

i-Natural Photocatalyst MSDS Catalog



*Excellence in Healthcare
..... from Nature*

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- Nakusul HK P.12
- Nakusul ECO-C P.17
- Nakusul ECO-5 P.22
- Nakusul CLEAR P.27
- Nakusul SE P.33
- Nakusul PET P.36
- Nakusul CAR P.41

環境|浄化|の|光|触|媒
NANOBEST[®]
可視光型アパタイト被覆二酸化チタン

光でナクスル
nakusul[®]
抗菌、消臭が続く光触媒。
Titanium Dioxide Coated with Apatite



MATERIAL SAFETY DATA SHEET

Date Issued: 2020.12.12 Date Revised: 2020.12.12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nakusul 01
Product Description	Photocatalyst Disinfectant Deodorant
Product Number	Nakusul 01
Name of Supplier	i-Natural Healthcare Products Limited
Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong
Emergency Contact	Technical Development Division
Emergency Phone	+852 3104 1516
Email	info@i-natural.com.hk
Name of Raw Material Supplier	Nanobest Japan Co., Ltd

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

[GHS classification]

Acute toxicity Oral: Out of category

Skin corrosive / irritating: Out of category

Skin sensitization: Category 1

2.2. Label elements

Picture display:



Attention word: Warning

Hazard information: May cause allergic skin reaction

2.3. Other hazards

Preventive measures: Avoid inhalation of dust / fume.
Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients and content

Name of Ingredient	CAS No.	Percentage	Note
Sodium percarbonate	15630-89-4	0.2-0.25%	
Citric acid	5949-29-1	0.2-0.25%	
Titanium dioxide	13463-67-7	0.03-0.1%	
Mixture of surfactant / apatite	5949-29-1	0.4-0.5%	
Water	7732-18-5	99%	
Others	-	-	

4. FIRST AID MEASURES

If it comes into your eyes,	<ul style="list-style-type: none">○ Immediately wash with plenty of clean water○ Remove your contact lenses if you wear them○ Thoroughly wash the eyelids○ Get a doctor's diagnosis as soon as possible
If it gets on your skin,	<ul style="list-style-type: none">○ Wipe off the deposits quickly with a cloth○ Wash thoroughly with plenty of water and soap○ Do not use solvents or thinners○ Seek medical consultation if there is any change in appearance or pain
If you inhale,	<ul style="list-style-type: none">○ If you feel sick after inhaling vapor or gas, move to a place with fresh air○ Rest in a position that makes it easy to breathe○ Call your doctor if you feel unwell
If you swallow it,	<ul style="list-style-type: none">○ If swallowed by mistake, rest and seek medical advice immediately○ Do not swallow vomitus○ Do not force vomiting except as directed by a doctor

5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Water [✓], carbon dioxide [✓], foam [✓], powder [✓], dry sand [✓], Other []

5.2. Special hazards arising from the substance or mixture

This product is not flammable. In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

5.3. Advice for firefighters

Containers that can be moved should be removed from the fire location only if it is safe. If it cannot be moved, pour water into the container to cool it. Be sure to wear a self-contained breather and appropriate protective equipment to extinguish the fire from the windward side.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment (gloves, protective mask, apron, goggles, etc.) when working.

6.2. Environmental precautions

Collect the leaked material in a sealable container and move it to a safe place.

6.3. Methods and material for containment and cleaning up

Collect with a shovel, waste cloth, etc. For a large amount of outflow, enclose it with an embankment to prevent the outflow. Be careful when washing with water as it may cause environmental pollution if it is discharged into rivers.

6.4. Reference to other sections

Dispose of deposits, waste, etc. in accordance with relevant laws and regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handle in a well-ventilated place
- Ensure the container is sealed each time
- After handling, wash your hands and face thoroughly, and do not bring gloves or other contaminated protective equipment to other areas.

7.2. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight
- Store in a well-ventilated place
- Storage temperature 5°C - 40°C (25°C if possible)

7.3. Specific end use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

<<Control concentration>>

Control concentration (working environment evaluation standard (Ministry of Labor Notification No. 79, 1988) has not been set.

<<Equipment measures>>

It is necessary to install a local exhaust system, seal the equipment, or provide proper ventilation so that the work environment is not polluted by dust.

<<Allowable concentration>>

The Japan Society for Occupational Health has not set an allowable concentration for this product.

8.2. Exposure controls

- Eye protection: Wear safety goggles
- Skin protection: Wear gloves that are impervious to organic solvents or chemicals
- Respiratory protection: Wear a dust mask
- Other protective equipment: Long-sleeved work clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Shape	Powder	Color	Light White
Smell	Odorless	pH	7 (neutral)
Boiling Point	100°C ± 1°C	Melting Point	0°C ± 1°C
Flash Point	Non-flammable	Ignition Point	Non-ignitable
Explosion Limit	Non-flammable	Density	1.0-1.1
Vapor Pressure	No data	Vapor density	No data
n-Octanol / Water Partition Coefficient	No data	Decomposition Temperature	No Data
Solubility	No data		

9.2. Other information: Nil

10. STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with strong oxidants and strong bases

10.2. Chemical stability: Stable

10.3. Possibility of hazardous reactions: Nil

10.4. Conditions to avoid: High temperature

10.5. Incompatible materials: Strong oxidizer

10.6. Hazardous decomposition products

In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:	No information
Skin corrosive / irritating:	Not irritating to rabbit skin
Skin sensitization	No information
Germ cell mutagenicity:	No product safety tests have been conducted.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Environmental impact information of the mixture: No information

12.2. Persistence and degradability: No data

12.3. Bioaccumulative potential: No data

12.4. Mobility in soil: No data

12.5. Results of PBT and vPvB assessment: No data

12.6. Other adverse effects: No data

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Reclamation must be performed by a certified company under the 'Law on Disposal of Waste and Cleaning'.
 - Do not directly drain water which was used for washing containers or apparatus and devices to ground and drain ditches. Also, as to wastes which are products of treatment of drains and burning, dispose them subject to Law on Disposal of Waste and Cleaning and laws and regulations concerned; or outsource the disposal to a certified disposal company.
-

14. TRANSPORT INFORMATION

General matters:

- Follow directions on handling and keeping.
- Confirm that there are no leaks in containers, and load them in a way that does not cause inversion, falling and damage. Never fail to take measures to prevent load shifting.

Land transportation:

ADR/RID

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	

ADN

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Marine transportation: Comply with the Ships Safety Law.

IMDG

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Air transportation: Comply with the Aviation Law.

IATA

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

15. REGULATORY INFORMATION

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

- Major laws and regulations are not applicable.
- The UN No.: Non-existing

15.2. Chemical safety assessment

Nil

16: OTHER INFORMATION

Main references

- Chemistry Handbook Revised 3rd Edition
- "Raw Material Database" edited by Japan Paint Manufacturers Association
- Solvent pocket book
- Dangerous disaster prevention emergency handbook
- International Chemical Safety Cards (ICSC)
- GHS compatible MSDS · Label creation guidebook edition by Japan Paint Manufacturers Association
- JIS Z 7250
- "Titanium oxide (physical properties and applied technology)" published by Gihodo (技報堂)

[Note]

The content of this data sheet has been prepared based on the best research, but it does not cover all the information, and the evaluation of the data described does not necessarily guarantee sufficient safety. The chemicals used in the mixture can have unknown hazards and should be handled with extreme care. This product safety data sheet is created based on Japanese domestic regulations.

MATERIAL SAFETY DATA SHEET

Date Issued: 2020.12.12 Date Revised: 2020.12.12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nakusul 03 (MEK-03)
Product Description	Photocatalyst Disinfectant Deodorant
Product Number	Nakusul 03
Name of Supplier	i-Natural Healthcare Products Limited
Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong
Emergency Contact	Technical Development Division
Emergency Phone	+852 3104 1516
Email	info@i-natural.com.hk
Name of Raw Material Supplier	Nanobest Japan Co., Ltd

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

[GHS classification]

Acute toxicity Oral: Out of category

Skin corrosive / irritating: Out of category

Skin sensitization: Category 1

2.2. Label elements

Picture display:



Attention word: Warning

Hazard information: May cause allergic skin reaction

2.3. Other hazards

Preventive measures: Avoid inhalation of dust / fume.
Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients and content

Name of Ingredient	CAS No.	Percentage	Note
Sodium percarbonate	15630-89-4	0.2-0.25%	
Citric acid	5949-29-1	0.2-0.25%	
Titanium dioxide	13463-67-7	0.03-0.1%	
Mixture of surfactant / apatite	5949-29-1	0.4-0.5%	
Water	7732-18-5	99%	
Others	-	-	

4. FIRST AID MEASURES

If it comes into your eyes,	<ul style="list-style-type: none">○ Immediately wash with plenty of clean water○ Remove your contact lenses if you wear them○ Thoroughly wash the eyelids○ Get a doctor's diagnosis as soon as possible
If it gets on your skin,	<ul style="list-style-type: none">○ Wipe off the deposits quickly with a cloth○ Wash thoroughly with plenty of water and soap○ Do not use solvents or thinners○ Seek medical consultation if there is any change in appearance or pain
If you inhale,	<ul style="list-style-type: none">○ If you feel sick after inhaling vapor or gas, move to a place with fresh air○ Rest in a position that makes it easy to breathe○ Call your doctor if you feel unwell
If you swallow it,	<ul style="list-style-type: none">○ If swallowed by mistake, rest and seek medical advice immediately○ Do not swallow vomitus○ Do not force vomiting except as directed by a doctor

5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Water [✓], carbon dioxide [✓], foam [✓], powder [✓], dry sand [✓], Other []

5.2. Special hazards arising from the substance or mixture

This product is not flammable. In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

5.3. Advice for firefighters

Containers that can be moved should be removed from the fire location only if it is safe. If it cannot be moved, pour water into the container to cool it. Be sure to wear a self-contained breather and appropriate protective equipment to extinguish the fire from the windward side.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment (gloves, protective mask, apron, goggles, etc.) when working.

6.2. Environmental precautions

Collect the leaked material in a sealable container and move it to a safe place.

6.3. Methods and material for containment and cleaning up

Collect with a shovel, waste cloth, etc. For a large amount of outflow, enclose it with an embankment to prevent the outflow. Be careful when washing with water as it may cause environmental pollution if it is discharged into rivers.

6.4. Reference to other sections

Dispose of deposits, waste, etc. in accordance with relevant laws and regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handle in a well-ventilated place
- Ensure the container is sealed each time
- After handling, wash your hands and face thoroughly, and do not bring gloves or other contaminated protective equipment to other areas.

7.2. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight
- Store in a well-ventilated place
- Storage temperature 5°C - 40°C (25°C if possible)

7.3. Specific end use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

<<Control concentration>>

Control concentration (working environment evaluation standard (Ministry of Labor Notification No. 79, 1988) has not been set.

<<Equipment measures>>

It is necessary to install a local exhaust system, seal the equipment, or provide proper ventilation so that the work environment is not polluted by dust.

<<Allowable concentration>>

The Japan Society for Occupational Health has not set an allowable concentration for this product.

8.2. Exposure controls

- Eye protection: Wear safety goggles
- Skin protection: Wear gloves that are impervious to organic solvents or chemicals
- Respiratory protection: Wear a dust mask
- Other protective equipment: Long-sleeved work clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Shape	Powder	Color	Light White
Smell	Odorless	pH	9 (neutral)
Boiling Point	100°C ± 1°C	Melting Point	0°C ± 1°C
Flash Point	Non-flammable	Ignition Point	Non-ignitable
Explosion Limit	Non-flammable	Density	1.0-1.1
Vapor Pressure	No data	Vapor density	No data
n-Octanol / Water Partition Coefficient	No data	Decomposition Temperature	No Data
Solubility	No data		

9.2. Other information: Nil

10. STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with strong oxidants and strong bases

10.2. Chemical stability: Stable

10.3. Possibility of hazardous reactions: Nil

10.4. Conditions to avoid: High temperature

10.5. Incompatible materials: Strong oxidizer

10.6. Hazardous decomposition products

In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:	No information
Skin corrosive / irritating:	Not irritating to rabbit skin
Skin sensitization	No information
Germ cell mutagenicity:	No product safety tests have been conducted.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Environmental impact information of the mixture: No information

12.2. Persistence and degradability: No data

12.3. Bioaccumulative potential: No data

12.4. Mobility in soil: No data

12.5. Results of PBT and vPvB assessment: No data

12.6. Other adverse effects: No data

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Reclamation must be performed by a certified company under the 'Law on Disposal of Waste and Cleaning'.
 - Do not directly drain water which was used for washing containers or apparatus and devices to ground and drain ditches. Also, as to wastes which are products of treatment of drains and burning, dispose them subject to Law on Disposal of Waste and Cleaning and laws and regulations concerned; or outsource the disposal to a certified disposal company.
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14. TRANSPORT INFORMATION

General matters:

- Follow directions on handling and keeping.
- Confirm that there are no leaks in containers, and load them in a way that does not cause inversion, falling and damage. Never fail to take measures to prevent load shifting.

Land transportation:

ADR/RID

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	

ADN

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Marine transportation: Comply with the Ships Safety Law.

IMDG

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Air transportation: Comply with the Aviation Law.

IATA

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

15. REGULATORY INFORMATION

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

- Major laws and regulations are not applicable.
- The UN No.: Non-existing

15.2. Chemical safety assessment

Nil

16: OTHER INFORMATION

Main references

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MATERIAL SAFETY DATA SHEET

Date Issued: 2020.12.12 Date Revised: 2020.12.12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nakusul Anti-Formaldehyde
Product Description	Photocatalyst Anti-Formaldehyde Disinfectant
Product Number	Nakusul HK
Name of Supplier	i-Natural Healthcare Products Limited
Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong
Emergency Contact	Technical Development Division
Emergency Phone	+852 3104 1516
Email	info@i-natural.com.hk
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2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

[GHS classification]

Acute toxicity Oral: Out of category

Skin corrosive / irritating: Out of category

Skin sensitization: Category 1

2.2. Label elements

Picture display:



Attention word: Warning

Hazard information: May cause allergic skin reaction

2.3. Other hazards

Preventive measures: Avoid inhalation of dust / fume.
Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients and content

Name of Ingredient	CAS No.	Percentage	Note
Dihydrazide adipic acid	1071-93-8	0.95-0.98%	
Calcium phosphate	7758-87-4	0.02-0.05%	
Titanium Dioxide	13463-67-7	0.03-0.1%	
Mixture of surfactant	5949-29-1	0.4-0.5%	
Water	7732-18-5	98.5%	
Others	-	-	

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If you swallow it,	<ul style="list-style-type: none">○ If swallowed by mistake, rest and seek medical advice immediately○ Do not swallow vomitus○ Do not force vomiting except as directed by a doctor

5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Water [✓], carbon dioxide [✓], foam [✓], powder [✓], dry sand [✓], Other []

5.2. Special hazards arising from the substance or mixture

This product is not flammable. In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

5.3. Advice for firefighters

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- Ensure the container is sealed each time
- After handling, wash your hands and face thoroughly, and do not bring gloves or other contaminated protective equipment to other areas.

7.2. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight
- Store in a well-ventilated place
- Storage temperature 5°C - 40°C (25°C if possible)

7.3. Specific end use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

<<Control concentration>>

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8.2. Exposure controls

- Eye protection: Wear safety goggles
- Skin protection: Wear gloves that are impervious to organic solvents or chemicals
- Respiratory protection: Wear a dust mask
- Other protective equipment: Long-sleeved work clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Shape	Powder	Color	Light White
Smell	Odorless	pH	8-9 (weak alkaline)
Boiling Point	100°C ± 1°C	Melting Point	0°C ± 1°C
Flash Point	Non-flammable	Ignition Point	Non-ignitable
Explosion Limit	Non-flammable	Density	1.0-1.1
Vapor Pressure	No data	Vapor density	No data
n-Octanol / Water Partition Coefficient	No data	Decomposition Temperature	No Data
Solubility	No data		

9.2. Other information: Nil

10. STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with strong oxidants and strong bases

10.2. Chemical stability: Stable

10.3. Possibility of hazardous reactions: Nil

10.4. Conditions to avoid: High temperature

10.5. Incompatible materials: Strong oxidizer

10.6. Hazardous decomposition products

In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:	Oral LD50 (rat) > 5000 mg/Kg
Skin corrosive / irritating:	Not irritating to rabbit skin
Skin sensitization	Skin sensitization test using guinea pigs: positive
Germ cell mutagenicity:	No product safety tests have been conducted.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Environmental impact information of the mixture: No information

12.2. Persistence and degradability: No data

12.3. Bioaccumulative potential: No data

12.4. Mobility in soil: No data

12.5. Results of PBT and vPvB assessment: No data

12.6. Other adverse effects: No data

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Reclamation must be performed by a certified company under the 'Law on Disposal of Waste and Cleaning'.
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General matters:

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Land transportation:

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14.2	UN proper shipping name	
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14.4	Packing group	
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14.1	UN number	
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14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Marine transportation: Comply with the Ships Safety Law.

IMDG

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Air transportation: Comply with the Aviation Law.

IATA

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

15. REGULATORY INFORMATION

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

- Major laws and regulations are not applicable.
- The UN No.: Non-existing

15.2. Chemical safety assessment

Nil

16: OTHER INFORMATION

Main references

- Chemistry Handbook Revised 3rd Edition
- "Raw Material Database" edited by Japan Paint Manufacturers Association
- Solvent pocket book
- Dangerous disaster prevention emergency handbook
- International Chemical Safety Cards (ICSC)
- GHS compatible MSDS · Label creation guidebook edition by Japan Paint Manufacturers Association
- JIS Z 7250
- "Titanium oxide (physical properties and applied technology)" published by Gihodo (技報堂)

[Note]

The content of this data sheet has been prepared based on the best research, but it does not cover all the information, and the evaluation of the data described does not necessarily guarantee sufficient safety. The chemicals used in the mixture can have unknown hazards and should be handled with extreme care. This product safety data sheet is created based on Japanese domestic regulations.

MATERIAL SAFETY DATA SHEET

Date Issued: 2020.12.12 Date Revised: 2020.12.12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nakusul ECO-C
Product Description	Photocatalyst Carpet Disinfectant Deodorant
Product Number	Nakusul ECO-C
Name of Supplier	i-Natural Healthcare Products Limited
Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong
Emergency Contact	Technical Development Division
Emergency Phone	+852 3104 1516
Email	info@i-natural.com.hk
Name of Raw Material Supplier	Nanobest Japan Co., Ltd

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

[GHS classification]

Acute toxicity Oral: Out of category

Skin corrosive / irritating: Out of category

Skin sensitization: Category 1

2.2. Label elements

Picture display:



Attention word: Warning

Hazard information: May cause allergic skin reaction

2.3. Other hazards

Preventive measures: Avoid inhalation of dust / fume.
Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients and content

Name of Ingredient	CAS No.	Percentage	Note
Sodium Percarbonate	15630-89-4	0.4-0.5%	
Citric Acid	5949-29-1	0.4-0.5%	
Titanium Dioxide	13463-67-7	0.01-0.1%	
Mixture of Surfactant & Apatite	5949-29-1	0.8-1.0%	
Water	7732-18-5	96-98%	
Others	-	-	

4. FIRST AID MEASURES

If it comes into your eyes,	<ul style="list-style-type: none">○ Immediately wash with plenty of clean water○ Remove your contact lenses if you wear them○ Thoroughly wash the eyelids○ Get a doctor's diagnosis as soon as possible
If it gets on your skin,	<ul style="list-style-type: none">○ Wipe off the deposits quickly with a cloth○ Wash thoroughly with plenty of water and soap○ Do not use solvents or thinners○ Seek medical consultation if there is any change in appearance or pain
If you inhale,	<ul style="list-style-type: none">○ If you feel sick after inhaling vapor or gas, move to a place with fresh air○ Rest in a position that makes it easy to breathe○ Call your doctor if you feel unwell
If you swallow it,	<ul style="list-style-type: none">○ If swallowed by mistake, rest and seek medical advice immediately○ Do not swallow vomitus○ Do not force vomiting except as directed by a doctor

5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Water [✓], carbon dioxide [✓], foam [✓], powder [✓], dry sand [✓], Other []

5.2. Special hazards arising from the substance or mixture

This product is not flammable. In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

5.3. Advice for firefighters

Containers that can be moved should be removed from the fire location only if it is safe. If it cannot be moved, pour water into the container to cool it. Be sure to wear a self-contained breather and appropriate protective equipment to extinguish the fire from the windward side.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment (gloves, protective mask, apron, goggles, etc.) when working.

6.2. Environmental precautions

Collect the leaked material in a sealable container and move it to a safe place.

6.3. Methods and material for containment and cleaning up

Collect with a shovel, waste cloth, etc. For a large amount of outflow, enclose it with an embankment to prevent the outflow. Be careful when washing with water as it may cause environmental pollution if it is discharged into rivers.

6.4. Reference to other sections

Dispose of deposits, waste, etc. in accordance with relevant laws and regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handle in a well-ventilated place
- Ensure the container is sealed each time
- After handling, wash your hands and face thoroughly, and do not bring gloves or other contaminated protective equipment to other areas.

7.2. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight
- Store in a well-ventilated place
- Storage temperature 5°C - 40°C (25°C if possible)

7.3. Specific end use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

<<Control concentration>>

Control concentration (working environment evaluation standard (Ministry of Labor Notification No. 79, 1988) has not been set.

<<Equipment measures>>

It is necessary to install a local exhaust system, seal the equipment, or provide proper ventilation so that the work environment is not polluted by dust.

<<Allowable concentration>>

The Japan Society for Occupational Health has not set an allowable concentration for this product.

8.2. Exposure controls

- Eye protection: Wear safety goggles
- Skin protection: Wear gloves that are impervious to organic solvents or chemicals
- Respiratory protection: Wear a dust mask
- Other protective equipment: Long-sleeved work clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Shape	Powder	Color	Light White
Smell	Odorless	pH	9 (alkaline)
Boiling Point	100°C ± 1°C	Melting Point	0°C ± 1°C
Flash Point	Non-flammable	Ignition Point	Non-ignitable
Explosion Limit	Non-flammable	Density	1.0-1.1
Vapor Pressure	No data	Vapor density	No data
n-Octanol / Water Partition Coefficient	No data	Decomposition Temperature	No Data
Solubility	No data		

9.2. Other information: Nil

10. STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with strong oxidants and strong bases

10.2. Chemical stability: Stable

10.3. Possibility of hazardous reactions: Nil

10.4. Conditions to avoid: High temperature

10.5. Incompatible materials: Strong oxidizer

10.6. Hazardous decomposition products

In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:	No information
Skin corrosive / irritating:	LD50=2000mg/Kg
Skin sensitization	No information
Germ cell mutagenicity:	No product safety tests have been conducted.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Environmental impact information of the mixture: No information

12.2. Persistence and degradability: No data

12.3. Bioaccumulative potential: No data

12.4. Mobility in soil: No data

12.5. Results of PBT and vPvB assessment: No data

12.6. Other adverse effects: No data

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Reclamation must be performed by a certified company under the 'Law on Disposal of Waste and Cleaning'.
 - Do not directly drain water which was used for washing containers or apparatus and devices to ground and drain ditches. Also, as to wastes which are products of treatment of drains and burning, dispose them subject to Law on Disposal of Waste and Cleaning and laws and regulations concerned; or outsource the disposal to a certified disposal company.
-

14. TRANSPORT INFORMATION

General matters:

- Follow directions on handling and keeping.
- Confirm that there are no leaks in containers, and load them in a way that does not cause inversion, falling and damage. Never fail to take measures to prevent load shifting.

Land transportation:

ADR/RID

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	

ADN

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Marine transportation: Comply with the Ships Safety Law.

IMDG

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Air transportation: Comply with the Aviation Law.

IATA

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

15. REGULATORY INFORMATION

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

- Major laws and regulations are not applicable.
- The UN No.: Non-existing

15.2. Chemical safety assessment

Nil

16: OTHER INFORMATION

Main references

- Chemistry Handbook Revised 3rd Edition
- "Raw Material Database" edited by Japan Paint Manufacturers Association
- Solvent pocket book
- Dangerous disaster prevention emergency handbook
- International Chemical Safety Cards (ICSC)
- GHS compatible MSDS · Label creation guidebook edition by Japan Paint Manufacturers Association
- JIS Z 7250
- "Titanium oxide (physical properties and applied technology)" published by Gihodo (技報堂)
- "Comprehensive Chemical Database" Japan Chemical Database Co., Ltd.

[Note]

The content of this data sheet has been prepared based on the best research, but it does not cover all the information, and the evaluation of the data described does not necessarily guarantee sufficient safety.

The chemicals used in the mixture can have unknown hazards and should be handled with extreme care.

This product safety data sheet is created based on Japanese domestic regulations.

MATERIAL SAFETY DATA SHEET

Date Issued: 2020.12.12 Date Revised: 2020.12.12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nakusul ECO-5
Product Description	Photocatalyst Carpet Deep Cleaning Disinfectant
Product Number	Nakusul ECO-5
Name of Supplier	i-Natural Healthcare Products Limited
Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong
Emergency Contact	Technical Development Division
Emergency Phone	+852 3104 1516
Email	info@i-natural.com.hk
Name of Raw Material Supplier	Nanobest Japan Co., Ltd

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

[GHS classification]

Acute toxicity Oral: Out of category

Skin corrosive / irritating: Out of category

Skin sensitization: Category 1

2.2. Label elements

Picture display:



Attention word: Warning

Hazard information: May cause allergic skin reaction

2.3. Other hazards

Preventive measures: Avoid inhalation of dust / fume.
Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients and content

Name of Ingredient	CAS No.	Percentage	Note
Sodium Percarbonate	15630-89-4	0.4-0.5%	
Citric Acid	5949-29-1	0.4-0.5%	
Titanium Dioxide	13463-67-7	0.01%	
Mixture of Surfactant & Apatite	5949-29-1	0.1%	
Water	7732-18-5	99%	
Others	-	-	

4. FIRST AID MEASURES

If it comes into your eyes,	<ul style="list-style-type: none">○ Immediately wash with plenty of clean water○ Remove your contact lenses if you wear them○ Thoroughly wash the eyelids○ Get a doctor's diagnosis as soon as possible
If it gets on your skin,	<ul style="list-style-type: none">○ Wipe off the deposits quickly with a cloth○ Wash thoroughly with plenty of water and soap○ Do not use solvents or thinners○ Seek medical consultation if there is any change in appearance or pain
If you inhale,	<ul style="list-style-type: none">○ If you feel sick after inhaling vapor or gas, move to a place with fresh air○ Rest in a position that makes it easy to breathe○ Call your doctor if you feel unwell
If you swallow it,	<ul style="list-style-type: none">○ If swallowed by mistake, rest and seek medical advice immediately○ Do not swallow vomitus○ Do not force vomiting except as directed by a doctor

5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Water [✓], carbon dioxide [✓], foam [✓], powder [✓], dry sand [✓], Other []

5.2. Special hazards arising from the substance or mixture

This product is not flammable. In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

5.3. Advice for firefighters

Containers that can be moved should be removed from the fire location only if it is safe. If it cannot be moved, pour water into the container to cool it. Be sure to wear a self-contained breather and appropriate protective equipment to extinguish the fire from the windward side.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment (gloves, protective mask, apron, goggles, etc.) when working.

6.2. Environmental precautions

Collect the leaked material in a sealable container and move it to a safe place.

6.3. Methods and material for containment and cleaning up

Collect with a shovel, waste cloth, etc. For a large amount of outflow, enclose it with an embankment to prevent the outflow. Be careful when washing with water as it may cause environmental pollution if it is discharged into rivers.

6.4. Reference to other sections

Dispose of deposits, waste, etc. in accordance with relevant laws and regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handle in a well-ventilated place
- Ensure the container is sealed each time
- After handling, wash your hands and face thoroughly, and do not bring gloves or other contaminated protective equipment to other areas.

7.2. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight
- Store in a well-ventilated place
- Storage temperature 5°C - 40°C (25°C if possible)

7.3. Specific end use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

<<Control concentration>>

Control concentration (working environment evaluation standard (Ministry of Labor Notification No. 79, 1988) has not been set.

<<Equipment measures>>

It is necessary to install a local exhaust system, seal the equipment, or provide proper ventilation so that the work environment is not polluted by dust.

<<Allowable concentration>>

The Japan Society for Occupational Health has not set an allowable concentration for this product.

8.2. Exposure controls

- Eye protection: Wear safety goggles
- Skin protection: Wear gloves that are impervious to organic solvents or chemicals
- Respiratory protection: Wear a dust mask
- Other protective equipment: Long-sleeved work clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Shape	Powder	Color	Light White
Smell	Odorless	pH	11-12 (alkaline)
Boiling Point	100°C ± 1°C	Melting Point	0°C ± 1°C
Flash Point	Non-flammable	Ignition Point	Non-ignitable
Explosion Limit	Non-flammable	Density	1.0-1.1
Vapor Pressure	No data	Vapor density	No data
n-Octanol / Water Partition Coefficient	No data	Decomposition Temperature	No Data
Solubility	No data		

9.2. Other information: Nil

10. STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with strong oxidants and strong bases

10.2. Chemical stability: Stable

10.3. Possibility of hazardous reactions: Nil

10.4. Conditions to avoid: High temperature

10.5. Incompatible materials: Strong oxidizer

10.6. Hazardous decomposition products

In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:	No information
Skin corrosive / irritating:	LD50=2000mg/Kg
Skin sensitization	No information
Germ cell mutagenicity:	No product safety tests have been conducted.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Environmental impact information of the mixture: No information

12.2. Persistence and degradability: No data

12.3. Bioaccumulative potential: No data

12.4. Mobility in soil: No data

12.5. Results of PBT and vPvB assessment: No data

12.6. Other adverse effects: No data

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Reclamation must be performed by a certified company under the 'Law on Disposal of Waste and Cleaning'.
 - Do not directly drain water which was used for washing containers or apparatus and devices to ground and drain ditches. Also, as to wastes which are products of treatment of drains and burning, dispose them subject to Law on Disposal of Waste and Cleaning and laws and regulations concerned; or outsource the disposal to a certified disposal company.
-

14. TRANSPORT INFORMATION

General matters:

- Follow directions on handling and keeping.
- Confirm that there are no leaks in containers, and load them in a way that does not cause inversion, falling and damage. Never fail to take measures to prevent load shifting.

Land transportation:

ADR/RID

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	

ADN

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Marine transportation: Comply with the Ships Safety Law.

IMDG

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Air transportation: Comply with the Aviation Law.

IATA

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

15. REGULATORY INFORMATION

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

- Major laws and regulations are not applicable.
- The UN No.: Non-existing

15.2. Chemical safety assessment

Nil

16: OTHER INFORMATION

Main references

- Chemistry Handbook Revised 3rd Edition
- "Raw Material Database" edited by Japan Paint Manufacturers Association
- Solvent pocket book
- Dangerous disaster prevention emergency handbook
- International Chemical Safety Cards (ICSC)
- GHS compatible MSDS · Label creation guidebook edition by Japan Paint Manufacturers Association
- JIS Z 7250
- "Titanium oxide (physical properties and applied technology)" published by Gihodo (技報堂)
- "Comprehensive Chemical Database" Japan Chemical Database Co., Ltd.

[Note]

The content of this data sheet has been prepared based on the best research, but it does not cover all the information, and the evaluation of the data described does not necessarily guarantee sufficient safety.

The chemicals used in the mixture can have unknown hazards and should be handled with extreme care.

This product safety data sheet is created based on Japanese domestic regulations.

MATERIAL SAFETY DATA SHEET

Date Issued: 2020.12.29 Date Revised: 2020.12.29

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nakusul Clear
Product Description	Photocatalyst Durable Glass Coating
Product Number	Nakusul Clear
Name of Supplier	i-Natural Healthcare Products Limited
Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong
Emergency Contact	Technical Development Division
Emergency Phone	+852 3104 1516
Email	info@i-natural.com.hk
Name of Raw Material Supplier	Nanobest Japan Co., Ltd

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

[GHS classification]

Acute toxicity Oral: May be harmful if swallowed

Skin corrosive / irritating: Mild skin irritation

Skin sensitization: Out of category

2.2. Label elements

Picture display:



Attention word: Warning

Hazard information: May cause an allergic skin reaction

2.3. Other hazards

Risk of hereditary disease
Risk of adverse effects on reproductive function or foetation
Organ damage due to long-term or repeated exposure
(central nervous system, auditory system)

Preventive measures:

Read the instruction manual before use
Do not handle until you have read and understood all safety precautions
Use personal protective equipment as needed
Do not eat, drink or smoke when using this product
Wash your hands thoroughly after handling
Avoid inhalation of dust/fume
Avoid release to the environment

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients and content

Name of Ingredient	CAS No.	Percentage	Note
Titanium Dioxide	13463-67-7	< 1%	
2-Propanol	7631-96-9	6.7%	
n-Butanol	71-36-1	2.4%	
Silicon Dioxide (Sirika)	7631-86-9	0.3%	
Ethanol	64-17-5	90%	
Water	7732-18-5	0.3-0.4%	

4. FIRST AID MEASURES

If it comes into your eyes,	<ul style="list-style-type: none">○ Immediately wash with plenty of clean water○ Remove your contact lenses if you wear them○ Thoroughly wash the eyelids○ Get a doctor's diagnosis as soon as possible
If it gets on your skin,	<ul style="list-style-type: none">○ Wipe off the deposits quickly with a cloth○ Wash thoroughly with plenty of water and soap○ Do not use solvents or thinners○ Seek medical consultation if there is any change in appearance or pain
If you inhale,	<ul style="list-style-type: none">○ If you feel sick after inhaling vapor or gas, move to a place with fresh air○ Rest in a position that makes it easy to breathe○ Call your doctor if you feel unwell
If you swallow it,	<ul style="list-style-type: none">○ If swallowed by mistake, rest and seek medical advice immediately○ Do not swallow vomitus○ Do not force vomiting except as directed by a doctor

5: FIREFIGHTING MEASURES

5.1. Fire extinguishing media

Water [✓], carbon dioxide [✓], foam [✓], powder [✓], dry sand [✓], Other []

5.2. Special hazards arising from the substance or mixture

In case of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

5.3. Advice for firefighters

Containers that can be moved should be removed from the fire location only if it is safe. If it cannot be moved, pour water into the container to cool it. Be sure to wear a self-contained breather and appropriate protective equipment to extinguish the fire from the windward side.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

Wear appropriate protective equipment (gloves, protective mask, apron, goggles, etc.) when working.

6.2. Environmental precautions

Collect the leaked material in a sealable container and move it to a safe place.

Immediately remove nearby ignition sources, hot bodies and combustibles. Prepare a suitable fire extinguisher in case of ignition. Collect using a tool such as plastic so that sparks do not occur.

6.3. Methods and material for containment and cleaning up

Collect with a shovel, waste cloth, etc. For a large amount of outflow, enclose it with an embankment to

prevent the outflow. Be careful when washing with water as it may cause environmental pollution if it is discharged into rivers.

6.4. Reference to other sections

Dispose of deposits, waste, etc., following relevant laws and regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handle in a well-ventilated place
- Ensure the container is sealed each time
- After handling, wash your hands and face thoroughly, and do not bring gloves or other contaminated protective equipment to other areas.

7.2. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight
- Store in a well-ventilated place of low humidity
- Store in a covered warehouse
- Store in a closed, corrosion-resistant container

7.3. Specific end use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

"Control concentration."

Control concentration (working environment evaluation standard (Ministry of Labor Notification No. 79, 1988) has not been set.

"Equipment measures."

It is necessary to install a local exhaust system, seal the equipment, or provide proper ventilation so that the work environment is not polluted by dust.

"Allowable concentration."

The Japan Society for Occupational Health has not set an allowable concentration for this product.

8.2. Exposure controls

- Eye protection: Wear safety goggles
- Skin protection: Wear gloves that are impervious to organic solvents or chemicals
- Respiratory protection: Wear a dust mask
- Other protective equipment: Long-sleeved work clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Shape	Powder	Color	White
Smell	Alcohol	pH	7 (neutral) (?)
Boiling Point	80°C ± 2°C (?)	Melting Point	0°C ± 1°C (?)
Flash Point	?	Ignition Point	?
Explosion Limit	Non-flammable	Density	About 0.8
Vapor Pressure	No data	Vapor density	No data
n-Octanol / Water Partition Coefficient	No data	Decomposition Temperature	No Data
Solubility	No data		

9.2. Other information: Nil

10. STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with strong oxidants and strong bases

10.2. Chemical stability: Stable

10.3. Possibility of hazardous reactions: Nil

10.4. Conditions to avoid: High temperature and fire

10.5. Incompatible materials: Strong oxidizer

10.6. Hazardous decomposition products

In a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity: No information

Skin corrosive / irritating: No information

Skin sensitization: No information

Germ cell mutagenicity: No product safety tests have been conducted

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Environmental impact information of the mixture: No information

12.2. Persistence and degradability: No data

12.3. Bioaccumulative potential: No data

12.4. Mobility in soil: No data

12.5. Results of PBT and vPvB assessment: No data

12.6. Other adverse effects: No data

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Reclamation must be performed by a certified company under the 'Law on Disposal of Waste and Cleaning'.
- Do not directly drain water which was used for washing containers or apparatus and devices to ground and drain ditches. Also, as to wastes which are products of treatment of drains and burning, dispose them subject to Law on Disposal of Waste and Cleaning and laws and regulations concerned; or outsource the disposal to a certified disposal company.

14. TRANSPORT INFORMATION

General matters:

- Follow directions on handling and keeping.
- Confirm that there are no leaks in containers, and load them in a way that does not cause inversion, falling, and damage. Never fail to take measures to prevent load shifting.

Land transportation:

ADR/RID

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -

14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

ADN

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Marine transportation: Comply with the Ships Safety Law.

IMDG

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Air transportation: Comply with the Aviation Law.

IATA

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

15. REGULATORY INFORMATION

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

- Major laws and regulations are not applicable.
- The UN No.: Non-existing

15.2. Chemical safety assessment

Nil

16: OTHER INFORMATION

Main references

- Chemistry Handbook Revised 3rd Edition
- "Raw Material Database" edited by Japan Paint Manufacturers Association
- Solvent pocketbook
- Dangerous disaster prevention emergency handbook
- International Chemical Safety Cards (ICSC)
- GHS compatible MSDS · Label creation guidebook edition by Japan Paint Manufacturers Association
- JIS Z 7250
- "Titanium oxide (physical properties and applied technology)" published by Gihodo

[Note]

The content of this data sheet has been prepared based on the best research. Still, it does not cover all the information, and the evaluation of the data described does not necessarily guarantee sufficient safety.

The chemicals used in the mixture can have unknown hazards and should be handled with extreme care.

This product safety data-sheet is created based on Japanese domestic regulations.

Material Safety Data Sheet

1. Manufacturer and product information	Name of company	i-Natural Healthcare Products Limited		
	Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong		
	Homepage	www.i-natural.com.hk		
	Tel	+852 3104 1516		
	Email	info@i-natural.com.hk		
	Date of preparation and revision	Date issued: 2018.01.21 First revision: 2022.01.26		
	Name of material	Nakusul SE		
	Name of Raw Material Supplier	Nanobest Japan Co., Ltd		
	Product Description	Photocatalyst Disinfectant Deodorant		
	Description of the material / main use	Titanium oxide solution		
2. Composition ingredients	Distinction: homogeneous material or mixture			
	Name of ingredient	CAS No.		Note
	Titanium Dioxide	13463-67-7	0.16-0.2%	
	Water		>99%	
	Others		<1%	
3. Points of dangerous and properties	Name of classification: the properties do not come under any classifying standards.			
	Comments on dangerous and toxic properties. No information on dangerous and toxic properties in particular.			
4. First-aid treatment	If it comes into your eyes,	Treat eyes in the same way as you do when dust comes into them, that is to say wash them thoroughly and see a doctor if something is wrong with your eyes.		
	If it gets on your skin	Particular treatments are unnecessary.		
	If you inhale,	Gargle with a lot of water. Depending on the condition,		
	If you swallow it,	In the case that someone swallows it by mistake, make him (Her) gargle with water, spew it out and lie quietly. Make him (Her) see a doctor depending on his (her) condition. Make sure that he (she) does not swallow the spewed thing. Unless except the case under instructions of a doctor, do not force him (her) to spew it.		
5. Measures to be taken in case of a fire	Extinguishment which can be used	Water [✓], Carbonic acid gas [✓], Form [✓], Powder [✓]		
		Dry sand [✓], Others []		
	<u>Way of fire fighting</u> * Put on safety wears such as heat-resistance clothes. * promptly remove combustibles from the place of the fire. * Cool airtight containers to be exposed to high temperature. * Perform firefighting from the windward. * Use appropriate extinguishment.			

6. Measures to be taken in case of leakage	<ul style="list-style-type: none"> ▪ Never handle it without putting appropriate protectors such as globes, a protective mask, an apron and goggles. ▪ Sweep the leakage into a pile or vacuum clean and dispose. ▪ Dispose something to which it sticks and wastes in accordance with the provisions of laws and regulations concerned.
7. Directions on handling and keeping	<p><u>Directions on handling</u></p> <ul style="list-style-type: none"> ▪ Handle it at the well-ventilated place. ▪ Put protectors on in order to prevent it from touching skin, mucous membrane or clothe and coming into eyes. ▪ Well wash your face and hands after handling. Do not bring contaminated protectors such as globes into a resting room and so on. ▪ Stopper containers tightly every time. <p><u>Directions on keeping</u></p> <ul style="list-style-type: none"> ▪ Avoid direct sunlight. ▪ Keep it at the place of low humidity.

8. Prevention of exposure and protecting measures	<p><u>Facility requirements</u></p> <ul style="list-style-type: none"> ▪ Do not place things which would be high temperature or ignition point. ▪ The place where it is handled must be a well-ventilated environment. 				
	Protectors	Respiratory organs	<ul style="list-style-type: none"> ▪ Put an appropriate mask on in the case of spraying,. ▪ Put a mask which prevents inhalation of vapor and mist. 		
		Eyes	<ul style="list-style-type: none"> ▪ Wear protective glasses whenever you handle it 		
		Hands	<ul style="list-style-type: none"> ▪ Put globes made of a material which does not have chemicals infiltrated. 		
		Skins and body	<ul style="list-style-type: none"> ▪ Whenever you handle it, wear clothes which protect your skin and body so as not to expose them. It is to be desired that the material of the protective clothes do not have chemicals infiltrated. 		
9. Physical properties and chemical properties	State	Liquid [<input checked="" type="checkbox"/>] Gas [<input type="checkbox"/>]			
		Solid: Lump [<input type="checkbox"/>] Powder [<input type="checkbox"/>] Pate [<input type="checkbox"/>]			
		Color: white Bad smell: -			
	Boiling point: -		Melting point: -		
	Density (specific gravity): 3.18 ~ 3.9		PH: -		
	Others: dispersed in water				
	Information on dangerous or toxic properties. No information in particular.				
10. Stability and reactivity	Reactivity and stability	<u>Danger caused by contact.</u> No information in particular			
		<u>Emission of toxic gas in the case of burning</u> This material itself does not ignite and burn. However, after vaporizing water, if contained organic matter burns, there is a possibility of emission of carbon oxide.			
		<u>Other information on reactivity</u> No reactivity under normal conditions.			
11. Information on toxic properties	Toxic properties of compositional substances and standards of exposure concentration				
	Name of substance	Controlled concentration	ACGIH (TLV)	IARC	Other toxic properties
	Titanium oxide	-	10mg/m ³	3	
	<u>Information on other toxic properties of compositional substances:</u> No particular information other than the above				

Information on toxic properties of the material:

Safety test as to a mixture of it has not been performed.

12. Information on influence to environment	In case of leakage or disposal, handle with care because there is a possibility of having bad influence on environment. Take proper measures in order to prevent the material and wash water from directly flowing to ground, rivers and drain ditches.
13. Directions on disposal	<ul style="list-style-type: none">▪ Reclamation has to be performed by a certified company in accordance with 'Law on Disposal of Waste and Cleaning'.▪ Do not directly drain water which was used for washing containers or apparatus and devices to ground and drain ditches.▪ Also as to wastes which are products of treatment of drains and burning, dispose them subject to Law on Disposal of Waste and Cleaning and laws and regulations concerned; or outsource the disposal to a certified disposal company.
14. Directions on transportation	General matters: <ul style="list-style-type: none">▪ Follow directions on handling and keeping.▪ Confirm that there are no leaks in containers, and load them in the way which do not cause inversion, falling and damage. Never fail to take measures to prevent load shifting. Land transportation: <ul style="list-style-type: none">▪ In the case that the Fire Services Law, Industrial Safety and Health Law or Poisonous and Deleterious Substances Control Law is applicable, comply with the way of transportation provided in the applicable laws. Marine transportation: <ul style="list-style-type: none">▪ Comply with the Ships Safety Law. Air transportation: <ul style="list-style-type: none">▪ Comply with the Aviation Law.
15. Applicable laws and ordinances	Major laws and regulations are not applicable. The UN No.: Non-existing
16. Other information	<u>Reference</u> <ul style="list-style-type: none">▪ 'Material Substance Database' compiled by Japan Paint Manufacturers Association▪ Solution pocketbook▪ Handbook of danger, disaster prevention and first-aid▪ International Chemical Safety Card (ICSC)▪ Material Safety Data Sheet (MSDC) issued by manufacturing company of each material
<p>Note: This MSDS has been made based on our company's knowledge in good faith, however mentioned numerical values are not warranted values. Assessment of dangerous or toxic properties is not always enough. Please handle with care.</p>	

MATERIAL SAFETY DATA SHEET

Date Issued: 2020.12.12 Date Revised: 2020.12.12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nakusul for Pet
Product Description	Photocatalyst Disinfectant Deodorant for Pet
Product Number	Nakusul for Pet
Name of Supplier	i-Natural Healthcare Products Limited
Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong
Emergency Contact	Technical Development Division
Emergency Phone	+852 3104 1516
Email	info@i-natural.com.hk
Name of Raw Material Supplier	Nanobest Japan Co., Ltd

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

[GHS classification]

Acute toxicity Oral: Out of category

Skin corrosive / irritating: Out of category

Skin sensitization: Category 1

2.2. Label elements

Picture display:



Attention word: Warning

Hazard information: May cause allergic skin reaction

2.3. Other hazards

Preventive measures: Avoid inhalation of dust / fume.
Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients and content

Name of Ingredient	CAS No.	Percentage	Note
Sodium percarbonate	15630-89-4	0.2-0.25%	
Citric acid	5949-29-1	0.2-0.25%	
Titanium Dioxide	13463-67-7	0.03-0.1%	
Mixture of surfactant / apatite	5949-29-1	0.4-0.5%	
Water	7732-18-5	99%	
Others	-	-	

4. FIRST AID MEASURES

If it comes into your eyes,	<ul style="list-style-type: none">○ Immediately wash with plenty of clean water○ Remove your contact lenses if you wear them○ Thoroughly wash the eyelids○ Get a doctor's diagnosis as soon as possible
If it gets on your skin,	<ul style="list-style-type: none">○ Wipe off the deposits quickly with a cloth○ Wash thoroughly with plenty of water and soap○ Do not use solvents or thinners○ Seek medical consultation if there is any change in appearance or pain
If you inhale,	<ul style="list-style-type: none">○ If you feel sick after inhaling vapor or gas, move to a place with fresh air○ Rest in a position that makes it easy to breathe○ Call your doctor if you feel unwell
If you swallow it,	<ul style="list-style-type: none">○ If swallowed by mistake, rest and seek medical advice immediately○ Do not swallow vomitus○ Do not force vomiting except as directed by a doctor

5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Water [✓], carbon dioxide [✓], foam [✓], powder [✓], dry sand [✓], Other []

5.2. Special hazards arising from the substance or mixture

This product is not flammable. In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

5.3. Advice for firefighters

Containers that can be moved should be removed from the fire location only if it is safe. If it cannot be moved, pour water into the container to cool it. Be sure to wear a self-contained breather and appropriate protective equipment to extinguish the fire from the windward side.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment (gloves, protective mask, apron, goggles, etc.) when working.

6.2. Environmental precautions

Collect the leaked material in a sealable container and move it to a safe place.

6.3. Methods and material for containment and cleaning up

Collect with a shovel, waste cloth, etc. For a large amount of outflow, enclose it with an embankment to prevent the outflow. Be careful when washing with water as it may cause environmental pollution if it is discharged into rivers.

6.4. Reference to other sections

Dispose of deposits, waste, etc. in accordance with relevant laws and regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handle in a well-ventilated place
- Ensure the container is sealed each time
- After handling, wash your hands and face thoroughly, and do not bring gloves or other contaminated protective equipment to other areas.

7.2. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight
- Store in a well-ventilated place
- Storage temperature 5°C - 40°C (25°C if possible)

7.3. Specific end use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

<<Control concentration>>

Control concentration (working environment evaluation standard (Ministry of Labor Notification No. 79, 1988) has not been set.

<<Equipment measures>>

It is necessary to install a local exhaust system, seal the equipment, or provide proper ventilation so that the work environment is not polluted by dust.

<<Allowable concentration>>

The Japan Society for Occupational Health has not set an allowable concentration for this product.

8.2. Exposure controls

- Eye protection: Wear safety goggles
- Skin protection: Wear gloves that are impervious to organic solvents or chemicals
- Respiratory protection: Wear a dust mask
- Other protective equipment: Long-sleeved work clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Shape	Powder	Color	Light White
Smell	Odorless	pH	7 (neutral)
Boiling Point	100°C ± 1°C	Melting Point	0°C ± 1°C
Flash Point	Non-flammable	Ignition Point	Non-ignitable
Explosion Limit	Non-flammable	Density	1.0-1.1
Vapor Pressure	No data	Vapor density	No data
n-Octanol / Water Partition Coefficient	No data	Decomposition Temperature	No Data
Solubility	No data		

9.2. Other information: Nil

10. STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with strong oxidants and strong bases

10.2. Chemical stability: Stable

10.3. Possibility of hazardous reactions: Nil

10.4. Conditions to avoid: High temperature

10.5. Incompatible materials: Strong oxidizer

10.6. Hazardous decomposition products

In the event of a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:	No information
Skin corrosive / irritating:	Not irritating to rabbit skin
Skin sensitization	No information
Germ cell mutagenicity:	No product safety tests have been conducted.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Environmental impact information of the mixture: No information

12.2. Persistence and degradability: No data

12.3. Bioaccumulative potential: No data

12.4. Mobility in soil: No data

12.5. Results of PBT and vPvB assessment: No data

12.6. Other adverse effects: No data

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Reclamation must be performed by a certified company under the 'Law on Disposal of Waste and Cleaning'.
 - Do not directly drain water which was used for washing containers or apparatus and devices to ground and drain ditches. Also, as to wastes which are products of treatment of drains and burning, dispose them subject to Law on Disposal of Waste and Cleaning and laws and regulations concerned; or outsource the disposal to a certified disposal company.
-

14. TRANSPORT INFORMATION

General matters:

- Follow directions on handling and keeping.
- Confirm that there are no leaks in containers, and load them in a way that does not cause inversion, falling and damage. Never fail to take measures to prevent load shifting.

Land transportation:

ADR/RID

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	

ADN

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Marine transportation: Comply with the Ships Safety Law.

IMDG

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Air transportation: Comply with the Aviation Law.

IATA

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

15. REGULATORY INFORMATION

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

- Major laws and regulations are not applicable.
- The UN No.: Non-existing

15.2. Chemical safety assessment

Nil

16: OTHER INFORMATION

Main references

- Chemistry Handbook Revised 3rd Edition
- "Raw Material Database" edited by Japan Paint Manufacturers Association
- Solvent pocket book
- Dangerous disaster prevention emergency handbook
- International Chemical Safety Cards (ICSC)
- GHS compatible MSDS · Label creation guidebook edition by Japan Paint Manufacturers Association
- JIS Z 7250
- "Titanium oxide (physical properties and applied technology)" published by Gihodo (技報堂)

[Note]

The content of this data sheet has been prepared based on the best research, but it does not cover all the information, and the evaluation of the data described does not necessarily guarantee sufficient safety. The chemicals used in the mixture can have unknown hazards and should be handled with extreme care. This product safety data sheet is created based on Japanese domestic regulations.

MATERIAL SAFETY DATA SHEET

Date Issued: 2020.12.12 Date Revised: 2020.12.12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Nakusul for Car
Product Description	Photocatalyst Car Disinfectant
Product Number	Nakusul for Car
Name of Supplier	i-Natural Healthcare Products Limited
Address	Unit 01, 9/F, One Mong Kok Road Commercial Centre, 1 Mongkok Road, Kowloon, Hong Kong
Emergency Contact	Technical Development Division
Emergency Phone	+852 3104 1516
Email	info@i-natural.com.hk
Name of Raw Material Supplier	Nanobest Japan Co., Ltd

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

[GHS classification]

Acute toxicity Oral: Out of category

Skin corrosive / irritating: Out of category

Skin sensitization: Category 1

2.2. Label elements

Picture display:



Attention word: Warning

Hazard information: May cause an allergic skin reaction

2.3. Other hazards

Preventive measures: Avoid inhalation of dust/fume.
Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients and content

Name of Ingredient	CAS No.	Percentage	Note
Dihydrazide adipic acid	1071-93-8	0.95-0.98%	
Calcium phosphate	7758-87-4	0.02-0.05%	
Titanium Dioxide	13463-67-7	0.03-0.1%	
Mixture of surfactant	5949-29-1	0.4-0.5%	
Water	7732-18-5	98.5%	
Others	-	-	

4. FIRST AID MEASURES

If it comes into your eyes,	<ul style="list-style-type: none">○ Immediately wash with plenty of clean water○ Remove your contact lenses if you wear them○ Thoroughly wash the eyelids○ Get a doctor's diagnosis as soon as possible
If it gets on your skin,	<ul style="list-style-type: none">○ Wipe off the deposits quickly with a cloth○ Wash thoroughly with plenty of water and soap○ Do not use solvents or thinners○ Seek medical consultation if there is any change in appearance or pain
If you inhale,	<ul style="list-style-type: none">○ If you feel sick after inhaling vapor or gas, move to a place with fresh air○ Rest in a position that makes it easy to breathe○ Call your doctor if you feel unwell
If you swallow it,	<ul style="list-style-type: none">○ If swallowed by mistake, rest and seek medical advice immediately○ Do not swallow vomitus○ Do not force vomiting except as directed by a doctor

5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Water [✓], carbon dioxide [✓], foam [✓], powder [✓], dry sand [✓], Other []

5.2. Special hazards arising from the substance or mixture

In a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

5.3. Advice for firefighters

Containers that can be moved should be removed from the fire location only if it is safe. If it cannot be moved, pour water into the container to cool it.

Be sure to wear a self-contained breather and appropriate protective equipment to extinguish the fire from the windward side.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

Wear appropriate protective equipment (gloves, protective mask, apron, goggles, etc.) when working.

6.2. Environmental precautions

Collect the leaked material in a sealable container and move it to a safe place.

6.3. Methods and material for containment and cleaning up

Collect with a shovel, waste cloth, etc. For a large amount of outflow, enclose it with an embankment to prevent the outflow. Be careful when washing with water as it may cause environmental pollution if it is discharged into rivers.

6.4. Reference to other sections

Dispose of deposits, waste, etc., following relevant laws and regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handle in a well-ventilated place
- Ensure the container is sealed each time
- After handling, wash your hands and face thoroughly, and do not bring gloves or other contaminated protective equipment to other areas.

7.2. Conditions for safe storage, including any incompatibilities

- Avoid direct sunlight
- Store in a well-ventilated place
- Storage temperature 5°C - 40°C (25°C if possible)

7.3. Specific end use(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

"Control concentration."

Control concentration (working environment evaluation standard (Ministry of Labor Notification No. 79, 1988) has not been set.

"Equipment measures."

It is necessary to install a local exhaust system, seal the equipment, or provide proper ventilation so that the work environment is not polluted by dust.

"Allowable concentration."

The Japan Society for Occupational Health has not set an allowable concentration for this product.

8.2. Exposure controls

- Eye protection: Wear safety goggles
- Skin protection: Wear gloves that are impervious to organic solvents or chemicals
- Respiratory protection: Wear a dust mask
- Other protective equipment: Long-sleeved work clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Shape	Powder	Color	White
Smell	Odorless	pH	8-9 (weak alkaline)
Boiling Point	100°C ± 1°C	Melting Point	0°C ± 1°C
Flash Point	Non-flammable	Ignition Point	Non-ignitable
Explosion Limit	Non-flammable	Density	No data
Vapor Pressure	No data	Vapor density	No data
n-Octanol / Water Partition Coefficient	No data	Decomposition Temperature	No Data
Solubility	No data		

9.2. Other information: Nil

10. STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with strong oxidants and strong bases

10.2. Chemical stability: Stable

10.3. Possibility of hazardous reactions: Nil

10.4. Conditions to avoid: High temperature

10.5. Incompatible materials: Strong oxidizer

10.6. Hazardous decomposition products

In a fire, harmful gases such as carbon monoxide and nitrogen oxides may be generated.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:	Oral LD50 (rat) > 5000 mg/Kg
Skin corrosive / irritating:	Not irritating to rabbit skin
Skin sensitization	Skin sensitization test using guinea pigs: positive
Germ cell mutagenicity:	No product safety tests have been conducted.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Environmental impact information of the mixture: No information

12.2. Persistence and degradability: No data

12.3. Bioaccumulative potential: No data

12.4. Mobility in soil: No data

12.5. Results of PBT and vPvB assessment: No data

12.6. Other adverse effects: No data

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of the contents/container following the regulations of the local law and regulations.

14. TRANSPORT INFORMATION

General matters:

- Follow directions on handling and keeping.
- Confirm that there are no leaks in containers, and load them in a way that does not cause inversion, falling, and damage. Never fail to take measures to prevent load shifting.

Land transportation:

ADR/RID

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

ADN

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Marine transportation: Comply with the Ships Safety Law.

IMDG

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

Air transportation: Comply with the Aviation Law.

IATA

14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es) Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-Dangerous Goods - - - -
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.7	Transport in bulk according to Annex II of MARPOL and the IBC Code	Not Applicable

15. REGULATORY INFORMATION

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

- Major laws and regulations are not applicable.
- The UN No.: Non-existing

15.2. Chemical safety assessment

Nil

16: OTHER INFORMATION

Main references

- Chemistry Handbook Revised 3rd Edition
- "Raw Material Database" edited by Japan Paint Manufacturers Association
- Solvent pocketbook
- Dangerous disaster prevention emergency handbook
- International Chemical Safety Cards (ICSC)
- GHS compatible MSDS · Label creation guidebook edition by Japan Paint Manufacturers Association
- JIS Z 7250

[Note]

The content of this data sheet has been prepared based on the best research. Still, it does not cover all the information, and the evaluation of the data described does not necessarily guarantee sufficient safety.

The chemicals used in the mixture can have unknown hazards and should be handled with extreme care.

This product safety data-sheet is created based on Japanese domestic regulations.