1. Identification

A. Product name : Colour Tint for Anythane & PT-3000 Polyaspartic

B. Recommended Use and Restriction on Use
- ○ General use : Colorant for solvent based paints
- ○ Restriction on use : Restricted to use other than recommended use

C. Manufacturer / Supplier / distributor information
- ○ Company name : NOROO Paint & Coatings Co., Ltd.
- ○ Address : 351, Bakdal-ro, Manan-gu, Anyang-si, Gyeonggi-do, Korea
- ○ Emergency telephone number : +82-31-467-6114

D. AU Importer
- ○ Company name : Synergy Building Supplies
- ○ Address : 236 PLANET ST WELSHPOOL WA 6106
- ○ Emergency telephone number : 1300 655 853

2. Hazard identification

A. GHS Classification
Flammable liquids Category 3
Acute toxicity (inhalation: gas) Category 4
Reproductive toxicity Category 2
Chronic aquatic toxicity Category 3
Serious eye damage/irritation Category 2A
Specific target organ toxicity(Single exposure) Category 2
Specific target organ toxicity(Repeated exposure) Category 2
Skin corrosion/irritation Category 2
Ozone layer hazard

B. GHS label elements
- ○ Hazard symbols



- ○ Signal words : DANGER
- ○ Hazard statements :

H226 Flammable liquid and vapour
H332 Harmful if inhaled
H361 Suspected of damaging fertility or the unborn child
H412 Harmful to aquatic life with long lasting effects
H319 Causes serious eye irritation
H371 Causes damage to the immune system and kidneys in the body. (Refer Section SDS 11)
H373 Prolonged or repeated exposure may cause damage to the liver, testes, skin, respiratory system, blood and central nervous system of the body (Refer Section SDS 11)
H315 Causes skin irritation
H420 It destroys the upper layer of the ozone layer and is harmful to public health and environment.

- ○ Precautionary statements

- Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. ? No smoking.
P242 Use only non-sparking tools. Flammable liquids (chapter 2.6) 1, 2, 3
P261 Do not breathe dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P270 Do not eat, drink or smoke when using this product.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P273 Avoid release to the environment.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash hands thoroughly after handling.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

- Response

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P370+P378 In case of fire: Use Suitable extinguishing media for extinction(Refer Section MSDS 5).
P308+P313 If exposed or concerned: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P309+P311 If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P314 Get medical advice/attention if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P321 Specific treatment
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

- Storage
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

- Disposal
P501 Dispose of contents/container in accordance with local/regional/national/international regulation
P502 Please refer to the information provided by the manufacturer / supplier on recycling and recycling examples.

C. Other hazards which do not result in classification : (NFPA Classification)

NFPA grade / Chemical Name	Health	Flammability	Reactivity
Titanium dioxide	1	0	0
Trade secret	NO DATA	NO DATA	NO DATA
Xylene	NO DATA	NO DATA	NO DATA
Propylene glycol methyl ether acetate	1	2	0
Kerosine	2	2	0
Aluminium hydroxide	1	0	0
Silicon dioxide	1	0	0
Ethylbenzene	2	3	0

3. Composition/information on ingredients

Chemical Name	Trade names and Synonyms	CAS-NO	Content(%)
Titanium dioxide	Titanium dioxide	13463-67-7	53~63
Trade secret	Trade secret	영업비밀	20~30
Xylene	Xylene	1330-20-7	5~15
Propylene glycol methyl ether acetate	Propylene glycol methyl ether acetate	108-65-6	4~14
Kerosine	Kerosine	8008-20-6	1~10
Aluminium hydroxide	Aluminium hydroxide	21645-51-2	1~10
Silicon dioxide	Silicon dioxide	7631-86-9	1~10
Ethylbenzene	Ethylbenzene	100-41-4	1~10

4. First-aid measures

A. Eye Contact : If irritation, pain, swelling, tears or glaring happens, take medical assistant immediately Flush exposed eyes with plenty of water for more than 15minutes.

B. Skin Contact : Wash off with soap and water for more than 15 minutes. And take medical assistant immediately. If symptoms like irritation or pain occurs, take medical assistant immediately. Remove exposed clothing, and wash off exposed area with soap and water.

C. Inhalation : Take a medical assistant immediately. Remove contaminated clothing and shoes, and isolate it. If hard to breathe, administering oxygen Perform the artificial respiration, using the pocket mask with one way valves or other respiratory medical devices. If inhalated or swallowed, do not perform the inhalation phase of breathing If not breathing, perform the artificial respiration. Avoid from exposure, and move into an area with fresh air.

D. Ingestion Contact : It is need to be considered that early removal of some ingested material by gastric lavage must be weighed against potential complications of bleeding or perforation Take proper medical assistant by symtoms. If ingested large quantity, take medical assistant. Do not try to induce vomiting, if occurs, keep head below hips to prevent swallow into lungs. Inducing vomit.

E. Notes to Physician : There is no specific antidote and take an appropriate medical treatment.

5. Fire-fighting measures

A. Suitable (Unsuitable) extinguishing media
○ Suitable extinguishing media : Powder extinguishing agent, gaseous Extinguishing Agent, and regular foam.
○ (Unsuitable) extinguishing media : Water is not appropriate extinguishing agent
○ Case of big fire : Use appropriate protective device depend on the situation. Stay away more than 800m to avoid tank explosion. Spread large amount of the extinguishing agent as a mist form with staying against wind.

B. Specific hazards arising from the chemical
○ Pyrolysate : Carbon dioxide, toxic carbon compounds/Nitrogen compounds/sulfur compounds
○ Fire and Explosion danger : Risk of medium-sized fire.

C. Special protective actions for fire-fighters
○ Personal Precautions, protective equipment : Gas mask or air respirator, heat resistant clothing, heat resistant helmet, heat resistant gloves, heat resistant boots
○ Emergency procedures : Block the area except for the fire-suppression personnel. Cooling containers with water long time after extinguish fire. If there is no risk, moving containers away from fire. Use appropriate extinguishing agents to catch fire.

6. Accidental release measures

A. Personal Precautions, protective equipment and emergency procedures
○ Personal Precautions, protective equipment : Gas mask for organic gases, other appropriate protective device / clothing / gloves.
○ Emergency procedures : Do not contact on the bare skin Do work with the personal protected devices such as gas

mask for organic gases other appropriate protective devices / clothing / gloves. Spray water to reduce amount of steam. Take an action to block the leakage if there is no risk.

B. Environmental precautions
○ Atmosphere : Using local ventilation to Minimize the exposure to worker. Do install the local ventilations and full ventilation system
○ Soil : Use absorbent to collect the appropriate container. Trap spilled material at bottom in deep water pockets, excavated holding areas or within sand bag barriers.
○ Under water : Collect spilled material with mechanic devices Use absorbent to collect the appropriate container.

C. Methods and materials for containment and cleaning up
○ Small spill : Move to appropriate container for disposal of spilled material collected. Absorb for use sand or other non-combustible material.
○ Large spill : Notify to central and local government, when emissions are above regulation. Prohibit access of unnecessary people, isolate hazard area to secure.

7. Handling and storage

A. Precautions for safe handling : Use local ventilations and a full ventilation system when handling Seal the container for minimizing the petroleum steam Ground for preventing the static discharge Keep or handle followed by Dangerous goods Safety Management Act

B. Conditions for safe storage, including any incompatibilities : Stored in an isolated place, freezing caution, high temperature body caution. Avoid strong oxidizing agents, acid. Storage temperature: 5 ~ 35 ℃ Avoid direct sunlight while storing outdoor. Because of evaporation and contamination concerns, airtight the container and store in a well-ventilated building.

8. Exposure controls/personal protection

A. Exposure Limits
○ Titanium dioxide
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

○ Trade secret
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

○ Xylene
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

○ Propylene glycol methyl ether acetate
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

○ Kerosine
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

○ Aluminium hydroxide
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

○ Silicon dioxide
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

○ Ethylbenzene
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

B. Engineering Controls :
▷ Do install the local ventilations and full ventilation system
▷ Using local ventilation to Minimize the exposure to worker.
▷ NO DATA
▷ NO DATA

C. Personal Protective Equipment
○ Respiratory protection : Use the personal protect respirator for organic solvent or higher level of capacity when workers are supposed to be exposed under unsuitable respiratory working condition, or longer period exposure than standard level. Respirators should be authorized by Korea Occupational Safety and Health Agency
○ Eye protection : Let workers do wear the safety glasses in case hazard caused by mist may be expected. Install washing facilities and an emergency washing facilities close to workplace. Use the respirator for organic solvent or higher level.
○ Hand protection : Wear the chemical protective gloves Do the workers wear the impermeable protective gloves made from rubber/PVC due to skin irritation may be supposed by chronicle and long period exposure.
○ Skin protection : Wear appropriate chemical protective clothing. Work after wearing the impermeable protective apron made by rubber/PVC in case hazard caused by exposure or spill, wear the impermeable whole body protective clothing if needed.

9. Physical and chemical properties

A. Appearance : Liquid

B. Odor : Characteristic Odor

C. Odor threshold : NO DATA

D. PH : NO DATA

E. Melting point/Freezing point : NO DATA

F. Initial Boiling Point/Boiling Ranges : NO DATA

G. Flash point : 27

H. Evaporating Rate : NO DATA

I. Flammability(solid, gas) : NON Flammable

J. Upper/Lower Flammability or explosive limits : NO DATA

K. Vapour pressure : NO DATA

L. Solubility : Insoluable

M. Vapour density : NO DATA

N. Specific gravity : 1.75 ± 0.3

O. Partition coefficient of n-octanol/water : NO DATA

P. Autoignition temperature : NO DATA

Q. Decomposition temperature : NO DATA

R. Viscosity : 60-90

S. Molecular weight : NO DATA

10. Stability and reactivity

A. Chemical stability : NO DATA

B. Possibility of hazardous reactions : Avoid contaminants and friction Do not contact with heat, spark, flame or other flammable sources

C. Conditions to avoid : Oxidation agent, metal and combustable materials

D. Hazardous decomposition products : Thermal decomposition products (carbon etc.,)

11.Toxicological information

A. Information on the likely routes of exposure
- ○ Respiratory tracts : Adverse lung effects, Dyspnoea, Hypothermia, Vomitting
- ○ Oral : Vomitting, Diarrhea, Stomach pain, Irregular heartbeat
- ○ Skin : Irritation, Burn, Adverse nerve effects
- ○ Eye : Irritation, eye damage

B. Delayed and immediate effects and also chronic effects from short and long term exposure
- ○ Titanium dioxide
  - Acute toxicity
    Oral : LD50 > 10000 ㎎/㎏ Rat
    Dermal : LD50 > 10000 ㎎/㎏ Rabbit
    Inhalation : LD50 > 10000 ㎎/㎏ Rabbit
  - Skin corrosion/irritation : (in rabbit) skin Irritation test result weak Irritation or non-irritating
  - Serious eye damage/irritation : Using the rabbit eye irritation test results - Mild irritant
  - Respiratory sensitization : NO DATA
  - Skin sensitization : negative patch test results in people
  - Carcinogenicity
    IARC : Group 2B
    OSHA : NO DATA
    ACGIH : A4
    NTP : NO DATA
    EU CLP : NO DATA
  - Germ cell mutagenicity : Mouse Micronucleustest Negative, Mouse Chromosomal abnormalitiestest Negative
  - Reproductive toxicity : Mouse Micronucleustest Negative, Mouse Chromosomal abnormalitiestest Negative
  - STOT-single exposure : NO DATA
  - STOT-repeated exposure : Reported occupational pneumoconiosis in the exposed workers for more than 20 years.
  - Aspiration hazard : NO DATA
- ○ Trade secret
  - Acute toxicity
    Oral : NO DATA
    Dermal : NO DATA
    Inhalation : NO DATA
  - Skin corrosion/irritation : NO DATA
  - Serious eye damage/irritation : NO DATA
  - Respiratory sensitization : NO DATA
  - Skin sensitization : NO DATA
  - Carcinogenicity
    IARC : NO DATA
    OSHA : NO DATA
    ACGIH : NO DATA
    NTP : NO DATA
    EU CLP : NO DATA
  - Germ cell mutagenicity : NO DATA
  - Reproductive toxicity : NO DATA

- STOT-single exposure : NO DATA
- STOT-repeated exposure : NO DATA
- Aspiration hazard : NO DATA

○ Xylene
- Acute toxicity
  Oral : LD50=3550 mg/kg rat
  Dermal : LD50 4350 mg/kg Rabbit
  Inhalation : LD50 4350 mg/kg Rabbit
- Skin corrosion/irritation : Skin irritation test in rabbits Causes moderate irritation.
- Serious eye damage/irritation : Skin irritation test in rabbits Causes moderate irritation.
- Respiratory sensitization : NO DATA
- Skin sensitization : NO DATA
- Carcinogenicity
  IARC : Group 3
  OSHA : NO DATA
  ACGIH : A4
  NTP : NO DATA
  EU CLP : NO DATA
- Germ cell mutagenicity : If three people a voice dynamics, somatic cell mutagenicity tests in vivo (micronucleus test, chromosome test) Voice
- Reproductive toxicity : If three people a voice dynamics, somatic cell mutagenicity tests in vivo (micronucleus test, chromosome test) Voice
- STOT-single exposure : NO DATA
- STOT-repeated exposure : NO DATA
- Aspiration hazard : In the liquid can cause chemical pneumonia if swallowed.

○ Propylene glycol methyl ether acetate
- Acute toxicity
  Oral : LD50 = 8532 mg/kg Rat
  Dermal : LD50 > 5000 mg/kg Rabbit
  Inhalation : LD50 > 5000 mg/kg Rabbit
- Skin corrosion/irritation : rabbit: non-Irritation
- Serious eye damage/irritation : Rabbit: mild irritant
- Respiratory sensitization : NO DATA
- Skin sensitization : Guinea pig / maximization test (GLP): No sensitization
- Carcinogenicity
  IARC : NO DATA
  OSHA : NO DATA
  ACGIH : NO DATA
  NTP : NO DATA
  EU CLP : NO DATA
- Germ cell mutagenicity : In vitro - Salmonella typhimurium/TA98, TA100, TA1535, TA1537 (ames test, GLP): With and without metabolic activation system- Negative, CHL Cells/Chromosomal abnormalitiestest (GLP):With and without metabolic activation system- Negative, rat Hepatocyte/UDStest (GLP
- Reproductive toxicity : In vitro - Salmonella typhimurium/TA98, TA100, TA1535, TA1537 (Return mutation test, GLP): Negative (negative), CHL Cells / Chromosome aberration test (GLP): Negative (negative), rat hepatocyte / UDS test (GLP) : Negative in the absence of metabolic activation system
- STOT-single exposure : Reported liver effects in humans. Rat Causes affect the spleen. In mice causes an effect on the central nervous system, and lung. That the anesthetic effect on the animal. Irritating to the prayers of people. (ACGIH, etc.)
- STOT-repeated exposure : Reported affect the kidneys, liver, central nervous system in humans. (PATTY 5th)
- Aspiration hazard : NO DATA

○ Kerosine
- Acute toxicity
  Oral : LD50 = 2835 mg/kg rabbit
  Dermal : LD50 > 2000 mg/kg Rabbit
  Inhalation : LD50 > 2000 mg/kg Rabbit
- Skin corrosion/irritation : Appears to stimulate human skin
- Serious eye damage/irritation : Unstimulated eye
- Respiratory sensitization : NO DATA
- Skin sensitization : Guinea pig test results negative
- Carcinogenicity
  IARC : NO DATA
  OSHA : NO DATA
  ACGIH : A3
  NTP : NO DATA
  EU CLP : NO DATA
- Germ cell mutagenicity : Using somatic cell in vivo Mutagenic test (bone marrow cell chromosome aberration test) result Negative, using mouse bone marrow Micronucleus testresult Negative, Dominant lethal test result Negative
- Reproductive toxicity : Using somatic cell in vivo Mutagenic test (bone marrow cell chromosome aberration test) result Negative, using mouse bone marrow Micronucleus testresult Negative, Dominant lethal test result Negative
- STOT-single exposure : airway irritation and Narcotic effects Appear
- STOT-repeated exposure : NO DATA
- Aspiration hazard : The chemical pneumonia reported in people search

○ Aluminium hydroxide
- Acute toxicity
  Oral : LD50 > 5000 mg/kg Rat
  Dermal : NO DATA
  Inhalation : NO DATA
- Skin corrosion/irritation : Can not see the danger signs
- Serious eye damage/irritation : Can not see the danger signs
- Respiratory sensitization : NO DATA

- Skin sensitization : NO DATA
- Carcinogenicity
  IARC : NO DATA
  OSHA : NO DATA
  ACGIH : NO DATA
  NTP : NO DATA
  EU CLP : NO DATA
- Germ cell mutagenicity : NO DATA
- Reproductive toxicity : NO DATA
- STOT-single exposure : NO DATA
- STOT-repeated exposure : Patients with long-term administration of renal dysfunction and neurological abnormalities of parathyroid hormone leads to degradation.
- Aspiration hazard : NO DATA

○ Silicon dioxide
- Acute toxicity
  Oral : LD50 = 3160 ㎎/㎏ Rat
  Dermal : NO DATA
  Inhalation : NO DATA
- Skin corrosion/irritation : NO DATA
- Serious eye damage/irritation : NO DATA
- Respiratory sensitization : NO DATA
- Skin sensitization : Not a skin sensitizer
- Carcinogenicity
  IARC : Group 3
  OSHA : NO DATA
  ACGIH : NO DATA
  NTP : NO DATA
  EU CLP : NO DATA
- Germ cell mutagenicity : NO DATA
- Reproductive toxicity : NO DATA
- STOT-single exposure : NO DATA
- STOT-repeated exposure : NO DATA
- Aspiration hazard : NO DATA

○ Ethylbenzene
- Acute toxicity
  Oral : LD50 = 3500 ㎎/㎏ Rat
  Dermal : LD50 = 15400 ㎎/㎏ Rabbit
  Inhalation : Steam LC50 = 4000 ppm 4 hr Rat (Equivalents : 17.4 mg/L)
- Skin corrosion/irritation : skin Irritation test result weak Irritation
- Serious eye damage/irritation : Rabbit eye irritation test results in a slight conjunctival irritation, recoverable damage.
- Respiratory sensitization : NO DATA
- Skin sensitization : NO DATA
- Carcinogenicity
  IARC : Group 2B
  OSHA : NO DATA
  ACGIH : A3
  NTP : NO DATA
  EU CLP : NO DATA
- Germ cell mutagenicity : Micronucleustest Negative (7)
- Reproductive toxicity : Micronucleustest Negative (7)
- STOT-single exposure : It causes central nervous system effects in laboratory animals and airway irritation.
- STOT-repeated exposure : NO DATA
- Aspiration hazard : Hydrocarbons. Swallowing the liquid by aspiration may cause chemical pneumonia. Ties seongryul 0.74 mm2 / s (25 ℃)

12. Ecological information

A. Ecotoxicity

○ Titanium dioxide
- Fish : NO DATA
- Crustaceans : EC50 > 1000 ㎎/ℓ 48 hr
- Algae : NO DATA

○ Trade secret
- Fish : NO DATA
- Crustaceans : NO DATA
- Algae : NO DATA

○ Xylene
- Fish : NO DATA
- Crustaceans : NO DATA
- Algae : NO DATA

○ Propylene glycol methyl ether acetate
- Fish : LC50 ≥ 100 ㎎/ℓ 96 hr Oryzias latipes
- Crustaceans : EC50 = 373 ㎎/ℓ 48 hr Daphnia magna
- Algae : EC50 ≥ 1000 ㎎/ℓ 72 hr Selenastrum capricornutum

○ Kerosine
- Fish : LC50 = 5 ㎎/ℓ 96 hr
- Crustaceans : NO DATA
- Algae : NO DATA

○ Aluminium hydroxide
- Fish : LC50 > 100 ㎎/ℓ 96 hr Other (Salmo trutta)

- Crustaceans : EC50 > 100 ㎎/ℓ 48 hr Daphnia magna
- Algae : EC50 > 100 ㎎/ℓ 72 hr Selenastrum capricornutum

○ Silicon dioxide
- Fish : NO DATA
- Crustaceans : NO DATA
- Algae : NO DATA

○ Ethylbenzene
- Fish : LC50 = 9.09 ㎎/ℓ 96 hr
- Crustaceans : LC50 = 0.4 ㎎/ℓ 96 hr
- Algae : NO DATA

B. Persistence and degradability

○ Titanium dioxide
- Persistence : NO DATA
- Degradability : NO DATA

○ Trade secret
- Persistence : NO DATA
- Degradability : NO DATA

○ Xylene
- Persistence : NO DATA
- Degradability : NO DATA

○ Propylene glycol methyl ether acetate
- Persistence : log Kow = 0.43
- Degradability : NO DATA

○ Kerosine
- Persistence : NO DATA
- Degradability : NO DATA

○ Aluminium hydroxide
- Persistence : NO DATA
- Degradability : NO DATA

○ Silicon dioxide
- Persistence : log Kow = 0.53
- Degradability : NO DATA

○ Ethylbenzene
- Persistence : NO DATA
- Degradability : NO DATA

C. Bioaccumulative potential

○ Titanium dioxide
- Bioaccumulative potential : NO DATA
- Biodegration : NO DATA

○ Trade secret
- Bioaccumulative potential : NO DATA
- Biodegration : NO DATA

○ Xylene
- Bioaccumulative potential : NO DATA
- Biodegration : 39 (%)

○ Propylene glycol methyl ether acetate
- Bioaccumulative potential : NO DATA
- Biodegration : Biodegradability > 60 (%) 28 day

○ Kerosine
- Bioaccumulative potential : NO DATA
- Biodegration : NO DATA

○ Aluminium hydroxide
- Bioaccumulative potential : BCF = 3.162
- Biodegration : NO DATA

○ Silicon dioxide
- Bioaccumulative potential : BCF = 3.162
- Biodegration : NO DATA

○ Ethylbenzene
- Bioaccumulative potential : NO DATA
- Biodegration : NO DATA

D. Mobility in soil

○ Titanium dioxide
▷ NO DATA

○ Trade secret
▷ NO DATA

○ Xylene
▷ log Kow = 3.12 (measured) (ortho), 3.2 (measured) (meta), 3.15 (measurements) (p) (5)

○ Propylene glycol methyl ether acetate
▷ NO DATA

○ Kerosine
▷ NO DATA

○ Aluminium hydroxide
▷ NO DATA

○ Silicon dioxide
▷ NO DATA

○ Ethylbenzene
▷ log Kow = 3.15 (11)

E. Other adverse effects

○ Titanium dioxide

▷ NO DATA
○ Trade secret
▷ NO DATA
○ Xylene
▷ NO DATA
○ Propylene glycol methyl ether acetate
▷ NO DATA
○ Kerosine
▷ NO DATA
○ Aluminium hydroxide
▷ NO DATA
○ Silicon dioxide
▷ NO DATA
○ Ethylbenzene
▷ NO DATA

13. Disposal considerations

A. Disposal methods : Disposal material should keep in the airtighted container, and consign according to Waste Mateial Management Act

B. Special precautions for disposal : Discard it followed by appropriate regulations Prohibit the unauthorized disposal and incineration due to adversely affect natural ecosystems

14. Transport information

A. UN number : 1263

B. Proper shipping name : Paint (including paint, lacquer, enamel, colorants, shellac solutions, varnish, polish, liquid filler and liquid lacquer sealer) or related materials (including paint diluent and reductant).

C. Hazard class : 3

D. Packing group : III

E. Marine pollutant : N/A

F. Special precautions for user related to transport or transportation measures
○ EmS FIRE SCHEDULE : F-E
○ EmS SPILLAGE SCHEDULE : S-E

15. Regulatory information

○ Titanium dioxide
- Information of EU Classification
▷ Classification : NO DATA
▷ Risk Phrases : NO DATA
▷ Safety Phrase : NO DATA
- U.S. Federal regulations
▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
▷ CERCLA Section 103 (40CFR302.4) : notapplicable
▷ EPCRA Section 302 (40CFR355.30) : notapplicable
▷ EPCRA Section 304 (40CFR355.40) : notapplicable
▷ EPCRA Section 313 (40CFR372.65) : notapplicable
- Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA
- Montreal Protocol listed ingredients : NO DATA

○ Trade secret
- Information of EU Classification
▷ Classification : NO DATA
▷ Risk Phrases : NO DATA
▷ Safety Phrase : NO DATA
- U.S. Federal regulations
▷ OSHA PROCESS SAFETY (29CFR1910.119) : NO DATA
▷ CERCLA Section 103 (40CFR302.4) : NO DATA
▷ EPCRA Section 302 (40CFR355.30) : NO DATA
▷ EPCRA Section 304 (40CFR355.40) : NO DATA
▷ EPCRA Section 313 (40CFR372.65) : NO DATA
- Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA
- Montreal Protocol listed ingredients : NO DATA

○ Xylene
- Information of EU Classification
▷ Classification : NO DATA
▷ Risk Phrases : NO DATA
▷ Safety Phrase : NO DATA
- U.S. Federal regulations
▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
▷ CERCLA Section 103 (40CFR302.4) : 45.3599 kg 100 lb
▷ EPCRA Section 302 (40CFR355.30) : notapplicable
▷ EPCRA Section 304 (40CFR355.40) : notapplicable
▷ EPCRA Section 313 (40CFR372.65) : pertinent
- Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA

- Montreal Protocol listed ingredients : NO DATA

○ Propylene glycol methyl ether acetate
- Information of EU Classification
  ▷ Classification : NO DATA
  ▷ Risk Phrases : NO DATA
  ▷ Safety Phrase : NO DATA
- U.S. Federal regulations
  ▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
  ▷ CERCLA Section 103 (40CFR302.4) : notapplicable
  ▷ EPCRA Section 302 (40CFR355.30) : notapplicable
  ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
  ▷ EPCRA Section 313 (40CFR372.65) : notapplicable
- Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA
- Montreal Protocol listed ingredients : NO DATA

○ Kerosine
- Information of EU Classification
  ▷ Classification : NO DATA
  ▷ Risk Phrases : NO DATA
  ▷ Safety Phrase : NO DATA
- U.S. Federal regulations
  ▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
  ▷ CERCLA Section 103 (40CFR302.4) : notapplicable
  ▷ EPCRA Section 302 (40CFR355.30) : notapplicable
  ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
  ▷ EPCRA Section 313 (40CFR372.65) : notapplicable
- Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA
- Montreal Protocol listed ingredients : NO DATA

○ Aluminium hydroxide
- Information of EU Classification
  ▷ Classification : NO DATA
  ▷ Risk Phrases : NO DATA
  ▷ Safety Phrase : NO DATA
- U.S. Federal regulations
  ▷ OSHA PROCESS SAFETY (29CFR1910.119) : NO DATA
  ▷ CERCLA Section 103 (40CFR302.4) : NO DATA
  ▷ EPCRA Section 302 (40CFR355.30) : NO DATA
  ▷ EPCRA Section 304 (40CFR355.40) : NO DATA
  ▷ EPCRA Section 313 (40CFR372.65) : NO DATA
- Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA
- Montreal Protocol listed ingredients : NO DATA

○ Silicon dioxide
- Information of EU Classification
  ▷ Classification : NO DATA
  ▷ Risk Phrases : NO DATA
  ▷ Safety Phrase : NO DATA
- U.S. Federal regulations
  ▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
  ▷ CERCLA Section 103 (40CFR302.4) : notapplicable
  ▷ EPCRA Section 302 (40CFR355.30) : notapplicable
  ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
  ▷ EPCRA Section 313 (40CFR372.65) : notapplicable
- Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA
- Montreal Protocol listed ingredients : NO DATA

○ Ethylbenzene
- Information of EU Classification
  ▷ Classification : NO DATA
  ▷ Risk Phrases : NO DATA
  ▷ Safety Phrase : NO DATA
- U.S. Federal regulations
  ▷ OSHA PROCESS SAFETY (29CFR1910.119) : notapplicable
  ▷ CERCLA Section 103 (40CFR302.4) : 453.599 kg 1000 lb
  ▷ EPCRA Section 302 (40CFR355.30) : notapplicable
  ▷ EPCRA Section 304 (40CFR355.40) : notapplicable
  ▷ EPCRA Section 313 (40CFR372.65) : pertinent
- Rotterdam Convention listed ingredients : NO DATA
- Stockholm Convention listed ingredients : NO DATA
- Montreal Protocol listed ingredients : NO DATA

16. Other information

A. Reference
This MSDS is based on 'Industrial safety and health' Act paragraph 41 and Proclamation of Ministry of Labor and Employment 2016-19, and considered domestic regulations.
This MSDS is based on KOSHA, NITE, ESIS, NLM, SIDS, IPCS, NCIS.

B. Issue date : 1999-11-23

C. Revision number and Last date revised : 4.(15/07/2024 오후 6:55:04)

D. Other : " WWW.NOROO.CO.KR"