

SDS(Safety Data Sheet)

Product	Kixx D1 A3/B4 10W-40	
List No.	Issuing date	Last revised date
LB2765	2012-11-30	2018-01-01

1. IDENTIFICATION

1) Product name

Kixx D1 A3/B4 10W-40

2) Recommended use of the chemical and restriction on use

- Recommended use (Lubricants and additives)
Internal combustion engine oil
- Restrictions on use Do not use for any other purpose.

3) Details of the supplier of the safety data sheet

Manufacturer

- Company name GS Caltex Corporation
- Address GS Tower, 508, Nonhyeon-ro, Gangnam-gu, Seoul, Korea
- Emergency telephone number +82-1899-5145

2. HAZARDS IDENTIFICATION

1) Classification of the product

- Not applicable

2) Label elements

Hazard pictograms

- Not applicable

Signal word

- Not applicable

Hazard statements

- Not applicable

Precautionary statements

1) Prevention

- Not applicable

2) Response

- Not applicable

3) Storage

- Not applicable

4) Disposal

- Not applicable

3) Other hazards

○ Product NFPA Level

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

Product name	Health	Flammable	Reaction
Kixx D1 A3/B4 10W-40	1	1	0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Trade names and Synonyms	CAS No.	EC No.	Contain Ratio(%)
Distillates (petroleum), hydrotreated heavy paraffinic		64742-54-7	265-157-1	80 ~ 90
Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts		84605-29-8	283-392-8	0 ~ 1
Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid		179986-09-5	425-400-6	0 ~ 1
Business Secret1				5 ~ 15
arcrylic copolymer				0 ~ 1
Dodecylphenol, branched		121158-58-5	310-154-3	0 ~ 0.2

4. FIRST AID MEASURES

- 1) Eye contact**
- In case of contact with material, immediately flush eyes with running water for at least 15 minutes.
 - Get medical aid immediately.
- 2) Skin contact**
- In case of contact with material, immediately flush skin with running water for at least 15 minutes.
 - Remove and isolate contaminated clothing and shoes.
 - Launder contaminated clothing and shoes before re-use.
 - Get medical aid immediately.
- 3) Inhalation**
- Move to fresh air.
 - Give artificial respiration if victim is not breathing.
 - Administer oxygen if breathing is difficult.
 - Seek immediate medical assistance.
- 4) Ingestion**
- If unconscious but breathing, never give anything by mouth.
 - Get medical aid immediately.
- 5) Indication of any immediate medical**
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

attention and special treatment needed

- Do not apply drugs of the adrenaline ephedrine group.

5. FIRE FIGHTING MEASURES

1) Suitable (and unsuitable) extinguishing media - Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2 (Suitable extinguishing media).

- Large fire: Water spray/fog, regular foam (Suitable extinguishing media).
- High-pressure water (Unsuitable extinguishing media).

2) Special hazards arising from the substance or mixture

- May ignited from heat, friction or contamination.
- Containers may explode when heated.
- Some may burn but none ignite readily.
- Fire may produce irritating and/or toxic gases.
- May cause toxic effects if inhaled.
- Some liquids produce vapors that may cause dizziness or suffocation.
- May ignited from heat, friction or contamination.
- Containers may explode when heated.
- Some may burn but none ignite readily.
- Fire may produce irritating and/or toxic gases.
- May cause toxic effects if inhaled.
- Some liquids produce vapors that may cause dizziness or suffocation.

3) Special protective equipment and precautions for firefighters

- Substance may be transported hot.
- Runoff may cause pollution.
- Contact may cause burns to skin and eyes.
- 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: 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.

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

- Stop leak if you can do it without risk.
- Please note that materials and conditions to be avoided.
- Ventilate the contaminated area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.
- Do not enter areas which have more than 23.5% oxygen in the atmosphere, without respirator or air supplied mask.

- 2) Environmental precautions** - Prevent entry into waterways, sewers, basements or confined areas.
- 3) Methods and material for containment and cleaning up**
 - Small Spill: Flush area with flooding quantities of water.
 - Small Spill: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
 - Large Spill: Dike far ahead of liquid spill for later disposal.
 - With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
 - Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

7. HANDLING AND STORAGE

- 1) Precautions for safe handling**
 - Please note that materials and conditions to be avoided.
 - Wash ... thoroughly after handling.
 - Handling refer to engineering control/personal protection section.
 - CAUTION: High temperature.
 - CAUTION: This material does not contain oxygen and may cause asphyxia if released in a confined area.
 - High concentration of this gas will create an oxygen-deficient atmosphere, creating the risk of asphyxiation. Check oxygen content before entering area.
 - CAUTION: Vapors displace air and can cause asphyxiation in confined spaces if released material.
 - Keep under 20°C. This material evaporate slowly at 20°C and reach toxic concentration.
 - Do not spray. This material does not easily evaporated. But can be reach toxic concentration quickly in air if sprayed.
 - Check oxygen content before entering area.
 - Use adequate machine for prevention when package handling.
 - Avoid any skin and eye contact when insert undiluted solution. Wash ... thoroughly after handling.
 - Caution: Dangerous fire hazard when exposed to heat, or flame, sparks.
 - Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)
- 2) Conditions for safe storage (including any incompatibilities)**
 - Store in a dry place. Store in a closed container.
 - Please note that materials and conditions to be avoided.
 - Store containers: AVOID the place where can be damage and contamination.
 - Store in a cool/low-temperature, well-ventilated {dry} place {away from heat and ignition sources}
 - Choose a place that can be protected from strong oxidizers and acid.
 - Drum Handling: Must work at safe place., Loading more than 3 stack is prohibited.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

1) Control parameters

Chemical name	Exposure limits	ACGIH TLV	OSHA PEL	Biological limit values(BLV)
Distillates (petroleum), hydrotreated heavy paraffinic	TWA : Not applicable STEL : Not applicable	5mg/m3 Not applicable	Not available	Not applicable
Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts	TWA : Not applicable STEL : Not applicable	Not applicable Not applicable	Not available	Not applicable
Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid	TWA : Not applicable STEL : Not applicable	Not applicable Not applicable	Not available	Not applicable
BUSINESS SECRET1	TWA : Not applicable STEL : Not applicable	Not applicable Not applicable	Not available	Not applicable
acrylic copolymer	TWA : Not applicable STEL : Not applicable	Not applicable Not applicable	Not available	Not applicable
Dodecylphenol, branched	TWA : Not applicable STEL : Not applicable	Not applicable Not applicable	Not available	Not applicable

2) Appropriate engineering controls

- 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.
 - Wear Non-moisture permeable goggle for dust protection.
 - Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- **Hand protection**
 - Wear insulated gloves.
 - Wear Non-moisture permeable chemical resistance protective gloves(latex, nitrile rubber, PVC) for prevent skin contact.

○ **Body protection**

- 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
Appearance	Clear, light yellow liquid
Color	No Data
Smell	a specific smell of Hydrocarbon
Smell Threshold	No Data
pH (Numerical value)	No Data
Melting/Freezing Point	No Data
Boiling Point (Numerical value)	No Data
Flash Point (Numerical value)	230 °C
Evaporating Rate	No Data
Flammability(Solid, Gas)	No Data
Explosibility Range	No Data
Steam Pressure	No Data
Solubility (Numerical value)	No Data
Vapor Density	No Data
Specific Gravity	0.86
Distribution Coefficient	No Data
Selfignition Temperature	No Data
Pyrolysis Temperature	No Data
Viscosity (Numerical value)	15.0 mm ² /s (at 100°C)
Molecular Weight	No Data

10. STABILITY AND REACTIVITY

1) Chemical Stability and hazardous reactivity

- Stable under normal temperatures and pressures.
- Containers may explode when heated.
- Some may burn but none ignite readily.
- Fire may produce irritating and/or toxic gases.
- May cause toxic effects if inhaled.
- Some liquids produce vapors that may cause dizziness or suffocation.

2) Conditions to avoid

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

- 3) **Incompatible materials** - Combustibles.
- Irritating and/or toxic gas.

4) **Hazardous decomposition products** - Not available

11. TOXICOLOGICAL INFORMATION

1) Information on the likely routes of exposures

Inhalation

- After inhalation: No data

Skin contact

- Following skin contact: No data

Eye contact

- After eye contact: No data

Ingestion

- After ingestion: No data

2) Health hazard information

Acute toxicity

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

- Distillates (petroleum), hydrotreated heavy paraffinic : LD50 >15000 mg/kg Species : Rat

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : LD50=4468 mg/kg bw(Rat(female/male); Oral; OECD Guideline 401; 1985)

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : LD50 >2000 mg/kg (Rat; OECD Guideline 401, GLP)

- Dodecylphenol, branched : LD50=2100 mg/kg bw(rat, female/male) (OECD Guideline 401)

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

- Distillates (petroleum), hydrotreated heavy paraffinic : LD50 >5000 mg/kg Species : Rabbit

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : LD50>2002 mg/kg bw(Rat(female/male); Dermal; OECD Guideline 402; 1985)

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : LD50 >2000 mg/kg(Rat; no deaths, OECD TG 402, GLP)

- Dodecylphenol, branched : LD50=ca. 15000 mg/kg bw(rabbbti, male), No deaths (OECD Guideline 402)

*** Inhalation(Gas) - Not applicable**

- Distillates (petroleum), hydrotreated heavy paraffinic : No data

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : No data

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : No data

- Dodecylphenol, branched : No data

*** Inhalation(Vapour) - Not applicable (ATEMix > 20 mg/L)**

- Distillates (petroleum), hydrotreated heavy paraffinic : No data

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : LC50 >2.3 mg/l 4 hr (no death, (OECD Guideline 403))

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : No data

- Dodecylphenol, branched : No data

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

- Distillates (petroleum), hydrotreated heavy paraffinic : LC50 > 5.53 mg/L 4h Rat

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : No data

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : No data

- Dodecylphenol, branched : No data

○ Skin corrosion/Irritation :

- Distillates (petroleum), hydrotreated heavy paraffinic : Rabbit - slightly irritating

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Rat - irritatating

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : Rabbit, non-irritating (OECD TG 404, GLP)

- Dodecylphenol, branched : Severe skin irritant (PDII=8.0/8.0)

○ Serious eye damage/irritation :

- Distillates (petroleum), hydrotreated heavy paraffinic : Rabbit, not irritating, OECD TG 405 GLP (Read-across CAS No. 64742-53-6)

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : No data

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : Rabbit, non-irritating (OECD TG 405, GLP)

- Dodecylphenol, branched : irritating

○ Respiratory sensitization :

- Distillates (petroleum), hydrotreated heavy paraffinic : No data

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : No data

- Coconut oil, reaction : No data
product with glycerol ester
of 3,5-bis(1,1-dimethyl
ethyl)-4-
hydroxybenzenepropanoic
acid

- Dodecylphenol, branched : No data

○ **Skin sensitization :**

- Distillates (petroleum), : Not sensitising (Guinea Pig)
hydrotreated heavy
paraffinic

- Phosphorodithioic acid : Not sensitising(Guinea Pig, OECD Guideline 406; 1997)
mixed O,O-bis(1,3-
dimethylbutyl and iso-Pr)
esters zinc salts

- Coconut oil, reaction : Not sensitising (Guinea Pig) (OECD TG 406)
product with glycerol ester
of 3,5-bis(1,1-dimethyl
ethyl)-4-
hydroxybenzenepropanoic
acid

- Dodecylphenol, branched : Not sensitising (Guinea Pig)

○ **Carcinogenicity :**

- Distillates (petroleum), : EU CLP:1B The classification as a carcinogen need not apply if it can be shown
hydrotreated heavy that the substance contains less than 3% DMSO extract as measure by IP 346
paraffinic

- Phosphorodithioic acid : No data
mixed O,O-bis(1,3-
dimethylbutyl and iso-Pr)
esters zinc salts

- Coconut oil, reaction : No data
product with glycerol ester
of 3,5-bis(1,1-dimethyl
ethyl)-4-
hydroxybenzenepropanoic
acid

- Dodecylphenol, branched : No data

○ **Germ cell mutagenicity :**

- Distillates (petroleum), : CHO cell - Negative
hydrotreated heavy
paraffinic

- Phosphorodithioic acid : In vitro - Bacterial reverse mutation test ; Negative(OECD Guideline 471; 1997)
mixed O,O-bis(1,3-
dimethylbutyl and iso-Pr)
esters zinc salts

- Coconut oil, reaction : In Vitro Mammalian Chromosome Aberration Test: ambiguous(OECD 473), in

product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid

vitro gene mutation study in bacteria: negative(OECD 471 & 472), In vivo micronucleus assay(OECD 474) & In vivo UDS Test: negativ

- Dodecylphenol, branched : In vitro- Negative (Bacterial Reverse Mutation Assay; OECD TG 471)

○ **Reproductive toxicity :**

- Distillates (petroleum), hydrotreated heavy paraffinic : Reproductive performance was not adversely affected at any dose level evaluated. (Rat)

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : EC 283-392-8 has not been tested for reproduction toxicity, however experimental data on structurally related substances EC 270-608-0 was available and suitable for read-across. Based on this study, N

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : Rat oral; No effects on male fertility, on conception rate and on pup development was observed. (OECD TG 415. GLP)

- Dodecylphenol, branched : "As a result of oral toxicity study with dosing of 0, 1.5, 15, and 75 mg/kg/day in rats (female / female), reduced implantation site, increased estrus cycle length and decreased mean epididymal sperm

○ **Specific target organ toxicity (single exposure) :**

- Distillates (petroleum), hydrotreated heavy paraffinic : No systemic effects were observed.

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : No data

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : As result of acute oral toxicity study with rats, no mortality, clinical signs, body weight, gross pathology findings observed.(OECD TG 401)

- Dodecylphenol, branched : No data

○ **Specific target organ toxicity (repeated exposure) :**

- Distillates (petroleum), hydrotreated heavy paraffinic : No systemic effects were observed.

- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : The oral repeat dose toxicity of an analog substance was evaluated with rats at doses as high as 160 mg/kg/day for up to 52 days. Substance-related toxicity was limited to morbidity, adverse clinical

- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : In repeated dose 90-day oral toxicity in rats, NOAEL=14 mg/kg bw/d(hepatic and thyroidal changes)(OECD TG 408, GLP)
 - Dodecylphenol, branched : (oral) NOAEL=1,000 mg/kg bw/day
- Aspiration hazard :**
- Distillates (petroleum), hydrotreated heavy paraffinic : No data
 - Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : 407.6 cSt(40 °C; ASTM D445-97; 2009)
 - Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : 157 mm²/s(80 °C)
 - Dodecylphenol, branched : 450cSt(40 °C; ASTM D 445; 1993)

12. ECOLOGICAL INFORMATION

1) Ecotoxicity

- Acute toxicity : Not available
- Chronic toxicity : Not classified

○ Acute (short-term) aquatic hazard:

Fish

Invertebrates

Aquatic algae

○ Chronic (Long-term) aquatic hazard:

Fish

Invertebrates

Aquatic algae

2) Persistence and degradability

○ Persistence

- Distillates (petroleum), hydrotreated heavy paraffinic : log Kow 6
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : log Kow 0.56
- Dodecylphenol, branched : 6.26 log Kow
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : log Pow > 2.1 (OECD Guideline 117; 1997)

Degradability

- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : No data
- Dodecylphenol, branched : No data
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : No data

3) Bioaccumulative potential

Bioaccumulation

Biodegradation

4) Mobility in soil

- Distillates (petroleum), hydrotreated heavy paraffinic : No data
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : No data
- Dodecylphenol, branched : No data
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : No data

5) Hazard to the ozone layer

- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Not applicable
- Dodecylphenol, branched : Not applicable
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : fish;Pimephales promelas,34d- NOELR \geq 10 mg/l, algae;Desmodium subspicatus,72h-NOErC=33mg/L(ECHA)

6) Other adverse effects

- Distillates (petroleum), hydrotreated heavy paraffinic : Fish: NOEC(Pimephales promelas) >5000 mg/L/7d
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Invertebrates: 21 d NOEC=46 mg/L (OECD Guideline 202, GLP)(ECHA)
- Dodecylphenol, branched : No data
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : 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) Special precaution for disposal

- 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) Transport hazard class(es)

- 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

EINECS(or ELINCS)

- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Hazardous Substances Requiring Management
- Dodecylphenol, branched : Not applicable
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : Not applicable
- acrylic copolymer : No data
- Business Secret1 : No data

EU CLP (CLASSIFICATION) - PRODUCT :

- Distillates (petroleum), hydrotreated heavy paraffinic : Existing Commercial Chemical Substances
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Pollutant release and transfer register substances, Existing Commercial Chemical Substances
- Dodecylphenol, branched : Existing Commercial Chemical Substances
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : Existing Commercial Chemical Substances
- acrylic copolymer : No data
- Business Secret1 : No data

Substances restricted under REACH

- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Not applicable
- Dodecylphenol, branched : Not applicable
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : Not applicable

- acrylic copolymer : No data
- Business Secret1 : No data

Substances subject to authorization under REACH

REACH SVHC List

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

- Distillates (petroleum), hydrotreated heavy paraffinic : Not applicable
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Not applicable
- Dodecylphenol, branched : Not applicable
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : Not applicable
- acrylic copolymer : No data
- Business Secret1 : No data

○ EU Classification (CLASSIFICATION)

- Distillates (petroleum), hydrotreated heavy paraffinic : Carc. 1B
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Not applicable
- Dodecylphenol, branched : Skin Corr. 1C,Repr. 1B,Eye Dam. 1,Aquatic Acute 1,Aquatic Chronic 1
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : Aquatic Chronic 4
- acrylic copolymer : No data
- Business Secret1 : No data

○ EU Classification (Risk Phrases)

- Distillates (petroleum), hydrotreated heavy paraffinic : H350
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Not applicable
- Dodecylphenol, branched : H314,H360F,H318,H400,H410
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : H413
- acrylic copolymer : No data
- Business Secret1 : No data

○ EU Classification (Safety Phrases)

- Distillates (petroleum), hydrotreated heavy paraffinic : S:53-45
- Phosphorodithioic acid mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters zinc salts : Not applicable
- Dodecylphenol, branched : S:(1/2)-26-36/37/39-45-61
- Coconut oil, reaction product with glycerol ester of 3,5-bis(1,1-dimethyl ethyl)-4-hydroxybenzenepropanoic acid : S:61
- acrylic copolymer : No data
- Business Secret1 : 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.

2) Issue Date

- 2012-11-30

3) Revision number and Last date revised

Number of revised

- 4

Date of last revision

- 2018-01-01

Last Revision History

- revision of chemical composition and company information

4) Other

- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS