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Akzonobel Industrial Coatings Korea

Vorsion: D0001 0003

MATERIAL SAFETY DATA SHEET

RESOTHANE-CUE#200 MATT CLEAR(G2)

Povicion doto: 2016 00 20

Date of iss	sue: 2016-05-10	Revision date: 2016-09-20	Version: R0001.0003
1. IDENTIF	ICATION		
A. Produ	ct name		
- RESC	OTHANE-CUE#200 M	IATT CLEAR(G2) [KF000039464]	
B. Recom	nmended use and re	estriction on use	
- Gener	ral use	: paint applid on plastic resin	
- Restri	iction on use	: Do not use for other purposes	
		/ Distributor information	
	ufacturer informatio		
- Ce	ompany name	: Akzonobel Industrial Coatings Korea	Ltd.
- A	ddress	: 60, Bonsan 1-ro 56beon-gil, Jinyeong-	eup, Gimhae-si, Gyeongsangnam-do, Korea
- D	ept.	:	
- Te	elephone number	:	
	mergency telephone nber	: (82) 55-720-0200	
- Fa	ax number	:	
- E-	-mail address	:	
∘ Supp	olier/Distributer infor	mation	
- Ce	ompany name	: Akzonobel Industrial Coatings Korea	Ltd.
- A	ddress	: 11, Byeolmang-ro 459beon-gil, Danw	on-gu, Ansan-si, Gyeonggi-do, Korea
- D	ept.	:	
- Te	elephone number	:	
	mergency telephone nber	: (82) 31-490-4200	
- Fa	ax number	:	
- E-	-mail address	:	

2. HAZARD IDENTIFICATION

A. GHS Classification

- Acute toxicity (inhalation: vapor) : Category2
- Chronic aquatic toxicity : Category2
- Carcinogenicity : Category2
- Flammable liquids : Category3
- Specific target organ toxicity(Single exposure) : Category1

B. GHS label elements

• Hazard symbols





• Signal words

- Warning
- Danger

• Hazard statements

- H226 Flammable liquid and vapour
- H330 Fatal if inhaled
- H351 Suspected of causing cancer
- H370 Causes damage to organs(Refer Section SDS 11)
- H411 Toxic to aquatic life with long lasting effects

Precautionary statements

1) Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. ? No smoking.
- P233 Keep container tightly closed.
- 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.
- P260 Do not breathe gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P281 Use personal protective equipment as required.
- P284 Wear respiratory protection.

2) 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.
- P307+P311 If exposed: Call a POISON CENTER or doctor/physician.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P320 Specific treatment is urgent
- P321 Specific treatment
- P370+P378 In case of fire: Use Suitable extinguishing media for extinction(Refer Section MSDS 5).
- P391 Collect spillage.
- 3) Storage
 - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 - P403+P235 Store in a well-ventilated place. Keep cool.
 - P405 Store locked up.
- 4) 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 (0 ~ 4 level)

- Health : 0, Flammability : 3, Reactivity : 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
Diethyl carbonate polymer with 2-ethyl-2-(hydroxymethyl)-		744252-75-3	20 ~ 30
1,3-propanediol and methyloxirane	-	744252-75-5	20~30



4-Methyl-2-pentanone	Methylisobutyl ketone, MIBK	108-10-1	10 ~ 20
Isobutyl acetate	Acetic acid, 2-methylpropyl ester	110-19-0	10 ~ 20
n-Butyl acetate	Acetic acid, butyl ester	123-86-4	10 ~ 20
1,3-Dioxolan-2-one polymer with 1,6-hexanediol and 1,5- pentanediol	-	132459-81-5	10 ~ 20
Silicon dioxide	Precipitated silica	112926-00-8	1 ~ 10
Propylene glycol methyl ether acetate	Propylene glycol monomethyl ether acetate	108-65-6	1 ~ 10
Acetic acid ethyl ester	Ethyl acetate	141-78-6	1 ~ 10
Secret	Secret	-	1 ~ 10

4. FIRST AID MEASURES

A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15minutes and call a doctor/physician.
- Get medical attention immediately.

B. Skin contact

- Flush skin with plenty of wter for at least 15 minutes while removing contaminated clothing and shoes.
- Laundering enough contaminated clothing before reuse.
- Get medical attention immediately.

C. Inhalation contact

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- If breathing is stopped or irregular, give artificial respiration and supply oxygen.

D. Ingestion contact

- About whether I should induce vomiting Take the advice of a doctor.
- Rinse your mouth with water immediately.
- Get medical attention immediately.

E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.
- If exposed or concerned, get medical attention/advice.

5. FIREFIGHTING MEASURES

A. Suitable (Unsuitable) extinguishing media

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray
- Avoid use of water jet for extinguishing

B. Specific hazards arising from the chemical

- Not available

C. Special protective actions for firefighters

- Cool containers with water until well after fire is out.

- Keep unauthorized personnel out.



- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative.
- Keep containers cool with water spray.
- Vapor or gas is burned at distant ignition sources can be spread quickly.
- The extremely low flash point made by fire-fighters may be less effective at digesting weeks.

6. ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency procedures

- Wear proper personal protective apparatus as indicated in Section 8 and avoid skin contact and inhalation.
- Must work against the wind, let the upwind people to evacuate.
- Do not touch spilled material. Stop leak if you can do it without risk.
- Move container to safe area from the leak area.
- Do not direct water at spill or source of leak.
- Cleanup and disposal under expert supervision is advised.
- Keep unauthorized people away, isolate hazard area and deny entry.

B. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

C. Methods and materials for containment and cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation.
- Appropriate container for disposal of spilled material collected.
- Small leak: sand or other non-combustible material, please let use absorption.
- Wipe off the solvent.
- Dike for later disposal.
- Do not use plastic containers.
- Prevent the influx to waterways, sewers, basements or confined spaces.

7. HANDLING AND STORAGE

A. Precautions for safe handling

- Avoid contact with incompatible materials.
- Dealing only with a well-ventilated place.
- Do not handle until all safety precautions have been read and understood.
- Do not inhale the steam prolonged or repeated.
- Avoid contact with heat, sparks, flame or other ignition sources.
- Contaminated work clothing should not be allowed out of the workplace.

B. Conditions for safe storage, including any incompatibilities

- Save in cool, dry and well ventilated place.
- Do not apply direct heat.
- Avoid direct sunlight.
- Prevent static electricity and keep away from combustible materials or heat sources.
- By specifying a storage area for carcinogenic substances.
- Collected them in sealed containers.
- Store away from water and sewer.
- Store in well ventilated area.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits

• ACGIH TLV

- [4-Methyl-2-pentanone] : TWA, 20 ppm (82 mg/m3) STEL 75 ppm (307 mg/m3)
- [Isobutyl acetate] : TWA, 150 ppm (713 mg/m3)
- [n-Butyl acetate] : TWA, 150 ppm (713 mg/m3), STEL, 200 ppm (950 mg/m3)
- [Acetic acid ethyl ester] : TWA, 400 ppm (1440 mg/m3)
- [Secret] : TWA, 20 ppm (80 mg/m3) STEL, 50 ppm (200 mg/m3) Skin
- [Secret] : TWA, 10 pm (67.5 mg/m3), Inhalable fraction and vapor

B. Engineering controls

- A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

C. Personal protective equipment

Respiratory protection

- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
- Respiratory protection is ranked in order from minimum to maximum.
- Consider warning properties before use.
- Any chemical cartridge respirator with organic vapor cartridge(s).
- Any chemical cartridge respirator with a full facepiece and organic vaporcartridge(s).
- Any air-purifying respirator with a full facepiece and an organic vapor canister.

- For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

• Eye protection

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.
- Hand protection
 - Wear appropriate chemical resistant glove.
- Skin protection
 - Wear appropriate chemical resistant protective clothing.
- Others
 - Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Liquid(Viscous liquid)
- Color	MATT CLEAR
B. Odor	Not available
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	Not available
F. Initial Boiling Point/Boiling Ranges	79 °C
G. Flash point	23 °C
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	Not available
K. Vapour pressure	Not available
L. Solubility	Not available
M. Vapour density	Not available



N. Specific gravity(Relative density)	0.98±0.03
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	420 °C
Q. Decomposition temperature	Not available
R. Viscosity	54.5 ± 3KU
S. Molecular weight	Not available

10. STABILITY AND REACTIVITY

A. Chemical Stability and Reactivity

- This material is stable under recommended storage and handling conditions.

B. Possibility of hazardous reactions

- Cylinders exposed to fire may vent and release flammable gas.

C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces
- Avoid contact with heat, sparks, flame or other ignition sources.

D. Incompatible materials

- Not available

E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure

- \circ (Respiratory tracts)
- Not available
- o (Oral)
 - Not available

○ (Eye∙Skin)

- Not available

B. Delayed and immediate effects and also chronic effects from short and long term exposure

• Acute toxicity

* Oral

- [4-Methyl-2-pentanone] : LD50 = 2080 mg/kg Rat (NITE)
- [Isobutyl acetate] : LD50 = 15400 mg/kg Rat (DFGOT vol.19 (2003))
- [n-Butyl acetate] : LD50 = 14130 mg/kg Rat (HSDB)
- [Propylene glycol methyl ether acetate] : LD50 = 8532 mg/kg Rat (IUCLID)
- [Acetic acid ethyl ester] : LD50 5620 $\ensuremath{\texttt{mg/kg}}$ Rat
- [Secret] : LD50 > 8000 mg/kg Rat (RTECS)
- [Secret] : LD50 = 1800 mg/kg Rat (RTECS)
- [Secret] : LD50 > 5000 mg/kg Rat (IUCLID)
- [Secret] : LD50 = 5000 mg/kg Rat (BASF Canada lnc.)
- [Secret] : LD50 = 2369 mg/kg Rat (IUCLID)
- [Secret] : LD50 = 58 ~ 5000 mg/kg Rat (OECD SIDS)
- [Secret] : LD50 = 600 mg/kg Rat (NLM: ChemIDPLus)
- [Secret] : LD50 = 5660 mg/kg Rat
- [Secret] : LD50 > 2000 mg/kg

* Dermal



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- [4-Methyl-2-pentanone] : LD50 = 3000 \text{ mg/kg} rabbit (NITE)
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- [Isobutyl acetate] : LD50 = 17400 mg/kg rabbit (DFGOT vol.19 (2003))
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- [n-Butyl acetate] : LD50 = 17600 \text{ mg/kg} Rabbit (NITE(2006))
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- [Silicon dioxide] : LD50 = 5000 mg/kg (SIDS)
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- [Propylene glycol methyl ether acetate] : LD50 > 5000 {\rm mg/kg} Rabbit (IUCLID)
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- [Acetic acid ethyl ester] : LD50 > 18000 \ \mbox{mg/kg} Rabbit
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- [Secret] : LD50 = 947 mg/kg Rabbit (RTECS)
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- [Secret] : LD50 = 777 ~ 2000 mg/kg rabbit (OECD SIDS)
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- [Secret] : LD50 = 2700 \text{ mg/kg} Rabbit
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- [Secret] : $LD50 > 17760 \ \mbox{mg/kg}$ Guinea pig

* Inhalation

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- [4-Methyl-2-pentanone] : LC50 = 8.2 mg/\ell Rat (NITE)
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- [Isobutyl acetate] : LC50 = 38.0 mg/L/4 hr Rat (DFGOT vol.19 (2003))
- [n-Butyl acetate] : LC50 >21 mg/L/4hr (GLP)(ECHA)
- [Silicon dioxide] : Steam LC50 $> 2.0~\text{mg}/\ell$ Rat (SIDS)
- [Propylene glycol methyl ether acetate] : Steam LC50 = 28.8 mg/L/4 hr Rat (KOSHA)
- [Acetic acid ethyl ester] : Steam LC50 100 mg/ ℓ 4 hr Rat (LC50 = 200 mg/L/1hr conversion k)
- [Secret] : dust LC50 = 9.44 mg/L 4hr (75.5 mg/l 30 min의 환산치) Rat (RTECS)
- [Secret] : Steam LC50 = $2.375 \text{ mg/}\ell$ Mouse (RTECS)
- [Secret] : dust LC50 \ge 0.477 mg/L 4 hr Rat (IUCLID)
- [Secret] : Mist LC50 = 0.059 ~ 22 mg/L Rat (OECD SIDS)
- [Secret] : Steam LC50 32.6 mg/L/4hr Mouse

• Skin corrosion/irritation

- Not available

• Serious eye damage/irritation

- Not available

- \circ Respiratory sensitization
- Not available
- \circ Skin sensitization
 - Not available

• Carcinogenicity

* IARC

- [4-Methyl-2-pentanone] : Group 2B
- [Silicon dioxide] : Group 3 (Silica, amorphous)
- [Secret] : Group 3
- * OSHA

- Not available

* ACGIH

- [4-Methyl-2-pentanone] : A3

- [Secret] : A3

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* NTP
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- Not available

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* EU CLP
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- Not available

Germ cell mutagenicity

- Not available

Reproductive toxicity

- Not available

\circ STOT-single exposure

- Causes damage to organs(Refer Section SDS 11)

STOT-repeated exposure

- Not available

Aspiration hazard

- Not available



12. ECOLOGICAL INFORMATION

A. Ecotoxicity ° Fish

- [4-Methyl-2-pentanone] : $LC50 = 540 \text{ mg/}\ell 96 \text{ hr}$
- [Isobutyl acetate] : LC50 = 17 mg/ ℓ 96 hr
- [n-Butyl acetate] : $LC50 = 62 \text{ mg/}\ell 96 \text{ hr}$
- [Propylene glycol methyl ether acetate] : $LC50 \ge 100 \text{ mg/}\ell$ 96 hr Oryzias latipes
- [Acetic acid ethyl ester] : LC50 230 mg/ℓ 96 hr Pimephales promelas
- [Secret] : LC50 = 527 mg/ ℓ 96 hr Pimephales promelas
- [Secret] : LC50 = 0.97 mg/ ℓ 96 hr Lepomis macrochirus
- [Secret] : $LC50 > 3 \text{ mg/}\ell 96 \text{ hr Brachydanio rerio}$
- [Secret] : LC50 = 0.996 mg/ ℓ 96 hr
- [Secret] : LC50 > 20000 mg/\ell 96 hr Oncorhynchus mykiss
- [Secret] : $LC50 = 1300 \text{ mg}/\ell 96 \text{ hr}$
- [Secret] : LC50 = 20 mg/ ℓ 96 hr Oncorhynchus mykiss
- [Secret] : LC50 = $123.852 \text{ mg}/\ell 96 \text{ hr}$
- Crustaceans
 - [4-Methyl-2-pentanone] : EC50 = 170 mg/ ℓ 48 hr
 - [n-Butyl acetate] : LC50 = 32 mg/ ℓ 48 hr
 - [Propylene glycol methyl ether acetate] : $EC50=373~\text{mg}/\ell$ 48 hr Daphnia magna
 - [Acetic acid ethyl ester] : EC50 717 $\,\ensuremath{\mathtt{mg/\ell}}$ 48 hr Daphnia magna
 - [Secret] : EC50 = 820 mg/ ℓ 24 hr Daphnia magna
 - [Secret] : EC50 = 20 mg/ ℓ 24 hr
 - [Secret] : EC50 > 0.21 mg/ ℓ 48 hr Daphnia magna
 - [Secret] : LC50 = 0.110 mg/ ℓ 48 hr
 - [Secret] : EC50 = 23 mg/ ℓ 48 hr Daphnia magna
 - [Secret] : LC50 = 2332.935 mg/ ℓ 48 hr
- Algae
 - [Propylene glycol methyl ether acetate] : $EC50 \geq 1000~\text{mg}/\ell$ 72 hr Selenastrum capricornutum
 - [Acetic acid ethyl ester] : EC50 1800 ~ 3200 mg/ ℓ 72 hr (Selenastrum sp.)
 - [Secret] : EC50 = 32.9 mg/ℓ 72 hr (Chlamydomonas reinhardtii(Algae))
 - [Secret] : EC50 = 0.017 mg/ ℓ 96 hr
 - [Secret] : EC50 > 0.56 mg/ ℓ 72 hr Other (Freshwater algae)
 - [Secret] : EC50 = 0.615 mg/ ℓ 96 hr
 - [Secret] : EC50 = 0.29 mg/ ℓ 96 hr Selenastrum capricornutum
 - [Secret] : EC50 = 9.337 mg/ℓ 96 hr

B. Persistence and degradability

- Persistence
 - [4-Methyl-2-pentanone] : log Kow = 1.38
 - [Isobutyl acetate] : log Kow = 1.78
 - [n-Butyl acetate] : log Kow = 1.78
 - [Propylene glycol methyl ether acetate] : log Kow = 0.43
 - [Acetic acid ethyl ester] : log Kow 0.73
 - [Secret] : log Kow = 0.81
 - [Secret] : $\log Kow = 0.37$ (at 25 °C)
 - [Secret] : log Kow = 0.97 (11.43)
 - [Secret] : log Kow = 5.14
 - [Secret] : log Kow = 2.95
 - [Secret] : $\log Kow = 0.52$
- \circ Degradability



- [Secret] : BOD5/COD = 0.12

C. Bioaccumulative potential

- \circ Bioaccumulative potential
 - [Acetic acid ethyl ester] : BCF 30
 - [Secret] : BCF = 2.4 (Estimates)
 - [Secret] : BCF = 1351
 - [Secret] : BCF = 31
 - [Secret] : BCF = 180.1
 - [Secret] : BCF = 39.2
 - [Secret] : BCF = 3.162

\circ Biodegration

- [n-Butyl acetate] : Biodegradability = 98 (%)
- [Propylene glycol methyl ether acetate] : Biodegradability > 60 (%) 28 day
- [Acetic acid ethyl ester] : 100 (%) 28 day
- [Secret] : Biodegradability = 38 (%) 28 day
- [Secret] : Biodegradability = 58 (%) 28 day (Aerobic, Activated Sludge, Easily decomposed)
- [Secret] : Biodegradability = 74.3 (%) 28 day

D. Mobility in soil

- [Secret] : Koc = 1.838

E. Other adverse effects

- Not available

13. DISPOSAL CONSIDERATIONS

A. Disposal methods

- Since more than two kinds of designaed waste is mixed, it is difficult to treat seperatly, then can be reduction or stabilization by incineration or similar process.

- If water separation is possible, pre-process with Water separation process.
- Dispose by incineration.
- High temperature incinerate
- After taking off organic solvents that are supposed to be recycled, incinerate the rest of them at a high degree.

B. Special precautions for disposal

- The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities.

- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION

A. UN number

- 1263

B. Proper shipping name

- PAINT INCLUDING PAINT, LACQUER, ENAMEL, STAIN, SHELLAC SOLUTIONS, VARNISH, POLISH, LIQUID FILLER, AND LIQUID LACQUER BASE

C. Hazard class

- 3

D. Packing group

- Ш



E. Marine pollutant

- Applicable

F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.

- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE : F-E (Non-water-reactive flammable liquids)
- EmS SPILLAGE SCHEDULE : S-E (Flammable liquids, floating on water)

15. REGULATORY INFORMATION

A. National and/or international regulatory information

- POPs Management Law
 - Not applicable

• Information of EU Classification

- * Classification
 - [4-Methyl-2-pentanone] : F; R11 Xn; R20 Xi; R36/37 R66
 - [Isobutyl acetate] : F; R11 R66
 - [n-Butyl acetate] : R10 R66 R67
 - [Propylene glycol methyl ether acetate] : R10
 - [Acetic acid ethyl ester] : F; R11 Xi; R36 R66 R67
 - [Secret] : R10Xn; R20
 - [Secret] : Xi; R36
 - [Secret] : R10 Xi; R36/37/38 R43 N; R50
 - [Secret] : R10 Repr. Cat. 2; R61 Xi; R37
- * Risk Phrases
 - [4-Methyl-2-pentanone] : R11, R20, R36/37, R66
 - [Isobutyl acetate] : R11, R66
 - [n-Butyl acetate] : R10, R66, R67
 - [Propylene glycol methyl ether acetate] : R10
 - [Acetic acid ethyl ester] : R11, R36, R66, R67
 - [Secret] : R10, R20
 - [Secret] : R36
 - [Secret] : R10, R36/37/38, R43, R50
 - [Secret] : R61, R10, R37

* Safety Phrase

- [4-Methyl-2-pentanone] : S2, S9, S16, S29
- [Isobutyl acetate] : S2, S16, S23, S25, S29, S33
- [n-Butyl acetate] : S2, S25
- [Propylene glycol methyl ether acetate] : S2
- [Acetic acid ethyl ester] : S2, S16, S26, S33
- [Secret] : S2, S25
- [Secret] : S2, S24, S26
- [Secret] : S2, S24, S37, S61
- [Secret] : S53, S45
- U.S. Federal regulations

* OSHA PROCESS SAFETY (29CFR1910.119)

- Not applicable
- * CERCLA Section 103 (40CFR302.4)
 - [4-Methyl-2-pentanone] : 2267.995 kg 5000 lb
 - [Isobutyl acetate] : 2267.995 kg 5000 lb
 - [n-Butyl acetate] : 2267.995 kg 5000 lb



- [Acetic acid ethyl ester] : 2267.995 kg 5000 lb
- [Secret] : 2267.995 kg 5000 lb
- * EPCRA Section 302 (40CFR355.30)

- Not applicable

- * EPCRA Section 304 (40CFR355.40) - Not applicable
- * EPCRA Section 313 (40CFR372.65) - [4-Methyl-2-pentanone] : Applicable
- Rotterdam Convention listed ingredients - Not applicable
- Stockholm Convention listed ingredients - Not applicable

• Montreal Protocol listed ingredients

- Not applicable

16. OTHER INFORMATION

A. Reference

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

- This Safety Data Sheet was complied with data and morniation from the following sources: KOSHA, NTE, ESIS, NEW,

B. Issue date

- 2016-05-10

C. Revision number and Last date revised

- 2 times, 2016-09-20

D. Other

- This MSDS is prepared according to the Globally Harmonized System (GHS).

