/2020). <br> STEL: 200 ppm 15 minutes. <br> TWA: 150 ppm 8 hours. |
| Talc, not containing asbestiform fibres | Ministry of Employment and Labor (Republic of Korea, 1/2020). <br> TWA: $2 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Form: fibers |
| ethylbenzene | Ministry of Employment and Labor (Republic of Korea, 1/2020). <br> STEL: 125 ppm 15 minutes. <br> TWA: 100 ppm 8 hours. |
| iron hydroxide oxide yellow | Ministry of Employment and Labor (Republic of Korea, 1/2020). [Iron oxide] TWA: $5 \mathrm{mg} / \mathrm{m}^{3}$, (as Fe) 8 hours. Form: Fume TWA: $5 \mathrm{mg} / \mathrm{m}^{3}$, (as Fe) 8 hours. |
| Toluene | Ministry of Employment and Labor (Republic of Korea, 1/2020). <br> STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours. |

## Recommended

 monitoring procedures: 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.
B. Appropriate engineering : Use only with adequate ventilation. Use process enclosures, local exhaust controls
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.

## Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## C. Personal protective equipment

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.

## Eye protection

Hand protection

Gloves
: Chemical splash goggles.
: 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.
: For prolonged or repeated handling, use the following type of gloves:
May be used: butyl rubber
Not recommended: nitrile rubber
Recommended: neoprene, natural rubber (latex), polyvinyl alcohol (PVA), Viton®
Body protection

Hygiene measures
: 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.
: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 9. Physical and chemical properties

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

Physical state : Liquid.
Color : Beige.
B. Odor : Aromatic. [Strong]
C. Odor threshold : Not available.
D. pH
E. Melting/freezing point
: Not applicable.
F. Boiling point/boiling $:>37.78^{\circ} \mathrm{C}\left(>100^{\circ} \mathrm{F}\right)$ range
G. Flash point

## Section 9. Physical and chemical properties

H. Evaporation rate
I. Flammability (solid, gas) : Not available.
J. Lower and upper explosive (flammable) limits
K. Vapor pressure
L. Solubility(ies)

Solubility in water
M.

Vapor density
N. Relative density
O. Partition coefficient: n -
octanol/water
P. Auto-ignition
temperature
Q. Decomposition
temperature
Viscosity
Flow time (ISO 2431)
S.
: Not available.
: Not available.
: 1.34
: Not applicable.
:
: Not available.
: Not available.
: Not applicable.
: Greatest known range: Lower: 1.4\% Upper: 7.6\% (n-butyl acetate)

| Ingredient name | Vapor Pressure at $\mathbf{2 0}{ }^{\circ} \mathrm{C}$ |  | Vapor pressure at $\mathbf{5 0}^{\circ} \mathrm{C}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{m m ~ H g}$ | $\mathbf{k P a}$ | Method | mm <br> $\mathbf{H g}$ | $\mathbf{k P a}$ | Method |
|  | 11.25 | 1.5 | DIN EN <br> $13016-2$ |  |  |  |


$:$| Media | Result |
| :--- | :--- |
| Cold water | Not soluble |


| Ingredient name | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{F}$ | Method |
| :--- | :--- | :--- | :--- |
| D-butyl acetate | 415 | 779 | EU A.15 |

: Kínematic (room temperature): $>400 \mathrm{~mm}^{2} / \mathrm{s}$ ( $>400 \mathrm{cSt}$ )
Kinematic ( $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$ ): $>21 \mathrm{~mm}^{2} / \mathrm{s}(>21 \mathrm{cSt})$

## Section 10. Stability and reactivity

A. Chemical stability

Possibility of hazardous reactions
B. Conditions to avoid
C. Incompatible materials
D. Hazardous
decomposition products
: The product is stable.
: Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 11. Toxicological information

A. Information on the likely : Not available.
routes of exposure

| Potential acute health effects |  |
| :--- | :--- |
| Inhalation | $:$Can cause central nervous system (CNS) depression. May cause drowsiness or <br>  <br>  <br> Ingestion |
| dizziness. |  |
| Skin contact | : Can cause central nervous system (CNS) depression. |
| Eye contact | : Causes skin irritation. Defatting to the skin. |
|  |  |

## Over-exposure signs/symptoms

| Inhalation | $:$Adverse symptoms may include the following: <br> nausea or vomiting <br> headache <br> drowsiness/fatigue <br> dizziness/vertigo <br> unconsciousness <br> Ingestion <br> Skin contact |
| :--- | :--- |
| : No specific data. |  |
| : Adverse symptoms may include the following: |  |
| irritation |  |
| redness |  |
| dryness |  |
| cracking |  |
| $:$Eye contact <br> pain or irritation |  |
| watering |  |
| redness |  |

## B. Health hazards

## Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
| :---: | :---: | :---: | :---: | :---: |
| Xylene | LD50 Dermal | Rabbit | $1.7 \mathrm{~g} / \mathrm{kg}$ | - |
|  | LD50 Oral | Rat | $4.3 \mathrm{~g} / \mathrm{kg}$ |  |
| titanium dioxide | LC50 Inhalation Dusts and mists | Rat | >6.82 mg/l | 4 hours |
|  | LD50 Dermal | Rabbit | $>5000 \mathrm{mg} / \mathrm{kg}$ |  |
|  | LD50 Oral | Rat | $>5000 \mathrm{mg} / \mathrm{kg}$ |  |
| n-butyl acetate | LC50 Inhalation Vapor | Rat | >21.1 mg/l | 4 hours |
|  | LC50 Inhalation Vapor LD50 Dermal | Rat Rabbit | $\begin{aligned} & 2000 \mathrm{ppm} \\ & >17600 \mathrm{mg} / \mathrm{kg} \end{aligned}$ | 4 hours |
|  | LD50 Oral | Rat | $10.768 \mathrm{~g} / \mathrm{kg}$ |  |
| ethylbenzene | LC50 Inhalation Vapor | Rat | 17.8 mg/l | 4 hours |
|  | LD50 Dermal | Rabbit | $17.8 \mathrm{~g} / \mathrm{kg}$ |  |
|  | LD50 Oral LC50 Inhalation Dusts and | Rat | $3.5 \mathrm{~g} / \mathrm{kg}$ |  |
| iron hydroxide oxide yellow | LC50 Inhalation Dusts and mists | Rat | $>5.05 \mathrm{mg} / \mathrm{l}$ | 4 hours |
|  | LD50 Oral | Rat | $>10 \mathrm{~g} / \mathrm{kg}$ | - |
| bis(1,2,2,6,6-pentamethyl-4-piperidyl) <br> sebacate <br> Toluene | LD50 Oral | Rat | $3.125 \mathrm{~g} / \mathrm{kg}$ | - |
|  | LC50 Inhalation Vapor | Rat | $49 \mathrm{~g} / \mathrm{m}^{3}$ | 4 hours |
|  | LD50 Dermal | Rabbit Rat | $8.39 \mathrm{~g} / \mathrm{kg}$ |  |

## Section 11. Toxicological information

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

## Irritation/Corrosion

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

## 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

## Conclusion/Summary

Skin : 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.

## 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 | Classification | Route of <br> exposure | Target organs |
| :--- | :--- | :--- | :--- |
| Xylene | Category 3 | - | Narcotic effects <br> Narcotic effects <br> Rebutyl acetate <br> Respiratory tract <br> Calc, not containing asbestiform fibres <br> Category 3 <br> Category 3 |
| Narconic effects |  |  |  |

## Specific target organ toxicity (repeated exposure)

| Name | Classification | Route of <br> exposure | Target organs |
| :--- | :--- | :--- | :--- |
| Xylene | Category 1 | - | central nervous <br> system (CNS), <br> kidneys, liver |
| Toluene | Category 2 | - | - |

## Aspiration hazard

## Section 11. Toxicological information

| Name | Result |
| :--- | :--- |
| ethylbenzene <br> Toluene | ASPIRATION HAZARD - Category 1 <br> ASPIRATION HAZARD - Category 1 |

## Potential chronic health effects

| General | : Causes damage to organs through prolonged or repeated exposure. Prolonged or <br> repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. |
| :--- | :--- |
| Carcinogenicity | $:$Suspected of causing cancer. Risk of cancer depends on duration and level of <br> exposure. |
| Mutagenicity | $:$ No known significant effects or critical hazards. |
| Reproductive toxicity | $:$ No known significant effects or critical hazards. |

## Additional 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. Avoid contact with skin and clothing.

| Chemical name | Identifiers | GHS Classification |
| :---: | :---: | :---: |
| Xylene | CAS: 1330-20-7 | FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 <br> EYE IRRITATION - Category 2A <br> SPECIFIC TARGET ORGAN TOXICITY (SINGLE <br> EXPOSURE) (Narcotic effects) - Category 3 <br> SPECIFIC TARGET ORGAN TOXICITY <br> (REPEATED EXPOSURE) - Category 1 |
| titanium dioxide n-butyl acetate | CAS: 13463-67-7 CAS: 123-86-4 | CARCINOGENICITY - Category 2 <br> FLAMMABLE LIQUIDS - Category 2 <br> SPECIFIC TARGET ORGAN TOXICITY (SINGLE <br> EXPOSURE) (Narcotic effects) - Category 3 |
| Talc, not containing asbestiform fibres | CAS: 14807-96-6 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) Category 3 |
| ethylbenzene | CAS: 100-41-4 | FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3 |
| iron hydroxide oxide yellow bis(1,2,2,6,6-pentamethyl-4-piperidyl) | CAS: 51274-00-1 <br> CAS: 41556-26-7 | Not classified. <br> SKIN SENSITIZATION - Category 1B |
| Toluene | CAS: 108-88-3 | TOXIC TO REPRODUCTION - Category 2 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1

## Section 12. Ecological information

## A. Ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
| :---: | :---: | :---: | :---: |
| titanium dioxide n-butyl acetate ethylbenzene <br> iron hydroxide oxide yellow | Acute LC50 $>100 \mathrm{mg} / \mathrm{I}$ Fresh water Acute LC50 $18 \mathrm{mg} / \mathrm{l}$ <br> Acute EC50 $1.8 \mathrm{mg} / \mathrm{I}$ Fresh water Chronic NOEC $1 \mathrm{mg} / \mathrm{I}$ Fresh water Acute LC50 $>100000 \mathrm{mg} / \mathrm{l}$ | Daphnia - Daphnia magna <br> Fish <br> Daphnia <br> Daphnia - Ceriodaphnia dubia <br> Fish | 48 hours 96 hours 48 hours 96 hours |

B. Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
| :---: | :---: | :---: | :---: | :---: |
| n-butyl acetate ethylbenzene | TEPA and OECD 301D | 83 \% - Readily - 28 days <br> 79 \% - Readily - 10 days |  |  |
| Product/ingredient name | Aquatic half-life | Photolysis |  | Biodegradability |
| Xylene n-butyl acetate ethylbenzene Toluene | - <br> - <br> - |  |  | Readily Readily Readily Readily |

## C. Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
| :--- | :--- | :--- | :--- |
| Xylene | 3.12 | 7.4 to 18.5 | low |
| n-butyl acetate | 2.3 | - | low |
| ethylbenzene | 3.6 | 79.43 | low |
| Toluene | 2.73 | 8.32 | low |

D. Mobility in soil

Soil/water partition : Not available.
coefficient (Koc)
E. Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

A. 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.

## Section 13. Disposal considerations

B. Disposal precautions
: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. 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.

## Section 14. Transport information

|  | UN | IMDG | IATA |
| :--- | :---: | :---: | :---: |
| A. UN number | UN1263 | UN1263 | UN1263 |
| B. UN proper <br> shipping name | PAINT | PAINT | PAINT |
| C. Transport <br> hazard class(es) | 3 | 3 | 3 |
| D. Packing group | III | III | III |
| Environmental <br> hazards | No. | No. | No. |
| E. Marine <br> pollutant <br> substances | Not applicable. | Not applicable. | Not applicable. |

## Additional information

| UN | $:$This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to <br> 2.3.2.5.1. <br> IMDG <br> : This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to <br> 2.3.2.5. <br> IATA$\quad:$None identified. |
| :--- | :--- |

F. Special precaution which a user to be aware of or needs to comply with in connection with transport or tranportation
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

## A. Regulation according to ISHA

ISHA article 117 : None of the components are listed.
(Harmful substances
prohibited from
manufacture)

ISHA article 118 : None of the components are listed.
(Harmful substances
requiring permission)
Article 2 of Youth Protection : It is not allowed to sell to persons under the age of 19.
Act on Substances Hazardous
to Youth
Exposure Limits of Chemical Substances and Physical Factors
The following components have an OEL:
Xylene
titanium dioxide
n-butyl acetate
Talc, not containing asbestiform fibres
ethylbenzene
iron hydroxide oxide yellow
Toluene
ISHA Enforcement Regs : The following components are listed: toluene
Annex 19 (Exposure
standards established
for harmful factors)
ISHA Enforcement Regs : The following components are listed: xylene, titanium dioxide, n-butyl acetate, talc /
Annex 21 (Harmful soapstone, ethyl benzene, iron oxide
factors subject to Work
Environment
Measurement)
ISHA Enforcement Regs : The following components are listed: Xylene, Ethyl benzene, Iron oxide (dust, fume)
Annex 22 (Harmful
Factors Subject to
Special Health Check-
up)
Standard of Industrial : The following components are listed: xylene, titanium dioxide, n-butyl acetate, ethyl Safety and Health benzene, iron and its compounds
Annex 12 (Hazardous substances subject to control)
B. Regulation according to Chemicals Control Act

Article 11 (TRI)
Article 18 Prohibited (K- : None of the components are listed.
Reach Article 27)
Article 19 Subject to : None of the components are listed.
authorization (K-Reach
Article 25)
Article 20 Restricted (K- : None of the components are listed.
Reach Article 27)
Article 20 Toxic : Not applicable
Chemicals (K-Reach
Article 20)
Korea inventory : At least one component is not listed.

## Section 15. Regulatory information

Article 39 (Accident Precaution Chemicals)
C. Dangerous Materials Safety Management Act
: None of the components are listed.
: Class: Class 4 - Flammable Liquid
Item: 4. Class 2 petroleums - Water-insoluble liquid Threshold: 1000 L
Danger category: III
Signal word: Contact with sources of ignition prohibited
D. Wastes regulation
: Dispose of contents and container in accordance with all local, regional, national and international regulations.
E. Regulation according to other foreign laws

Safety, health and : No known specific national and/or regional regulations applicable to this product environmental (including its ingredients). the product

## Section 16. Other information

A. References
: Korean Ministry of Environment; Chemical Control Act Korean Ministry of Labor; Industrial Safety and Health Act NIER Notice Registry of Toxic Effects of Chemical Substances (RTECS) U.S. Environmental Protection Agency, AQUIRE (Aquatic toxicity Information Retrieval) ECOTOX Database System.
B. Date of issue/Date of : 12/4/2022 revision
C. Version : 2

Prepared by : EHS
D. Other
$\nabla$ 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.

