

Material Safety Data Sheet

Product	Kixx Hydro HVZ 15(formerly, GS Hydro HVZ 15)		
List No.	Issuing date	Last revised date	Department
LB2777	2012-11-30	2018-06-01	Finished Lubricants R&D Team

1. Identification of the substance/mixture and of the company/undertaking

1) Product identifier

- Kixx Hydro HVZ 15(formerly, GS Hydro HVZ 15)

2) Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified uses : (Lubricants and additives)
- Uses advised against : Do not use for any other purpose.

3) Supplier information

Manufacturer information

- Company name : GS Caltex Corporation
[Manufacture]
- Address : GS Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Korea
- Emergency telephone number : (02) 1899-5145

2. HAZARD IDENTIFICATION

1) Hazard classification

- Skin corrosion/irritation Category 2
- Serious eye damage/eye irritation Category 2
- Aspiration hazard Category 1

2) Allocation label elements

Hazard pictograms



Signal word

Danger

Hazard statements

- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

Precautionary statements

1) Prevention

- P264 Wash ... thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

2) Response

- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 Specific treatment (see ... on this label).
- P331 Do not induce vomiting.
- P332 + P313 If skin irritation occurs: Get medical advice/attention.
- P337 + P313 If eye irritation persists: Get medical advice/attention.
- P362 + P364 Take off contaminated clothing and wash it before reuse.

3) Storage

- P405 Store locked up.

4) Disposal

- P501 Dispose of contents/container to

3) Other hazards

○ Product NFPA Level : Health , Flammability , Reactivity

(※ 0-Lack, 1-Low, 2-Moderate, 3-High, 4-Very High)

※ Chemical NFPA Level.

- Distillates (petroleum), hydrotreated light paraffinic : Health=1, Flammable=1, Reaction=0
- Distillates (petroleum), hydrotreated heavy paraffinic : Health=1, Flammable=1, Reaction=0
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Health=1, Flammable=1, Reaction=0
- 2,6-di-tert-butylphenol : Health=2, Flammable=1, Reaction=0
- Business Secret1 : Health=0, Flammable=0, Reaction=0

3. Composition/Information on ingredients

Chemical name	Trade names and Synonyms	CAS No.	EC No.	Contain Ratio(%)
Distillates (petroleum), hydrotreated light paraffinic		64742-55-8	265-158-7	50 ~ 52
Distillates (petroleum), hydrotreated heavy paraffinic		64742-54-7	265-157-1	46 ~ 48
Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts		68649-42-3	272-028-3	0.1 ~ 0.4
2,6-di-tert-butylphenol		128-39-2	204-884-0	0.1 ~ 0.2
Business Secret1				0.1 ~ 3.8

4. FIRST AID MEASURES

1) Following eye contact

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

2) Following skin contact

- For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat.

- Seek immediate medical assistance.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.

3) Following inhalation

- Move to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Keep victim warm and quiet.

4) Following ingestion

- Seek immediate medical assistance.

5) Advice to physician

- 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

Suitable extinguishing media

- Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
- Use dry sand or earth to smother fire.
- Dry chemical.
- Water spray.
- CO₂.

Unsuitable extinguishing media

- Direct water.

2) Special hazards arising from the substance or mixture

- During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Containers may explode when heated.
- Some may burn but none ignite readily.
- Fire may produce irritating, corrosive and/or toxic gases.

3) Special protective equipment for firefighters

- Rescuers should put on appropriate protective gear.
- Evacuate area and fight fire from a safe distance.
- Substance may be transported in a molten form.
- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.
- Fire involving Tanks: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- Clean up spills immediately, observing precautions in Protective Equipment section.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Cover with plastic sheet to prevent spreading.
- Please note that materials and conditions to be avoided.

2) Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

3) For cleaning up

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

7. HANDLING AND STORAGE

1) Precautions for safe handling

- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- Use care in handling/storage.
- Loosen closure cautiously before opening.
- Avoid prolonged or repeated contact with skin.
- Avoid breathing vapors from heated material.
- Do not enter storage area unless adequately ventilated.
- Please note that materials and conditions to be avoided.
- Handling refer to engineering control/personal protection section.

2) Conditions for safe storage (including any incompatibilities)

- Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

1) Chemical exposure limits, Biological exposure standard

○ Occupational exposure limits (Domestic)

- Distillates (petroleum), hydrotreated light paraffinic : TWA Not applicable, STEL Not applicable
- Distillates (petroleum), hydrotreated heavy paraffinic : TWA Not applicable, STEL Not applicable
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : TWA Not applicable, STEL Not applicable
- 2,6-di-tert-butylphenol : TWA Not applicable, STEL Not applicable
- Business Secret1 : TWA Not applicable, STEL Not applicable

○ **Occupational exposure limits (ACGIH)**

- Distillates (petroleum), hydrotreated light paraffinic : TWA 5 mg/m³, STEL Not applicable
- Distillates (petroleum), hydrotreated heavy paraffinic : TWA 5 mg/m³, STEL Not applicable
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : TWA Not applicable, STEL Not applicable
- 2,6-di-tert-butylphenol : TWA Not applicable, STEL Not applicable
- Business Secret2 : TWA Not applicable, STEL Not applicable

○ **Biological limit values**

- Distillates (petroleum), hydrotreated light paraffinic : Not applicable
- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not applicable
- 2,6-di-tert-butylphenol : Not applicable
- Business Secret3 : Not applicable

2) Appropriate engineering controls

- Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
- Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

3) Personal protection equipment

○ **Respiratory protection**

- If high frequency of use or exposure, wear air respirator.
- Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.

○ **Eye protection**

- Wear suitable protective goggles and face shields.
- Wear face shield to protect eyes from scattering dust or hazardous liquid.
- Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

○ **Hand protection**

- Wear insulated gloves.
- Wear suitable protective gloves.
- Wear Non-moisture permeable chemical resistance protective gloves(latex, nitrile rubber, PVC) for prevent skin contact.

○ **Body protection**

- Wear suitable protective clothing.
- When contact is likely wear chemical resistant, oil and grease resistant, non-moisture permeable shoes and clothes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Item	Input Value
Apperance	Liquid(Clear and Transparent)
Smell	No Data
Smell Threshold	No Data

pH	No Data
Melting/Freezing Point	No Data
Boiling Point	No Data
Flash Point	182 °C
Evaporating Rate	No Data
Flammability	No Data
Explosibility Range	No Data
Steam Pressure	No Data
Solubility	No Data
Vapor Density	No Data
Specific Gravity	0.84
Distribution Coefficient	No Data
Self-Ignition Temperature	No Data
Pyrolysis Temperature	No Data
Viscosity	15 mm ² /s (at 40°C)
Molecular Weight	No Data

10. STABILITY AND REACTIVITY

1) Stability and hazardous reactivity

- Containers may explode when heated.
- Some may burn but none ignite readily.
- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Fire may produce irritating, corrosive and/or toxic gases.

2) Conditions to avoid

- Ignition source(heat, spark, flame, etc.).

3) Incompatible materials

- Combustibles, reducing material.

4) Hazardous decomposition products

- During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
- Irritating, corrosive and/or toxic gas.

11. TOXICOLOGICAL INFORMATION

1) Exposure route information

○ Inhalation

- Can be absorbed in body by inhalation.

○ Skin Contact

- Liquids can be exposed through the eyes, skin and oral.

○ Eye Contact

- Liquids can be exposed through the eyes, skin and oral.
- Vapors/mist can be exposed through the respiratory tract, eyes and skin.

○ Ingestion

- Can be absorbed in body by inhalation or contact skin and the digestive organs.

2) Health hazard information

○ Acute toxicity

* Oral - PRODUCT : Not applicable (ATEMix > 2,000 mg/kg)

- Distillates (petroleum), hydrotreated light paraffinic : LD50 >5000 mg/kg Species : Rat
- Distillates (petroleum), hydrotreated heavy paraffinic : LD50 >15000 mg/kg Species : Rat
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : LD50 >5000 mg/kg Species : Rat

* Dermal - PRODUCT : Not applicable (ATEMix > 2,000 mg/kg)

- Distillates (petroleum), hydrotreated light paraffinic : LD50 >2000 mg/kg Species : Rabbit
- Distillates (petroleum), hydrotreated heavy paraffinic : LD50 >5000 mg/kg Species : Rabbit
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : LD50 >1000 mg/kg Species : Rat

* Inhalation(Gas) - PRODUCT : Not applicable

- Distillates (petroleum), hydrotreated light paraffinic : No data
- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

* Inhalation(Vapour) - PRODUCT : Not applicable

- Distillates (petroleum), hydrotreated light paraffinic : No data
- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

* Inhalation(Dust, mist) - PRODUCT : Not applicable (ATEMix > 5 mg/L)

- Distillates (petroleum), hydrotreated light paraffinic : LC50 > 5.53 mg/L 4h Rat
- Distillates (petroleum), hydrotreated heavy paraffinic : LC50 > 5.53 mg/L 4h Rat
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

○ Skin corrosion/Irritation

- Distillates (petroleum), hydrotreated light paraffinic : Irritating (Rabbit)
- Distillates (petroleum), hydrotreated heavy paraffinic : Rabbit - slightly irritating
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Irritating
- 2,6-di-tert-butylphenol : Rabbit - irritating

○ Serious eye damage/irritation

- Distillates (petroleum), hydrotreated light paraffinic : Not irritating (Rabbit)
- Distillates (petroleum), hydrotreated heavy paraffinic : Rabbit, not irritating, OECD TG 405 GLP (Read-across CAS No. 64742-53-6)
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Rabbit - irritating (OECD 405, GLP)
- 2,6-di-tert-butylphenol : Rabbit - not irritating

○ Respiratory sensitization

- Distillates (petroleum), hydrotreated light paraffinic : No data
- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not sensitising (Guinea pig)
- 2,6-di-tert-butylphenol : No data

○ Skin sensitization

- Distillates (petroleum), hydrotreated light paraffinic : Not sensitising (Guinea Pig)
- Distillates (petroleum), hydrotreated heavy paraffinic : Not sensitising (Guinea Pig)
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not sensitising (Guinea Pig)
- 2,6-di-tert-butylphenol : Not sensitising (Guinea Pig)

○ Carcinogenicity

- Distillates (petroleum), hydrotreated light paraffinic : EU CLP:1B The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measure by IP 346
- Distillates (petroleum), hydrotreated heavy paraffinic : EU CLP:1B The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measure by IP 346
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

○ Germ cell mutagenicity

- Distillates (petroleum), hydrotreated light paraffinic : Negative (Mouse)
- Distillates (petroleum), hydrotreated heavy paraffinic : CHO cell - Negative
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : Ames test, Salmonella Typhimurim - Negative

○ Reproductive toxicity

- Distillates (petroleum), hydrotreated light paraffinic : Reproductive performance was not adversely affected at any dose level evaluated. (Rat)
- Distillates (petroleum), hydrotreated heavy paraffinic : Reproductive performance was not adversely affected at any dose level evaluated. (Rat)
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

○ Specific target organ toxicity (single exposure)

- Distillates (petroleum), hydrotreated light paraffinic : No data
- Distillates (petroleum), hydrotreated heavy paraffinic : No systemic effects were observed
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Respiratory tract irritation
- 2,6-di-tert-butylphenol : Human - eye, skin, respiratory irritation

○ Specific target organ toxicity (repeated exposure)

- Distillates (petroleum), hydrotreated light paraffinic : No systemic effects were observed (Rat)
- Distillates (petroleum), hydrotreated heavy paraffinic : No systemic effects were observed
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

○ Aspiration hazard

- Distillates (petroleum), hydrotreated light paraffinic : Viscosity: 1.99-847 mm²/s (at 40°C), hydrocarbons

- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity

○ Fish

- Distillates (petroleum), hydrotreated light paraffinic : LC50 > 5000 mg/L Fish(Oncorhynchus mykiss)
- Distillates (petroleum), hydrotreated heavy paraffinic : LC50 > 100 mg/L Fish(Pimephales promelas)
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : IUCLID LC50 5 mg/l ~ 1 mg/l 96 hr Pimephales promelas
- 2,6-di-tert-butylphenol : LC50 1.4 mg/L Pimephales promelas

○ Crustacean

- Distillates (petroleum), hydrotreated light paraffinic : EC50 > 1000 mg/L Aquatic invertebrates(Daphnia magna)
- Distillates (petroleum), hydrotreated heavy paraffinic : LC50 > 10000 mg/L Aquatic invertebrates(Gammarus pulex)
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : IUCLID EC50 5 mg/l ~ 1 mg/l 48 hr Daphnia pulex
- 2,6-di-tert-butylphenol : EC50 0.45 mg/l 48 hr Daphnia magna

○ Aquatic algae

- Distillates (petroleum), hydrotreated light paraffinic : NOEC >= 100 mg/L Aquatic algae(Pseudokirchnerella subcapitata)
- Distillates (petroleum), hydrotreated heavy paraffinic : NOEC >= 100 mg/L Aquatic algae(Pseudokirchnerella subcapitata)
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : EC50 1.2 mg/L Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)(Selenastrum capric

2) Persistence and degradation

○ Persistence

- Distillates (petroleum), hydrotreated light paraffinic : log Kow 6
- Distillates (petroleum), hydrotreated heavy paraffinic : log Kow 6
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : 4.92 log Kow

○ Degradation

- Distillates (petroleum), hydrotreated light paraffinic : No data
- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

○ biodegradation

- Distillates (petroleum), hydrotreated light paraffinic : BOD 6 %
- Distillates (petroleum), hydrotreated heavy paraffinic : BOD 77 %
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : O2 consumption 12~24 not inherently biodegradable

3) Bioaccumulative potential

- Distillates (petroleum), hydrotreated light paraffinic : No data
- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : BCF 660 (Leuciscus idus melanotus, Exp. for 3 days, Exp. Con. 37 ug/L)

4) Mobility in soil

- Distillates (petroleum), hydrotreated light paraffinic : No data
- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : Koc 4493

5) Hazard to the ozone layer

- Distillates (petroleum), hydrotreated light paraffinic : Not applicable
- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not applicable
- 2,6-di-tert-butylphenol : Not applicable

6) Other adverse effects

- Distillates (petroleum), hydrotreated light paraffinic : Fish: NOEC(Pimephales promelas) >5000 mg/L/7d
- Distillates (petroleum), hydrotreated heavy paraffinic : Fish: NOEC(Pimephales promelas) >5000 mg/L/7d
- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : No data
- 2,6-di-tert-butylphenol : No data

13. DISPOSAL CONSIDERATIONS

1) Disposal methods

- Every commercial waste producer shall either treat wastes generated from his/her place of business by him/herself or commission the treatment of such wastes to a person who has license for a waste treatment business under Article 26(3), a person who recycles of such wastes under Article 44(2), a person who has installed and operates a waste disposal facility under Article 4 or 5, a person who has completed the registration of a business of discharging wastes into the sea under Article 18 of the Marine Environment Management Act.

2) Precautions (including disposal of contaminated container of package)

- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)
- Do not allow spill material to enter sewers, storm water drains, soil, etc.
- Empty containers recycled under environmental laws.
- Empty containers may rupture when pressured.
- Empty containers may explode and residues can be ignited when pressured, cut, weld, heated.

14. TRANSPORT INFORMATION

1) UN No.

- Not applicable

2) Proper shipping name

- Not applicable

3) Class or division

- Not applicable

4) Packing group

- Not applicable

5) Marine pollutant

- Not applicable

6) Special safety response for transportation or transportation measure

- Types of Emergency Measures in Case of Fire : Not applicable
- Types of Emergency Measures in Leakage : Not applicable
- This product is not regulated for carriage according to ADR/RID, ADN, IMDG, ICAO/IATA.

15. REGULATORY INFORMATION

1) Occupational Safety and Health Act in Korea - PRODUCT :

- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Hazardous Substances Requiring Management
- Distillates (petroleum), hydrotreated light paraffinic : Not applicable
- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- 2,6-di-tert-butylphenol : Not applicable
- Business Secret : No data

2) Toxic Chemical Control Act in Korea - PRODUCT :

- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Pollutant release and transfer register substances, Existing Commercial Chemical Substances
- Distillates (petroleum), hydrotreated light paraffinic : Existing Commercial Chemical Substances
- Distillates (petroleum), hydrotreated heavy paraffinic : Existing Commercial Chemical Substances
- 2,6-di-tert-butylphenol : Existing Commercial Chemical Substances
- Business Secret : No data

3) Safety Control of Dangerous Substances Act in Korea - PRODUCT :

- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not applicable
- Distillates (petroleum), hydrotreated light paraffinic : Not applicable
- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- 2,6-di-tert-butylphenol : Not applicable
- Business Secret : No data

4) Wastes Control Act in Korea - PRODUCT : 지정 폐기물

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5) Other regulations in KOREA and Abroad regulations

○ U.S.A. management information(OSHA regulation)

- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not applicable
- Distillates (petroleum), hydrotreated light paraffinic : Not applicable
- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- 2,6-di-tert-butylphenol : Not applicable
- Business Secret : No data

○ U.S.A. management information(CERCLA regulation)

- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not applicable
- Distillates (petroleum), hydrotreated light paraffinic : Not applicable
- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable

- 2,6-di-tert-butylphenol : Not applicable

- Business Secret : No data

○ EU Classification (CLASSIFICATION)

- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not applicable

- Distillates (petroleum), hydrotreated light paraffinic : Carc. 1B

- Distillates (petroleum), hydrotreated heavy paraffinic : Carc. 1B

- 2,6-di-tert-butylphenol : Not applicable

- Business Secret : No data

○ EU Classification (Risk Phrases)

- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not applicable

- Distillates (petroleum), hydrotreated light paraffinic : H350

- Distillates (petroleum), hydrotreated heavy paraffinic : H350

- 2,6-di-tert-butylphenol : Not applicable

- Business Secret : No data

○ EU Classification (Safety Phrases)

- Phosphorodithioic acid O,O-dialkyl(C=1-14) esters zinc salts : Not applicable

- Distillates (petroleum), hydrotreated light paraffinic : S:53-45

- Distillates (petroleum), hydrotreated heavy paraffinic : S:53-45

- 2,6-di-tert-butylphenol : Not applicable

- Business Secret : No data

16. OTHER INFORMATION

1) 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

2) Print date

- 2012-11-30

3) Revision date

Number of revised

- 7

Date of last revision

- 2018-06-01

Last Revision History

- This is the English and EU version of 'Kixx Hydro HVZ 15'.

4) Other

- This information is based on current available databases to protect the health, environment and safety of workers.