Material Safety Data Sheet(MSDS)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- 1. Product Name : S-OIL GREASE EP 000
- 2. Advisable use and Restriction
 - Advisable use :grease
 - \bigcirc Restriction :Please avoid to mix with different oil
- 3. Manufacturer/Supplier information

○ Manufacturer : KOREA HOUGHTON CO., LTD. 20-31, Seobunam-ro 151beon-gil, Seonjangmyeon, Asan-si, Chungnam-do, S.KOREA(+82-2-3284-3353)

○ Supplier : S-OIL CORPORATION CO., LTD, 192, Baekbeom-ro, Mapo-gu, Seoul 04196, Korea

S.KOREA

Information service or emergency number : +82-2-3284-3353
 Dept. responsible for information/contact number : KOREA HOUGHTON CO., LTD. YOUNG UK, KWON (+82-10-2025-8059)

2. HAZARD IDENTIFICATION

- 1. Hazard classification - ACUTE TOXICITY(Inhalation:Dust/mist) Category 4
- 2. Allocation label elements



- Signal word : Warning
- Hazard statements :
 H332 Harmful if inhaled.

○ Precautionary statements

- Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

- Response

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 you feel unwell.

3. Other hazard information not included in hazard classification (NFPA)

No NFPA data of the product. thus NFPA data was described by the product component						
	Chemical Name	NFPA Level				
	Chemical Name	Health	Flamm abliity	Reactivity		
1.	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC	1	1	0		
2.	Substance1	1	1	0		
3.	Substance2	1	0	0		
4.	Substance3	1	1	0		
5.	Substance4	1	1	0		
6.	Substance5	1	1	0		
7.	Substance6	1	0	0		

3. INGREDIENT INFORMATION

Components		Common name	CAS No.	PCT(W%)
1)	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC	64742-54-7	70.0~80.0
2)	Substance1	_	-	10.0~20.0
3)	Substance2	_	_	1.0~5.0
4)	Substance3	_	_	1.0~5.0
5)	Substance4	-	_	0.1~1.0
6)	Substance5	_	_	0.1~1.0
7)	Substance6	_	_	0.01~1.0

4. FIRST AID MEASURES

1) Following eye contact

- Get medical aid immediately.

- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

2) Following skin contact

- Call a POISON CENTER or doctor/physician you feel unwell.
- For minor skin contact, avoid spreading material on unaffected skin.
- Get medical aid immediately.

- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

- Launder contaminated clothing and shoes before re-use. .
- Remove and isolate contaminated clothing and shoes.
- 3) Following inhalation
 - Administer oxygen if breathing is difficult.

- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

- Give artificial respiration if victim is not breathing.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

- If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

- Keep victim warm and quiet.
- Move to fresh air.
- Move victim to fresh air.
- Seek immediate medial assistance. .
- 4) Following ingestion
 - Call 911 or emergency medical service.

- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

- If unconscious but breathing, never give anything by mouth.

- 5) Advice to physician
 - Do not apply drugs of the adrenaline ephedrine group.

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES

- 1) Suitable (and unsuitable) extinguishing media
 - Use dry sand or earth to smother fire.
 - Large fire: Water spray/fog, regular foam (Suitable extinguishing media).
 - Large fire: Foam (Suitable extinguishing media).
 - Small fire: CO2 (Suitable extinguishing media).
 - Direct water (Unsuitable extinguishing media).
 - Large fire: Dry chemical (Suitable extinguishing media).
 - Small fire: Dry chemical (Suitable extinguishing media).
 - Large fire: Excess water (Suitable extinguishing media).
 - Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2 (Suitable extinguishing media).
 - Small fire: Regular foam (Suitable extinguishing media).

- Large fire: Water spray/fog (Suitable extinguishing media).
- Small fire: Water spray (Suitable extinguishing media).
- Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
- High-pressure water (Unsuitable extinguishing media).
- Large fire: CO2 (Suitable extinguishing media).
- Large fire: Alcohol-resistant foam (Suitable extinguishing media).
- 2. Special hazards arising from the substance
 - Specific hazards arising from the chemical(e.g. nature of any hazardous combustion products)
 - Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
 - \bigcirc Special protective equipment and precautions for fire-fighters :
 - Some may burn but none ignite readily.
 - Fire may produce irritating and/or toxic gases.
 - Containers may explode when heated.

6. ACCIDENTAL RELEASE MEASURES

- 1) Health considerations and protective equipment
 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 - Clean up spills immediately, observing precautions in Protective Equipment section.
 - Cover with plastic sheet to prevent spreading.
 - Do not enter areas which have more than 23.5% oxygen in the atmosphere, without respirator or air supplied mask.
 - Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
 - Do not touch or walk through spilled material.
 - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
 - Please note that materials and conditions to be avoided.
 - Prevent dust cloud.
 - Stop leak if you can do it without risk.
 - Ventilate the contaminated area.

2) Environmental precautions

- Avoid release to the environment.
- Keep out of waterways.
- Prevent entry into waterways, sewers, basements or confined areas.
- 3) For cleaning up

- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

- Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.

- Absorb the liquid and scrub the area with detergent and water.

- Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.
- Large Spill: Dike far ahead of liquid spill for later disposal.
- Reduce airborne dust and prevent scattering by moistening with water.

- Small Spill: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

7. HANDLING AND STORAGE

- 1) Precautions for safe handling
 - No reference
- 2) Conditions for safe storage (including any incompatibilities)
 - No reference

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- 1. Exposure exposure limits, Biological exposure standard :
 - * No exposure limits and biological exposure data of the product. thus data was described by the product component.

1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC

- Other regulation (Domestic) : No reference
- \bigcirc ACGIH : No reference
- \bigcirc biologische standard : No reference

2) Substance1

- \bigcirc Other regulation (Domestic) : No reference
- ACGIH : No reference
- \bigcirc biologische standard : No reference

3) Substance2

- Other regulation (Domestic) : No reference
- ACGIH : No reference
- biologische standard : No reference

- Other regulation (Domestic) : No reference
- \bigcirc ACGIH : No reference
- \bigcirc biologische standard : No reference

- \bigcirc Other regulation (Domestic) : No reference
- ACGIH : No reference
- \bigcirc biologische standard : No reference

6) Substance5

- \bigcirc Other regulation (Domestic) : No reference
- ACGIH : No reference
- \bigcirc biologische standard : No reference

7) Substance6

- \bigcirc Other regulation (Domestic) : No reference
- ACGIH : No reference
- \bigcirc biologische standard : No reference
- 2. Appropriate engineering controls

- Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

- If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

3. Personal protection

- \bigcirc Respiratory protection
- No reference
- \bigcirc Eye protection
- Provide emergency showers and eyewash.
- Wear suitable protective goggles and face shields.
- \bigcirc Hand protection
- Wear insulated gloves.
- Wear suitable protective gloves.
- \bigcirc Body protection
- Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 1. Appearances : dark brown
- 2. Odors : slight oil
- 3. Odor Threshold Values : No reference
- 4. pH Values : No reference

- 5. Melting Point : No reference
- 6. Boiling Point : No reference
- 7. Flash Points : Not applicable (but, base oil flash point : 244 °C)
- 8. Evaporation Rates : No reference
- 9. Flammability (solid, gas) : No reference
- 10. Upper/lower flammability or explosive limits : No reference
- 11. Vapor Pressure : No reference
- 12. Water Solubilities : No reference
- 13. Vapor Densities : No reference
- 14. Specific Gravity : 0.87 \pm 0.05(15/4°C)
- 15. Coefficient of Octanol/Water Distribution (Kow) : No reference
- 16. Autoignition Temperatures : No reference
- 17. Decomposition temperature : No reference
- 18. Viscosity : NLGI No.000
- 19. Molecular Weight : No reference

10. STABILITY AND REACTIVITY

- 1) Stability and hazardous reactivity :
 - Containers may explode when heated.
 - Fire may produce irritating, corrosive and/or toxic gases.
 - May cause toxic effects if inhaled.
 - Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
 - Some liquids produce vapors that may cause dizziness or suffocation.
 - Some may burn but none ignite readily.
 - Stable under normal temperatures and pressures.
- 2) Conditions to avoid :
 - Heat.
 - Ignition source(heat, spark, flame).
- 3) Incompatible materials :
 - Combustibles, reducing material.

- Irritating and/or toxic gas.
- 4) Hazardous decomposition products :
 - Corrosive/toxic fume.
 - Irritating, corrosive and/or toxic gas.

11. TOXICOLOGICAL INFORMATION

- 1) Exposure route information
 - \bigcirc by respiratory organ : No reference
 - \bigcirc by mouth : No reference
 - \bigcirc by skin and contact : No reference
 - \bigcirc by eye and contact : No reference
- 2. Health hazard information
 - * No data of the product. thus data was described by the product component.
 - 1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC)
 - ACUTE TOXICITY
 - Oral : Not applicable / LD50 > 5000 mg/kg Rat
 - Dermal : Not applicable / LD50 > 2000 mg/kg Rabbit
 - Inhalation-Gases : No reference
 - Inhalation-Vapours : No reference
 - Inhalation-Dust/mist : Category 4 / LC50 2.18 mg/L Rat
 - SKIN CORROSION/IRRITATION : Not applicable / Not irritating Rabbit
 - SERIOUS EYE DAMAGE/EYE IRRITATION : Not applicable / Not irritating Rabbit
 - RESPIRATORY SENSITIZATION : No reference
 - \bigcirc SKIN SENSITIZATION : Not applicable / Not sensitising Guinea pig
 - CARCINOGENICITY : Not applicable
 - Ministry of Employment and Labor : No reference
 - IARC : No reference
 - OSHA : No reference
 - ACGIH : No reference
 - NTP : No reference
 - EU CLP: No reference
 - \bigcirc GERM CELL MUTAGENICITY : Not applicable / Negative CHO cell
 - \bigcirc REPRODUCTIVE TOXICITY : Not applicable / Reproductive performance was not adversely affected at any dose level evaluated. Rat
 - \bigcirc SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE : No reference

 \bigcirc SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE : Not applicable / No systemic effects were observed. Rat

- ASPIRATION HAZARD : No reference
- 2) Substance1

- ACUTE TOXICITY
 - Oral : Not applicable / LD50 4100 mg/kg Rat
 - Dermal : Not applicable / LD50 > 3000 mg/kg Rat
 - Inhalation-Gases : No reference
 - Inhalation-Vapours : Not applicable / LC50 > 1.71 mg/L Rat
 - Inhalation-Dust/mist : No reference
- SKIN CORROSION/IRRITATION : No reference
- \bigcirc SERIOUS EYE DAMAGE/EYE IRRITATION : No reference
- RESPIRATORY SENSITIZATION : No reference
- SKIN SENSITIZATION : No reference
- CARCINOGENICITY : Not applicable
 - Ministry of Employment and Labor : No reference
 - IARC : No reference
 - OSHA : No reference
 - ACGIH : No reference
 - NTP : No reference
 - EU CLP: No reference
- GERM CELL MUTAGENICITY : Not applicable / Negative Salmonella typhimurium
- REPRODUCTIVE TOXICITY : No reference

 \odot SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE : Not applicable / No treatment-related deaths or toxic signs were reported. Rabbit

 \bigcirc SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE : Not applicable / No abnormal reactions or deaths occurred during the study in rats. Rat

○ ASPIRATION HAZARD : No reference

- ACUTE TOXICITY
 - Oral : Not applicable / LD50 > 5000 mg/kg Rat
 - Dermal : Not applicable / LD50 > 2000 mg/kg Rabbit
 - Inhalation-Gases : No reference
 - Inhalation-Vapours : No reference
 - Inhalation-Dust/mist : Category 4 / LC50 2.18 mg/L Rat
- SKIN CORROSION/IRRITATION: Not applicable / Not irritating Rabbit
- SERIOUS EYE DAMAGE/EYE IRRITATION : Not applicable / Not irritating Rabbit
- RESPIRATORY SENSITIZATION : No reference
- \bigcirc SKIN SENSITIZATION : Not applicable / Not sensitizing Guinea pig
- CARCINOGENICITY : Not applicable
 - Ministry of Employment and Labor : No reference

- IARC : No reference
- OSHA : No reference
- ACGIH : No reference
- NTP : No reference
- EU CLP: No reference
- \bigcirc GERM CELL MUTAGENICITY : Not applicable / Negative Mouse

○ REPRODUCTIVE TOXICITY : Not applicable / Reproductive performance was not adversely affected at any dose level evaluated. Also there were no neonatal toxicity observed. Rat

 \odot SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE : Not applicable / No clinical signs of toxicity not observed. Rat

○ SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE : Not applicable / Exposed 0, 50, 220 or 1000 mg/m3 for 4weeks to rat(Sprague-Dawley), no systemic effects were observed.

○ ASPIRATION HAZARD : N/A

- \bigcirc ACUTE TOXICITY
 - Oral : No reference
 - Dermal : No reference
 - Inhalation-Gases : No reference
 - Inhalation-Vapours : No reference
 - Inhalation-Dust/mist : No reference
- SKIN CORROSION/IRRITATION : No reference
- SERIOUS EYE DAMAGE/EYE IRRITATION : No reference
- RESPIRATORY SENSITIZATION : No reference
- SKIN SENSITIZATION : No reference
- CARCINOGENICITY : Not applicable
 - Ministry of Employment and Labor : No reference
 - IARC : No reference
 - OSHA : No reference
 - ACGIH : No reference
 - NTP : No reference
 - EU CLP : No reference
- GERM CELL MUTAGENICITY : No reference
- REPRODUCTIVE TOXICITY : No reference
- SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE : No reference
- SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE : No reference
- \bigcirc ASPIRATION HAZARD : No reference

- \bigcirc ACUTE TOXICITY
 - Oral : No reference
 - Dermal : No reference
 - Inhalation-Gases : No reference
 - Inhalation-Vapours : No reference
 - Inhalation-Dust/mist : No reference
- SKIN CORROSION/IRRITATION : No reference
- SERIOUS EYE DAMAGE/EYE IRRITATION : No reference
- RESPIRATORY SENSITIZATION : No reference
- \bigcirc SKIN SENSITIZATION : No reference
- CARCINOGENICITY : Not applicable
 - Ministry of Employment and Labor : No reference
 - IARC : No reference
 - OSHA : No reference
 - ACGIH : No reference
 - NTP: No reference
 - EU CLP : No reference
- GERM CELL MUTAGENICITY : No reference
- REPRODUCTIVE TOXICITY : No reference
- SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE : No reference
- \bigcirc SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE : No reference
- ASPIRATION HAZARD : No reference

- ACUTE TOXICITY
 - Oral: Not applicable / LD50 5000 mg/kg Rat
 - Dermal : No reference
 - Inhalation-Gases : No reference
 - Inhalation-Vapours : No reference
 - Inhalation-Dust/mist : No reference
- SKIN CORROSION/IRRITATION : No reference
- SERIOUS EYE DAMAGE/EYE IRRITATION : No reference
- RESPIRATORY SENSITIZATION : No reference
- \bigcirc SKIN SENSITIZATION : Not applicable / Guinea pig
- \bigcirc CARCINOGENICITY : Not applicable
 - Ministry of Employment and Labor : No reference
 - IARC : No reference

- OSHA : No reference
- ACGIH : No reference
- NTP : No reference
- EU CLP : No reference
- GERM CELL MUTAGENICITY : No reference
- REPRODUCTIVE TOXICITY : No reference
- SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE : No reference
- SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE : No reference
- \bigcirc ASPIRATION HAZARD : No reference

- ACUTE TOXICITY
 - Oral : No reference
 - Dermal : No reference
 - Inhalation-Gases : No reference
 - Inhalation-Vapours : No reference
 - Inhalation-Dust/mist : No reference
- \bigcirc SKIN CORROSION/IRRITATION : No reference
- SERIOUS EYE DAMAGE/EYE IRRITATION : No reference
- RESPIRATORY SENSITIZATION : No reference
- SKIN SENSITIZATION : No reference
- CARCINOGENICITY : Not applicable
 - Ministry of Employment and Labor : No reference
 - IARC : No reference
 - OSHA : No reference
 - ACGIH : No reference
 - NTP : No reference
 - EU CLP : No reference
- \bigcirc GERM CELL MUTAGENICITY : No reference
- REPRODUCTIVE TOXICITY : No reference
- SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE : No reference
- SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE : No reference
- ASPIRATION HAZARD : No reference

12. ECOLOGICAL INFORMATION

- 1. Aquatic toxicity
 - 1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC)
 - \bigcirc Fish, Crustacean, Acuatic algae : N/A

 \bigcirc Fish, Crustacean, Acuatic algae : No reference

3) Substance2

○ Fish, Crustacean, Acuatic algae : No reference

4) Substance3

 \bigcirc Fish, Crustacean, Acuatic algae : No reference

5) Substance4

 \bigcirc Fish, Crustacean, Acuatic algae : No reference

6) Substance5

 \bigcirc Fish, Crustacean, Acuatic algae : No reference

7) Substance6

○ Fish, Crustacean, Acuatic algae : No reference

2. Persistence and degradation

- 1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC)
- \odot n-octanol water partition coefficient : log Kow 6

2) Substance1

 \bigcirc n-octanol water partition coefficient :No reference

3) Substance2

 \bigcirc n-octanol water partition coefficient :No reference

4) Substance3

 \bigcirc n-octanol water partition coefficient :No reference

5) Substance4

 \odot n-octanol water partition coefficient : log Kow 12.46

6) Substance5

 \bigcirc n-octanol water partition coefficient :No reference

7) Substance6

 \bigcirc n-octanol water partition coefficient :No reference

3. Bioaccumulative potential

○ Bioaccumulation : No reference

4. Mobility in soil

- 1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC)
- No reference
- 2) Substance1
- No reference
- 3) Substance2
- No reference
- 4) Substance3
- No reference
- 5) Substance4
- No reference
- 6) Substance5
- No reference
- 7) Substance6
- No reference
- 5. Other adverse effects
 - 1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC)
 - No reference
 - 2) Substance1
 - No reference
 - 3) Substance2
 - No reference
 - 4) Substance3
 - No reference
 - 5) Substance4
 - No reference
 - 6) Substance5
 - No reference
 - 7) Substance6
 - No reference

13. DISPOSAL CONSIDERATIONS

- 1) Disposal methods
 - No reference
- 2) Precautions (including disposal of contaminated container of package)
 - Dispose of contents/container to ...

14. TRANSPORT INFORMATION

- 1. UN No. : No reference
- 2. Proper shipping name : No reference
- 3. Class or division : No reference
- 4. Packing group : No reference
- 5. Marine pollutant : No reference
- 6. Special safety response for transportation or transportation measure :
 - Classification to Fire : Not classified
 - Classification to oil spillage : Not classified

15. REGULATORY INFORMATION

- 가. Occupational safety and health act
 - 1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC)
 - No reference

2) Substance1

- No reference

3) Substance2

- No reference

4) Substance3

- No reference

5) Substance4

- No reference

6) Substance5

- No reference

7) Substance6

- No reference
- 나. Toxic chemical control act
 - 1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC)
 - Existing Chemical Substance

- Existing Chemical Substance

3) Substance2

- Existing Chemical Substance

4) Substance3

- Existing Chemical Substance

5) Substance4

- Existing Chemical Substance

6) Substance5

- Existing Chemical Substance, Pollutant Release and Transfer Registers

7) Substance6

- Existing Chemical Substance
- Safety Control gefährlicher Stoffe wirken in Korea Not classified
- 4. Abfälle Control Act in Korea 06-01-06, other
- 5. Sonstige Vorschriften in Korea und im Ausland Vorschriften
 - 1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC)
 - \bigcirc Other regulation (Domestic) : No reference
 - \bigcirc National regulations :
 - -EU Classification (CLASSIFICATION) : Carc.Cat.2; R45
 - -EU Classification (Risk Phrases) : R45
 - -EU Classification (Safety Phrases) : S:53-45

2) Substance1

- \bigcirc Other regulation (Domestic) : No reference
- \bigcirc National regulations : No reference

3) Substance2

- \bigcirc Other regulation (Domestic) : No reference
- \bigcirc National regulations :
 - -EU Classification (CLASSIFICATION) : Carc.Cat.2; R45
 - -EU Classification (Risk Phrases) : R45
 - -EU Classification (Safety Phrases) : S:53-45

- \bigcirc Other regulation (Domestic) : No reference
- \bigcirc National regulations : No reference

- Other regulation (Domestic) : No reference
- \bigcirc National regulations : No reference

6) Substance5

- \bigcirc Other regulation (Domestic) : No reference
- \bigcirc National regulations : No reference

7) Substance6

- \bigcirc Other regulation (Domestic) : No reference
- National regulations : No reference

16. OTHER INFORMATION

- 1. Reference :
 - CCR
 - CCRIS
 - ECOTOX
 - EPISUITE
 - EU CLP
 - HSDB
 - IARC
 - IUCLID
 - J Appl Toxicol, Vol 11(4), pp 297-302
 - NITE
 - Publication
 - Study report
 - publication
 - study report
- 2. Prepare date : 2016-02-03
- 3. Revised date :
- 4. Other : following revised GHS