1. Identification

A. Product name : MAGIC EYE ME-1500

B. Recommended Use and Restriction on Use
○ General use : automotive refinish
○ 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

2. Hazard identification

A. GHS Classification
Flammable liquids Category 2
Carcinogenicity Category 1A
Reproductive toxicity Category 2
Serious eye damage/irritation Category 2A
Specific target organ toxicity(Single exposure) Category 2
Specific target organ toxicity(Single exposure) Category 3
Specific target organ toxicity(Repeated exposure) Category 1
Skin corrosion/irritation Category 2
Aspiration hazard Category 2
Specific target organ toxicity(Single exposure) Category 1

B. GHS label elements
○ Hazard symbols

○ Signal words : DANGER
○ Hazard statements :
H225 Highly flammable liquid and vapour
H350 May cause cancer
H361 Suspected of damaging fertility or the unborn child
H319 Causes serious eye irritation
H371 Causes damage to the immune system and kidneys in the body. (Refer Section SDS 11)
H335+H336 May cause respiratory irritation, May cause drowsiness and dizziness.
H372 Prolonged or repeated exposure may cause lung damage to the body (Refer Section SDS 11)
H315 Causes skin irritation
H305 May be harmful if swallowed and enters airways
H370 Causes damage to organs: central nervous system (CNS), gastrointestinal tract(Refer Section SDS 11)
○ Precautionary statements
- Prevention
P210 Keep away from heat/sparks/open flames/hot surfaces. ? No smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools. Flammable liquids (chapter 2.6) 1, 2, 3
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P233 Keep container tightly closed.
- Response
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P321 Specific treatment
P309+P311 If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
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.
P314 Get medical advice/attention if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P370+P378 In case of fire: Use Suitable extinguishing media for extinction(Refer Section MSDS 5).
P307+P311 If exposed: Call a POISON CENTER or doctor/physician.

- Storage
  P403+P235 Store in a well-ventilated place. Keep cool.
  P405 Store locked up.
  P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- Disposal
  P501 Dispose of contents/container in accordance with local/regional/national/international regulation

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

NFPA grade / Chemical Name	Health	Flammability	Reactivity
Methyl Ethyl Ketone	1	3	0
S1(Trade secrets)	NO DATA	NO DATA	NO DATA
Toluene	2	3	0
n-Butyl acetate	2	3	0
Xylene	NO DATA	NO DATA	NO DATA
NO DATA	NO DATA	NO DATA	NO DATA
Ethylbenzene	2	3	0

3. Composition/information on ingredients

Chemical Name	Trade names and Synonyms	CAS-NO	Content(%)
Methyl Ethyl Ketone	Methyl Ethyl Ketone	78-93-3	32～42
S1(Trade secrets)	-	-	22～32
Toluene	Toluene	108-88-3	13～23
n-Butyl acetate	n-Butyl acetate	123-86-4	8～18
Xylene	Xylene	1330-20-7	4～14
NO DATA	NO DATA	영업비밀	1～10
Ethylbenzene	Ethylbenzene	100-41-4	0.1～4

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
○ Methyl Ethyl Ketone
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

○ S1 (Trade secrets)
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

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

○ n-Butyl acetate
- ACGIH : NO DATA
- Biological exposure indices : NO DATA

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

○ NO DATA
- 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 : Respiratory protection is ranked in order from minimum to maximum Respiratory protection may be needed, while frequent use or heavy exposure. Consider warning properties before use. If there is possibility of direct contact or exposure to these substances should wear a authorized dust-proof mask or respirator for organic compounds 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 : If there is possibility of direct contact or exposure to these substances should wear authorized safty glasses or mask. 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 appropriate protective gloves If there is possibility of direct contact or exposure to these substances should wear authorized safety gloves for chemicals. 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 cleanroom garment or appropriate protective clothing to prevent contamination If there is a possibility of direct contact or exposure to the substance Wear protective clothing for chemical substances 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 : solvent odor

C. Odor threshold : no data

D. PH : no data

E. Melting point/Freezing point : no data

F. Initial Boiling Point/Boiling Ranges : 100-145℃

G. Flash point : 22

H. Evaporating Rate : no data

I. Flammability(solid, gas) : no data

J. Upper/Lower Flammability or explosive limits : no data

K. Vapour pressure : no data

L. Solubility : no data

M. Vapour density : heavier than air

N. Specific gravity : 0.9~1.1

O. Partition coefficient of n-octanol/water : no data

P. Autoignition temperature : 425

Q. Decomposition temperature : no data

R. Viscosity : 55~65ku

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
- ○ Methyl Ethyl Ketone
  - Acute toxicity
    Oral : LD50 2737 ㎎/㎏ Rat
    Dermal : LD50 6480 ㎎/㎏ rabbit
    Inhalation : LD50 6480 ㎎/㎏ rabbit
  - Skin corrosion/irritation : Moderate irritation (Rabbit)
  - Serious eye damage/irritation : It appears not to be irritating by vapor exposure in humans.
  - 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 : Mammalian erythrocyte micronucleus test using Voice
  - Reproductive toxicity : Mammalian erythrocyte micronucleus test using Voice
  - STOT-single exposure : In the rat or mouse inhalation exposure test results appear in the relatively low concentration the effect on the central nervous system. It appears also affect the kidneys at concentrations in the rat courtyard. This prayer appears irritant by inhalation exposure
  - STOT-repeated exposure : NO DATA
  - Aspiration hazard : Ketones less than 13 carbon atoms
- ○ S1 (Trade secrets)
  - 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

○ Toluene
- Acute toxicity
Oral : rat LD50=2600 mg/kg
Dermal : rabbit LD50=12,000 mg/kg
Inhalation : rabbit LD50=12,000 mg/kg
- Skin corrosion/irritation : Rabbit skin irritation test using the results of the Causes moderate irritation.
- Serious eye damage/irritation : Eyes irritant test using a rabbit raised for 6 days reversible irritation.
- Respiratory sensitization : NO DATA
- Skin sensitization : Tests with negative results Guinea
- Carcinogenicity
IARC : Group 3
OSHA : NO DATA
ACGIH : A4
NTP : NO DATA
EU CLP : NO DATA
- Germ cell mutagenicity : Dominant lethal test negative, positive micronucleus test, chromosome aberration test positive
- Reproductive toxicity : Dominant lethal test negative, positive micronucleus test, chromosome aberration test positive
- STOT-single exposure : Causes acts on the central nervous system in humans, fatigue, drowsiness, dizziness, respiratory irritation, agitation, vomiting, central nervous system depression, confusion, gait abnormalities. Eyes, nose, causing irritation of the throat. In experimental animals
- STOT-repeated exposure : Headaches accompanied by people from hearing loss or visual field constriction, or nystagmus, tremor, ataxia, loss of memory, such as chronic central nervous system disorder that appears. Noewichuk is observed. It appears kidney dysfunction such as hematuria or pro
- Aspiration hazard : NO DATA

○ n-Butyl acetate
- Acute toxicity
Oral : LD50 = 14130 ㎎/㎏ Rat
Dermal : LD50 = 17600 ㎎/㎏ Rabbit
Inhalation : LD50 = 17600 ㎎/㎏ Rabbit
- Skin corrosion/irritation : Causes a weak stimulus person.
- Serious eye damage/irritation : Non-irritating to rabbit eye irritation
- Respiratory sensitization : NO DATA
- Skin sensitization : Not a skin sensitizer
- 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 : Central nervous system disorders who, pulmonary edema, respiratory irritation.
- STOT-repeated exposure : NO DATA
- Aspiration hazard : NO DATA

○ Xylene
- Acute toxicity
Oral : LD50=3550 mg/kg rat
Dermal : LD50 4350 ㎎/㎏ Rabbit
Inhalation : LD50 4350 ㎎/㎏ 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.

○ NO DATA
- 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

○ 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

○ Methyl Ethyl Ketone
- Fish : LC50 3220 ㎎/ℓ 96 hr Pimephales promelas
- Crustaceans : EC50 5091 ㎎/ℓ 48 hr Daphnia magna
- Algae : EC50 > 500 ㎎/ℓ 96 hr Skeletonema costatum

○ S1 (Trade secrets)
- Fish : NO DATA
- Crustaceans : NO DATA
- Algae : NO DATA

○ Toluene
- Fish : LC50 24 ㎎/ℓ 96 hr Oncorhynchus mykiss
- Crustaceans : EC50 11.5 ㎎/ℓ 48 hr Daphnia magna
- Algae : NO DATA

○ n-Butyl acetate
- Fish : LC50 = 62 ㎎/ℓ 96 hr
- Crustaceans : LC50 = 32 ㎎/ℓ 48 hr
- Algae : NO DATA

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

○ NO DATA
- 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

○ Methyl Ethyl Ketone
- Persistence : log Kow 0.29
- Degradability : NO DATA

○ S1 (Trade secrets)
- Persistence : NO DATA
- Degradability : NO DATA

○ Toluene
- Persistence : log Kow 2.73
- Degradability : NO DATA

○ n-Butyl acetate
- Persistence : log Kow = 1.78

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

C. Bioaccumulative potential
○ Methyl Ethyl Ketone
- Bioaccumulative potential : NO DATA
- Biodegration : 89 (%) 20 day
○ S1 (Trade secrets)
- Bioaccumulative potential : NO DATA
- Biodegration : NO DATA
○ Toluene
- Bioaccumulative potential : NO DATA
- Biodegration : 86 (%) 20 day
○ n-Butyl acetate
- Bioaccumulative potential : NO DATA
- Biodegration : Biodegradability = 98 (%)
○ Xylene
- Bioaccumulative potential : NO DATA
- Biodegration : 39 (%)
○ NO DATA
- Bioaccumulative potential : NO DATA
- Biodegration : NO DATA
○ Ethylbenzene
- Bioaccumulative potential : NO DATA
- Biodegration : NO DATA

D. Mobility in soil
○ Methyl Ethyl Ketone
▷ NO DATA
○ S1 (Trade secrets)
▷ NO DATA
○ Toluene
▷ NO DATA
○ n-Butyl acetate
▷ NO DATA
○ Xylene
▷ log Kow = 3.12 (measured) (ortho), 3.2 (measured) (meta), 3.15 (measurements) (p) (5)
○ NO DATA
▷ NO DATA
○ Ethylbenzene
▷ log Kow = 3.15 (11)

E. Other adverse effects
○ Methyl Ethyl Ketone
▷ NO DATA
○ S1 (Trade secrets)
▷ NO DATA
○ Toluene
▷ NO DATA
○ n-Butyl acetate
▷ NO DATA
○ Xylene
▷ NO DATA
○ NO DATA
▷ 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 : be applicable

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

15. Regulatory information

○ Methyl Ethyl Ketone
- 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) : 2267.995 kg 5000 lb
  ▷ 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

○ S1 (Trade secrets)
- 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

○ Toluene
- 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

○ n-Butyl 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) : 2267.995 kg 5000 lb
  ▷ 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

○ 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

○ NO DATA
- 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

○ 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 : 2016-05-25 오후 6:46:45

C. Revision number and Last date revised : 2.(2018-04-12 오후 9:38:08)

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