SECTION 1. IDENTIFICATION

Product identifier

Trade name : **CX 1067**

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

Use of the Substance/Mixture : Manufacture of plastics products
Polymer additive
Stabilizer

Recommended restrictions on use : None known.

Manufacturer or supplier's details

Company name of supplier : Baerlocher Production USA LLC
Address : 5890 Highland Ridge Drive
Cincinnati OH 45232
Telephone : (513) 604-2327
Emergency telephone number : CHEMTREC: 1-800-424-9300 (inside U.S.) / 1-703 527-3887 (outside U.S.) Collect calls are accepted
E-mail address : Hotline.PS@baerlocher.com
Responsible/issuing person : Product Safety Department

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	:	Category 4
Skin irritation	:	Category 2
Serious eye damage	:	Category 1
Skin sensitisation	:	Category 1
Reproductive toxicity	:	Category 1B
Specific target organ toxicity - single exposure	:	Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure	:	Category 2
Aspiration hazard	:	Category 1

GHS label elements

Hazard pictograms :

Signal word	:	Danger
Hazard statements	:	H227 Combustible liquid. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H336 May cause drowsiness or dizziness. H360D May damage the unborn child. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	:	**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. P260 Do not breathe mist or vapours. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. **Response:** P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P331 Do NOT induce vomiting. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. **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. **Disposal:** P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Other hazards

Combustible material

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : Mixture
Contains organic solvents.

Components

Chemical name	CAS-No.	Concentration (% w/w)
Calcium Compounds	Trade Secret	>= 1 - < 25
Distillates (petroleum), hydrotreated light	64742-47-8	>= 1 - < 25
Phosphorous acid, isodecyl diphenyl ester	26544-23-0	>= 1 - < 25
Distillates (petroleum), hydrotreated light	64742-47-8	>= 1 - < 25
Zinc Compounds	Trade Secret	>= 1 - < 25
Phosphorous acid, triisodecyl ester	25448-25-3	>= 1 - < 20
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	>= 1 - < 25
Naphthalene	91-20-3	>= 0.1 - < 1
Phenol	108-95-2	>= 0.1 - < 1

Trade secret – The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

General advice : Remove and wash contaminated clothing before re-use.
If inhaled : Move to fresh air.
In case of skin contact : Wash off with soap and plenty of water.
Take off contaminated clothing and shoes immediately.
In case of eye contact : Rinse immediately with plenty of water, also under the eyelids.
If swallowed : Call a physician immediately.
Show this safety data sheet to the doctor in attendance.
Most important symptoms and effects, both acute and delayed : No information available.
Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO2)
Dry chemical
Sand
Unsuitable extinguishing media : High volume water jet
Specific hazards during fire-fighting : Smoke and fumes, toxic.

Further information	:	Release of Phenol by hydrolysis.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Remove all sources of ignition. Ensure adequate ventilation. Avoid contact with skin and eyes. Use personal protective equipment.
Environmental precautions	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking. Provide sufficient air exchange and/or exhaust in work rooms.
Conditions for safe storage	:	Store at room temperature in the original container. Keep container tightly closed in a dry and well-ventilated place.
Technical measures/Precautions	:	Observe storage regulations and explosion protection for flammable liquids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated light	64742-47-8	TWA (Mist)	5 mg/m3	OSHA Z-1
Distillates (petroleum), hydrotreated light	64742-47-8	air 8 h (Skin)	200 mg/m3	ACGIH
			100 mg/m3	NIOSH REL
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	TWA (Inhalable fraction and vapor)	10 ppm	ACGIH
Naphthalene	91-20-3	air 8 h (Skin)	10 ppm	ACGIH
		TWA	10 ppm 50 mg/m3	NIOSH REL
		STEL	15 ppm 75 mg/m3	NIOSH REL
		PEL	10 ppm 50 mg/m3	OSHA Z-1
Phenol	108-95-2	TWA	5 ppm	ACGIH
		TWA	5 ppm	NIOSH REL

			19 mg/m3	
		C	15.6 ppm 60 mg/m3	NIOSH REL
		TWA	5 ppm 19 mg/m3	OSHA Z-1
		TWA	5 ppm 19 mg/m3	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam-pling time	Permissible concentra-tion	Basis
Phenol	108-95-2	Phenol	Urine	End of shift (As soon as possible after exposure ceases)	250 mg/g creatinine	ACGIH BEI

Engineering measures : Local exhaust

Personal protective equipment

Respiratory protection : Up to 0.5 mg/m3: (APF=10) Any air-purifying respirator with a high-efficiency particulate filter/(APF=10) Any air-supplied respirator

Hand protection
- Glove thickness : >= 0.7 mm
- Directive : protective gloves acc. to EN 374, e.g. neoprene

Eye protection : Safety glasses

Skin and body protection : Long sleeved clothing
Rubber apron

Protective measures : antistatic shoes

Hygiene measures : When using do not eat or drink.
Do not smoke.
Wash hands before breaks and at the end of workday.
Shower or bathe at the end of working.
Keep working clothes separately.
Handle in accordance with good industrial hygiene and safety practice.
Regular cleaning of equipment, work area and clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Colour : light yellow
Odour : characteristic
Odour Threshold : No data available

pH : substance/mixture is non-soluble (in water)
Melting point/range : No data available

Boiling point/boiling range : 189 - 209 °C

		Value refers to the solvent.
Flash point	:	> 62 °C
Evaporation rate	:	No data available
Flammability (liquids)	:	Combustible Liquid
Upper explosion limit	:	ca. 5.4 %(V) Value refers to the solvent.
Lower explosion limit	:	ca. 0.7 %(V) Value refers to the solvent.
Vapour pressure	:	0.4 hPa (20 °C) Value refers to the solvent.
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0.8 - 1.0 g/cm3
Solubility(ies)		
Water solubility	:	slightly soluble
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	230 °C Value refers to the solvent.
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Refractive index	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable at normal ambient temperature and pressure.
Chemical stability	:	No decomposition if stored normally.
Possibility of hazardous reactions	:	Vapours may form explosive mixture with air.
Conditions to avoid	:	Keep away from heat and sources of ignition.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	No decomposition if used as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Skin contact
Ingestion

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate: 3,605 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 200 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Components:

Calcium Compounds:

Acute oral toxicity	:	Remarks: Read-across (Analogy) LD50: > 2,000 mg/kg Method: Acute toxicity estimate Assessment: The component/mixture is minimally toxic after single ingestion.
Acute inhalation toxicity	:	Remarks: Not classified due to lack of data.
Acute dermal toxicity	:	Remarks: Read-across (Analogy) LD50 (Rat): > 2,000 mg/kg Method: Acute toxicity estimate Assessment: The substance or mixture has no acute dermal toxicity

Distillates (petroleum), hydrotreated light:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): > 5 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg

Method: OECD Test Guideline 402

isodecyl diphenyl phosphite:

Acute oral toxicity : LD50 (Rat): 3,840 mg/kg
Method: standardised international/national methodology
Assessment: The component/mixture is minimally toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat): > 8.4 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes

LC50 (Rat): > 2.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity

Distillates (petroleum), hydrotreated light:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 420
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Acute inhalation toxicity : LC50 (Rat): > 5.28 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Zinc Compounds:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

Remarks: Read-across (Analogy)
referring to zinc content

LD50 (Rat): 2,043 mg/kg
Assessment: The component/mixture is minimally toxic after single ingestion.
Remarks: Read-across (Analogy)
referring to carboxylic acid content

Acute inhalation toxicity : Remarks: Not classified due to lack of data.

Acute dermal toxicity : Remarks: Read-across (Analogy)

LD50 (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

triisodecyl phosphite:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): > 12.6 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes

LC50 (Rat): > 53.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity

2-(2-butoxyethoxy)ethanol:

Acute oral toxicity : LD50 (Mouse): 2,410 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 3 mg/l
Exposure time: 2 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

GLP: no

LC50 (Rat): > 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): 2,764 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Naphthalene:

Acute oral toxicity : Remarks: Classification
Labelling according to EC Directives
Regulation (EC) No 1272/2008, Annex VI, Table 3
Acute oral toxicity
Category 4

phenol:

Acute oral toxicity : LD50 (Rat): 340 mg/kg
Method: OECD Test Guideline 401

(Humans): Assessment: The component/mixture is toxic after single ingestion.

Acute inhalation toxicity : LC0 (Rat): 0.9 mg/l
Exposure time: 8 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

LC50 (Rat): > 0.9 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

(Humans): Assessment: The component/mixture is toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rat, female): 660 mg/kg
Method: OECD Test Guideline 402

(Humans): Assessment: The component/mixture is toxic after single contact with skin.

Skin corrosion/irritation

Components:

Calcium Compounds:

Species: reconstructed human epidermis (RhE)

Method: OECD Test Guideline 439
Result: Skin irritation
GLP: yes

Species: In Vitro Membrane Barrier Test Method for Skin Corrosion - CORROSITEX
Method: OECD Test Guideline 435
Result: Not corrosive
GLP: yes

Distillates (petroleum), hydrotreated light:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

isodecyl diphenyl phosphite:

Species: Rabbit
Method: standardised international/national methodology
Result: Mild skin irritation

Distillates (petroleum), hydrotreated light:

Species: Rabbit
Exposure time: 24 h
Method: standardised international/national methodology
Result: Skin irritation
GLP: yes

Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes

Zinc Compounds:

Remarks: Read-across (Analogy)

Species: Rabbit
Method: OECD Test Guideline 404
Result: Mild skin irritation
GLP: yes

triisodecyl phosphite:

Species: Rabbit
Method: standardised international/national methodology
Result: No skin irritation
Remarks: Based on available data, the classification criteria are not met.

2-(2-butoxyethoxy)ethanol:

Species: Rabbit
Method: OECD Test Guideline 404

Result: Mild skin irritation
GLP: no

phenol:

Species: in vitro assay
Exposure time: 1 h
Method: Regulation (EC) No. 761/2009, B.46.
Result: Skin irritation
GLP: yes

Species: reconstructed human epidermis (RhE)
Exposure time: 3 min - 1 h
Method: OECD Test Guideline 431
Result: Corrosive
GLP: yes

Species: Rabbit
Exposure time: 24 h
Method: standardised international/national methodology
Result: Corrosive

Species: Rat
Exposure time: 1 min
Method: standardised international/national methodology
Result: Corrosive

Result: Corrosive after 3 minutes to 1 hour of exposure

Serious eye damage/eye irritation

Components:

Calcium Compounds:

Species: Rabbit
Result: Irreversible effects on the eye
Method: OECD Test Guideline 405
GLP: yes

Distillates (petroleum), hydrotreated light:

Remarks: Read-across (Analogy)

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

isodecyl diphenyl phosphite:

Species: Rabbit
Result: No eye irritation
Method: standardised international/national methodology
Remarks: Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:

Species: Rabbit
Result: not irritating
Method: standardised international/national methodology
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Zinc Compounds:

Remarks: Read-across (Analogy)

Species: Rabbit
Result: Eye irritation
Method: OECD Test Guideline 405
GLP: yes

triisodecyl phosphite:

Species: Rabbit
Result: No eye irritation
Method: standardised international/national methodology
Remarks: Based on available data, the classification criteria are not met.

2-(2-butoxyethoxy)ethanol:

Species: Rabbit
Result: Eye irritation
Method: OECD Test Guideline 405
GLP: no

phenol:

Species: Rabbit
Result: Irreversible effects on the eye
Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Components:

Calcium Compounds:

Remarks: Skin sensitisation

Remarks: Read-across (Analogy)

Test Type: Maximisation Test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Remarks: Respiratory sensitisation
Not classified due to lack of data.

Distillates (petroleum), hydrotreated light:

Remarks: Read-across (Analogy)

Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

Remarks: Respiratory sensitisation

Remarks: Based on available data, the classification criteria are not met.

isodecyl diphenyl phosphite:

Remarks: Skin sensitisation

Test Type: Maximisation Test
Species: Guinea pig
Method: standardised international/national methodology
Result: May cause sensitisation by skin contact.

Remarks: Respiratory sensitisation
Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:

Remarks: Skin sensitisation

Test Type: Buehler Test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Remarks: Respiratory sensitisation

Remarks: Based on available data, the classification criteria are not met.

Zinc Compounds:

Remarks: Skin sensitisation

Remarks: Read-across (Analogy)
Based on available data, the classification criteria are not met.

Remarks: Respiratory sensitisation

Remarks: Based on available data, the classification criteria are not met.

triisodecyl phosphite:

Remarks: Skin sensitisation

Test Type: LLNA

Species: Mouse
Method: OECD Test Guideline 429
Result: May cause sensitisation by skin contact.
GLP: yes

Remarks: Respiratory sensitisation
Based on available data, the classification criteria are not met.

2-(2-butoxyethoxy)ethanol:

Remarks: Skin sensitisation

Test Type: Maximisation Test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
Remarks: Based on available data, the classification criteria are not met.

Remarks: Respiratory sensitisation
Not classified due to lack of data.

phenol:

Remarks: Skin sensitisation

Test Type: Buehler Test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

Test Type: Intracutaneous test
Species: Mouse
Result: negative
Remarks: Based on available data, the classification criteria are not met.

Remarks: Respiratory sensitisation
Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Components:

Calcium Compounds:

Genotoxicity in vitro : Remarks: Read-across (Analogy)

: Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Species: Bacteria
Method: OECD Test Guideline 471
Result: negative
GLP: yes

: Remarks: Read-across (Analogy)

: Test Type: In vitro mammalian cell gene mutation test
Species: mouse lymphoma cells
Method: OECD Test Guideline 476
Result: negative
GLP: yes

: Remarks: Read-across (Analogy)

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)
Species: Human lymphocytes
Method: OECD Test Guideline 473
Result: negative
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Species: Bacteria
Method: OECD Test Guideline 471
Result: negative

: Remarks: Read-across (Analogy)

: Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative

: Test Type: In vitro gene mutation study in mammalian cells
Method: OECD Test Guideline 476
Result: negative

: Test Type: sister chromatid exchange assay
Method: OECD Test Guideline 479
Result: negative

Genotoxicity in vivo : Remarks: Read-across (Analogy)

Test Type: In vivo micronucleus test
Method: OECD Test Guideline 474
Result: negative

Test Type: dominant lethal test
Method: OECD Test Guideline 478
Result: negative

isodecyl diphenyl phosphite:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Species: Bacteria
Method: OECD Test Guideline 471

Result: negative
GLP: yes

: Test Type: DNA repair-suspension assay
Species: Bacteria
Method: standardised international/national methodology
Result: negative
GLP: yes

: Remarks: Read-across (Analogy)

: Test Type: Micronucleus test
Species: Human lymphocytes
Method: OECD Test Guideline 487
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Species: Bacteria
Method: OECD Test Guideline 471
Result: negative

: Test Type: In vitro gene mutation study in mammalian cells
Species: mouse lymphoma cells
Method: OECD Test Guideline 476
Result: negative
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Genotoxicity in vivo : Test Type: Genotoxicity in vivo
Species: Rat
Application Route: intraperitoneally
Method: OECD Test Guideline 478
Result: negative

Test Type: Genotoxicity in vivo
Species: Mouse
Application Route: intraperitoneally
Method: OECD Test Guideline 478
Result: negative

Test Type: Genotoxicity in vivo
Species: Mouse
Application Route: Inhalation
Method: OECD Test Guideline 478
Result: negative

Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)
Species: Rat
Application Route: intraperitoneally
Method: OECD Test Guideline 475
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Zinc Compounds:

Genotoxicity in vitro : Remarks: Read-across (Analogy)

: Remarks: Based on available data, the classification criteria are not met.

triisodecyl phosphite:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Species: Bacteria
Method: OECD Test Guideline 471
Result: negative
GLP: yes

: Test Type: In vitro gene mutation study in mammalian cells
Species: Chinese hamster ovary cells
Method: OECD Test Guideline 476
Result: negative
GLP: yes

2-(2-butoxyethoxy)ethanol:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Species: Bacteria
Method: OECD Test Guideline 471
Result: negative
GLP: yes

: Test Type: In vitro gene mutation study in mammalian cells
Species: Chinese hamster ovary cells
Method: OECD Test Guideline 476
Result: negative
GLP: yes

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)
Species: Chinese hamster ovary cells

Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 475
Result: negative
Remarks: Based on available data, the classification criteria are not met.

phenol:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Species: Bacteria
Method: OECD Test Guideline 471
Result: negative
GLP: yes

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)
Species: Chinese hamster ovary cells
Method: OECD Test Guideline 487
Result: positive

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)
Species: Chinese hamster ovary cells
Method: OECD Test Guideline 473
Result: positive

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Method: OECD Test Guideline 474
Result: positive
GLP: yes

Test Type: Transgenic rodent somatic cell gene mutation assay
Species: Mouse
Method: OECD Test Guideline 488
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment : Suspected of inducing heritable mutations in the germ cells of humans.

Carcinogenicity

Product:

Remarks: This product contains known or suspected carcinogens listed by IARC, NTP and/or OSHA at or above reportable quantities.

Components:

Calcium Compounds:
Remarks: Not classified due to lack of data.

Distillates (petroleum), hydrotreated light:
Remarks: Read-across (Analogy)

Method: OECD Test Guideline 453
Remarks: Based on available data, the classification criteria are not met.

isodecyl diphenyl phosphite:
Remarks: Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:
Species: Mouse
Application Route: Skin contact
Method: OECD Test Guideline 451
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Zinc Compounds:
Remarks: Read-across (Analogy)

Remarks: Based on available data, the classification criteria are not met.

triisodecyl phosphite:
Remarks: Based on available data, the classification criteria are not met.

2-(2-butoxyethoxy)ethanol:
Remarks: Not classified due to lack of data.

Naphthalene:
Remarks: IARC: (International Agency for Research on Cancer)
Category 2B

Remarks: NTP - National Toxicology Program Report
Reasonably anticipated to be a human carcinogen

phenol:
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 451
Result: no increase in tumors observed

Species: Rat

Application Route: Oral
Method: OECD Test Guideline 451
Result: no increase in tumors observed
Remarks: Based on available data, the classification criteria are not met.

Reproductive toxicity

Components:

Calcium Compounds:

Effects on fertility : Remarks: Read-across (Analogy)

Test Type: Three-generation study
Species: Rat
Application Route: Oral
General Toxicity - Parent: NOAEL: 75 mg/kg body weight
General Toxicity F1: NOAEL: 1,500 mg/kg food
Method: OECD Test Guideline 416
Remarks: Based on available data, the classification criteria are not met.

Effects on foetal development : Remarks: Read-across (Analogy)

Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 75 mg/kg body weight
Developmental Toxicity: NOAEL: 75 mg/kg body weight
Method: OECD Test Guideline 416
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:

Effects on fertility : Remarks: Read-across (Analogy)

Test Type: One-generation reproduction toxicity test
Method: OECD Test Guideline 415
Remarks: Based on available data, the classification criteria are not met.

Effects on foetal development : Remarks: Read-across (Analogy)

Method: OECD Test Guideline 414
Remarks: Based on available data, the classification criteria are not met.

isodecyl diphenyl phosphite:

Effects on fertility : Remarks: Read-across (Analogy)

Test Type: Screening for reproductive/developmental toxicity
Species: Rat
Application Route: Oral

General Toxicity - Parent: NOAEL: 14 mg/kg body weight
Fertility: NOAEL: 40 mg/kg body weight
Early Embryonic Development: NOAEL: 15 mg/kg body weight
Method: OECD Test Guideline 422
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Effects on foetal development : Remarks: Read-across (Analogy)

Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 40 mg/kg body weight
Teratogenicity: NOAEL: 40 mg/kg body weight
Embryo-foetal toxicity: NOAEL: 40 mg/kg body weight
Method: OECD Test Guideline 414
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:

Effects on fertility : Test Type: One-generation reproduction toxicity test
Species: Rat
Application Route: Oral

Test Type: Screening for reproductive/developmental toxicity
Species: Rat
Application Route: Skin contact
General Toxicity - Parent: > 494
Method: OECD Test Guideline 421
Remarks: Based on available data, the classification criteria are not met.

Test Type: One-generation reproduction toxicity test
Species: Rat
Application Route: Oral

Test Type: Screening for reproductive/developmental toxicity
Species: Rat
Application Route: Skin contact
NOAEL: > 494 mg/kg,
Method: OECD Test Guideline 421
Remarks: Based on available data, the classification criteria are not met.

Effects on foetal development : Species: Rat
Application Route: Inhalation
Method: OECD Test Guideline 414

Species: Rat
Application Route: Oral

Method: OECD Test Guideline 414
Remarks: Based on available data, the classification criteria are not met.
Species: Rat
Application Route: Inhalation
Method: OECD Test Guideline 414
Species: Rat
Application Route: Oral
Method: OECD Test Guideline 414
Remarks: Based on available data, the classification criteria are not met.

Zinc Compounds:

Effects on foetal development	:	Remarks: Read-across (Analogy) referring to carboxylic acid content May damage the unborn child.
Reproductive toxicity - Assessment	:	Clear evidence of adverse effects on development, based on animal experiments.

triisodecyl phosphite:

Effects on fertility	:	Test Type: Screening for reproductive/developmental toxicity Species: Rat Application Route: Oral General Toxicity - Parent: NOAEL: 1,000 mg/kg body weight Fertility: NOAEL: 1,000 mg/kg body weight Early Embryonic Development: NOAEL: 1,000 mg/kg body weight Method: OECD Test Guideline 422 GLP: yes Remarks: Based on available data, the classification criteria are not met.
Effects on foetal development	:	Test Type: Screening for reproductive/developmental toxicity Species: Rat Application Route: Oral General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight Embryo-foetal toxicity: NOAEL: 1,000 mg/kg body weight Method: OECD Test Guideline 422 GLP: yes Remarks: Based on available data, the classification criteria are not met.

2-(2-butoxyethoxy)ethanol:

Effects on fertility	:	Test Type: Two-generation study Species: Mouse Application Route: Oral General Toxicity - Parent: NOAEL: 2,200 mg/kg body weight Fertility: NOAEL: 2,200 mg/kg body weight Early Embryonic Development: NOAEL: 2,200 mg/kg body weight

Method: OECD Test Guideline 416

Test Type: One-generation reproduction toxicity test
Species: Rat
Application Route: Oral
General Toxicity - Parent: NOAEL: 1,000 mg/kg body weight
Fertility: NOAEL: 1,000 mg/kg body weight
Early Embryonic Development: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 415

Test Type: One-generation reproduction toxicity test
Species: Rat
Application Route: Skin contact
General Toxicity - Parent: NOAEL: 2,000 mg/kg body weight
Fertility: NOAEL: 2,000 mg/kg body weight
Early Embryonic Development: 2,000 mg/kg body weight
Method: OECD Test Guideline 415
Remarks: Based on available data, the classification criteria are not met.

Effects on foetal development : Species: Rabbit
Application Route: Skin contact
General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight
Teratogenicity: NOAEL: 1,000 mg/kg body weight
Embryo-foetal toxicity: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 414

Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 633 mg/kg body weight
Teratogenicity: NOAEL: 633 mg/kg body weight
Embryo-foetal toxicity: NOAEL: 633 mg/kg body weight
Method: OECD Test Guideline 414
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

phenol:

Effects on fertility : Test Type: Two-generation reproductive toxicity
Species: Rat
Application Route: Oral
General Toxicity - Parent: NOAEL: 71 mg/kg body weight
General Toxicity F1: NOAEL: 70 mg/kg body weight
Fertility: NOAEL: 71 mg/kg body weight
Early Embryonic Development: 70 mg/kg body weight
Method: OECD Test Guideline 416
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Effects on foetal development : Species: Rat
Application Route: Oral

General Toxicity Maternal: NOAEL: 60 mg/kg body weight
Embryo-foetal toxicity: NOAEL: 120 mg/kg body weight
Method: OECD Test Guideline 414
GLP: yes

Species: Mouse
Application Route: Oral
General Toxicity Maternal: NOAEL: 140 mg/kg body weight
Embryo-foetal toxicity: NOAEL: 140 mg/kg body weight
Method: OECD Test Guideline 414
Remarks: Based on available data, the classification criteria are not met.

STOT - single exposure

Components:

Calcium Compounds:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Distillates (petroleum), hydrotreated light:
Assessment: May cause drowsiness or dizziness.

isodecyl diphenyl phosphite:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Distillates (petroleum), hydrotreated light:
Assessment: May cause drowsiness or dizziness.

Zinc Compounds:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

triisodecyl phosphite:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

2-(2-butoxyethoxy)ethanol:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

phenol:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Components:

Calcium Compounds:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Distillates (petroleum), hydrotreated light:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

isodecyl diphenyl phosphite:
Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Zinc Compounds:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

triisodecyl phosphite:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

2-(2-butoxyethoxy)ethanol:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

phenol:
Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

Calcium Compounds:
Remarks: Read-across (Analogy)

Species: Rat
NOAEL: 300 mg/kg
Application Route: Oral
Exposure time: 28 d
Remarks: Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:
Remarks: Read-across (Analogy)

Application Route: Inhalation

Exposure time: 90 d
Method: OECD Test Guideline 413

Application Route: Oral
Exposure time: 90d
Method: OECD Test Guideline 408
Remarks: Based on available data, the classification criteria are not met.

isodecyl diphenyl phosphite:

Remarks: Read-across (Analogy)

Species: Rat
NOAEL: 15 mg/kg
Application Route: Oral
Exposure time: 16 w
Method: OECD Test Guideline 422
GLP: yes

Distillates (petroleum), hydrotreated light:

Species: Rat
Application Route: Oral
Remarks: Based on available data, the classification criteria are not met.

Species: rat / mouse
Application Route: Inhalation
Method: OECD Test Guideline 413
Remarks: Based on available data, the classification criteria are not met.

Species: Rat
Application Route: Dermal
Method: OECD Test Guideline 410
GLP: yes
Remarks: Based on available data, the classification criteria are not met.

Zinc Compounds:

Remarks: Read-across (Analogy)
Based on available data, the classification criteria are not met.

triisodecyl phosphite:

Species: Rat
NOAEL: 1,000 mg/kg
Application Route: Oral
Method: OECD Test Guideline 422
GLP: yes

2-(2-butoxyethoxy)ethanol:

Species: Rat
NOAEL: 250 mg/kg
Application Route: Oral
Exposure time: 90d

Method: OECD Test Guideline 408
GLP: yes

Species: Rat
< 200 mg/kg
Application Route: Dermal
Exposure time: 90d
Method: OECD Test Guideline 411
Symptoms: Local effects

Species: Rat
NOAEL: 0.094 mg/l
Application Route: Inhalation
Exposure time: 90d
Method: OECD Test Guideline 413
GLP: yes

phenol:

Species: Rat
NOAEL: 300 mg/kg
Application Route: Oral
Exposure time: 13 w
Method: OECD Test Guideline 424
GLP: yes

Species: Monkey
0.02 mg/l
Application Route: Inhalation
Exposure time: 90d w

Species: Rabbit
NOAEL: 130 mg/kg
Application Route: Skin contact
Exposure time: 4w

Aspiration toxicity

Components:

Calcium Compounds:

Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:

May be fatal if swallowed and enters airways.

isodecyl diphenyl phosphite:

Based on available data, the classification criteria are not met.

Distillates (petroleum), hydrotreated light:

May be fatal if swallowed and enters airways.

Zinc Compounds:
Based on available data, the classification criteria are not met.

triisodecyl phosphite:
Based on available data, the classification criteria are not met.

2-(2-butoxyethoxy)ethanol:
Not classified due to lack of data.

phenol:
Based on available data, the classification criteria are not met.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Calcium Compounds:

Toxicity to fish	:	Remarks: Read-across (Analogy) LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes Remarks: referring to carboxylic acid content LL50 (Oncorhynchus mykiss (rainbow trout)): < 300 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes Remarks: referring to carboxylic acid content
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: Read-across (Analogy) EL50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes Remarks: referring to carboxylic acid content
Toxicity to algae	:	Remarks: Read-across (Analogy) EC50 (Raphidocelis subcapitata (freshwater green alga)): >

100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes
Remarks: referring to carboxylic acid content

Toxicity to fish (Chronic toxicity) : Remarks: Read-across (Analogy)

Chronic Toxicity Value (Fish): 1.6 mg/l
Exposure time: 30 d
Method: QSAR
Remarks: referring to carboxylic acid content

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: Read-across (Analogy)

Chronic Toxicity Value (Daphnia magna (Water flea)): 1.7 mg/l
Method: QSAR

Toxicity to bacteria : GLP:
Remarks: Read-across (Analogy)

EC50 (Escherichia coli): 88.257 mg/l
Method: QSAR
GLP:
Remarks: referring to carboxylic acid content

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Distillates (petroleum), hydrotreated light:

Ecotoxicology Assessment

Acute aquatic toxicity :

Remarks: Read-across (Analogy)
Kerosene

This product has no known ecotoxicological effects.

Chronic aquatic toxicity :

Remarks: Read-across (Analogy)
Kerosene

Toxic to aquatic life with long lasting effects.

isodecyl diphenyl phosphite:

Toxicity to fish : Remarks: study scientifically unjustified

Toxicity to daphnia and other : Remarks: study scientifically unjustified

aquatic invertebrates
Toxicity to algae : Remarks: study scientifically unjustified

Toxicity to fish (Chronic toxicity) : Remarks: study scientifically unjustified

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: study scientifically unjustified

Toxicity to bacteria : Remarks: study scientifically unjustified

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects., Upon contact with water DPDP readily hydrolyses into a mixture of phosphorous acid, isodecanol and phenol in an approximate molar ratio of 1:1:2.

Distillates (petroleum), hydrotreated light:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 2.5 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203
GLP: yes
Remarks: Value refered to the Water accumulated fraction (WAF).

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 1.4 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes
Remarks: Value refered to the Water accumulated fraction (WAF).

Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): 1.3 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes
Remarks: Value refered to the Water accumulated fraction (WAF).

Toxicity to fish (Chronic toxicity) : NOEL (Oncorhynchus mykiss (rainbow trout)): 0.098 mg/l
Exposure time: 28 d
Method: QSAR
GLP: no

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Daphnia magna (Water flea)): 0.48 mg/l
Exposure time: 21 d
Test Type: semi-static test

Method: OECD Test Guideline 211
GLP: yes
Remarks: Value refered to the Water accumulated fraction (WAF).

Toxicity to bacteria : LL50 (Tetrahymena pyriformis): 677.9 mg/l
Exposure time: 72 h
Method: QSAR
GLP: no

Ecotoxicology Assessment

Acute aquatic toxicity : Based on available data, the classification criteria are not met.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Zinc Compounds:

Toxicity to fish : Remarks: Read-across (Analogy)

LC50 (Oncorhynchus mykiss (rainbow trout)): 0,169
Exposure time: 96 h
Test Type: static test
Method: standardised international/national methodology

Remarks: Read-across (Analogy)

LC50 (Pimephales promelas (fathead minnow)): 0,330 - 0,780
Exposure time: 96 h

Remarks: Read-across (Analogy)

LC50 (Lepomis macrochirus (Bluegill sunfish)): > 100
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : Remarks: Read-across (Analogy)

LC50 (Ceriodaphnia dubia (water flea)): 0,147 - > 0,53
Exposure time: 48 h
Method: standardised international/national methodology

Remarks: Read-across (Analogy)

EC50 (Daphnia magna (Water flea)): 85,4
Exposure time: 48 h
Test Type: static test
Method: standardised international/national methodology
GLP: no

Toxicity to algae : Remarks: Read-across (Analogy)

IC50 (Raphidocelis subcapitata (freshwater green alga)):

0,136
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

Remarks: Read-across (Analogy)

NOEC (Raphidocelis subcapitata (freshwater green alga)): 0,019

Remarks: Read-across (Analogy)

EC50 (Desmodesmus subspicatus (green algae)): 49,3
Exposure time: 72 h
Test Type: static test
Method: DIN 38412
GLP: no

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : Remarks: Read-across (Analogy)

NOEC: 0,044 - 0,530
Test Type: Fresh water

Remarks: Read-across (Analogy)

NOEC: 0,025
Test Type: Marine water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: Read-across (Analogy)

NOEC: 0,014 - 0,400
Test Type: Fresh water

Remarks: Read-across (Analogy)

NOEC: 0,0056 - 0,9
Test Type: Marine water

Remarks: Read-across (Analogy)

NOEC (Daphnia magna (Water flea)): 18 - 25
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to bacteria : GLP:
Remarks: Read-across (Analogy)

EC50 (activated sludge): 5,2
Exposure time: 3 h
Test Type: static test

Method: OECD Test Guideline 209
GLP:

GLP:
Remarks: Read-across (Analogy)

EC50 (Pseudomonas putida): 112,1
Exposure time: 17 h
Test Type: static test
Method: standardised international/national methodology
GLP: no

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Harmful to aquatic life with long lasting effects.

triisodecyl phosphite:

Toxicity to fish	:	Remarks: study scientifically unjustified
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: study scientifically unjustified
Toxicity to algae	:	Remarks: study scientifically unjustified
Toxicity to fish (Chronic toxicity)	:	Remarks: study technically not feasible
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	Remarks: study technically not feasible
Toxicity to bacteria	:	Remarks: study scientifically unjustified

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.

2-(2-butoxyethoxy)ethanol:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 1,300 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: no
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 96 h

Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

EC50 (Raphidocelis subcapitata (freshwater green alga)): 1,101 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity)	:	Chronic Toxicity Value (Fish): 369 mg/l Exposure time: 30 d Method: QSAR
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC50 (Non-standard test species): 112 mg/l Exposure time: 14 d Method: QSAR
Toxicity to bacteria	:	EC10 (activated sludge): > 1,995 mg/l Exposure time: 0.5 h Test Type: static test Method: OECD Test Guideline 209 GLP: no

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.

Naphthalene:

Ecotoxicology Assessment

Acute aquatic toxicity	:	Classification, Labelling according to EC Directives, Regulation (EC) No 1272/2008, Annex VI, Table 3, Very toxic to aquatic life.
Chronic aquatic toxicity	:	Classification, Labelling according to EC Directives, Regulation (EC) No 1272/2008, Annex VI, Table 3, Very toxic to aquatic life with long lasting effects.

phenol:

Toxicity to fish	:	LC50 (Poecilia reticulata (guppy)): 21.93 mg/l Exposure time: 14 d Test Type: semi-static test Method: OECD Test Guideline 204 GLP: yes

LC50 (Oncorhynchus mykiss (rainbow trout)): 8.9 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: standardised international/national methodology

LC50 (Pimephales promelas (fathead minnow)): 24.9 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: standardised international/national methodology

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia dubia (water flea)): 3.1 mg/l Exposure time: 48 h Test Type: static test Method: standardised international/national methodology GLP: no
Toxicity to algae	:	EC50 (Lemna minor (duckweed)): 61.82 mg/l Exposure time: 7 d Test Type: static test Method: OECD Test Guideline 221 GLP: yes
Toxicity to fish (Chronic toxicity)	:	NOEC (Cirrhina mrigala): 0.077 mg/l Exposure time: 60 d Test Type: semi-static test Method: standardised international/national methodology
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.16 mg/l Exposure time: 16 d Test Type: semi-static test Method: standardised international/national methodology
M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to bacteria	:	IC50 (Bacteria): 21 mg/l Exposure time: 24 h GLP: no

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

Calcium Compounds:

Biodegradability	:	Remarks: Read-across (Analogy) aerobic Inoculum: activated sludge Result: Not readily biodegradable. Biodegradation: 11 % Exposure time: 28 d Method: OECD Test Guideline 301F Remarks: referring to carboxylic acid content

Distillates (petroleum), hydrotreated light:

Biodegradability : Remarks: Read-across (Analogy)

Result: Readily biodegradable.

isodecyl diphenyl phosphite:

Biodegradability : Remarks: Read-across (Analogy)

aerobic
Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 84 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes

Distillates (petroleum), hydrotreated light:

Biodegradability : aerobic
Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 61 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: yes

Zinc Compounds:

Biodegradability : Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

Remarks: Read-across (Analogy)

aerobic
Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 99 %
Exposure time: 28 d
Method: OECD Test Guideline 301E
GLP: no
Remarks: The organic components of the product are biodegradable.

triisodecyl phosphite:

Biodegradability : aerobic
Inoculum: activated sludge
Result: Not readily biodegradable.
Biodegradation: 1.31 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes

aerobic
Inoculum: activated sludge
Result: Inherently biodegradable.
Biodegradation: 63 %
Exposure time: 42 d
Method: OECD Test Guideline 301D
GLP: yes

2-(2-butoxyethoxy)ethanol:

Biodegradability : aerobic
Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 85 %
Exposure time: 28 d
Method: OECD Test Guideline 301C
GLP: no

phenol:

Biodegradability : aerobic
Inoculum: activated sludge
Result: Readily biodegradable.
Biodegradation: 62 %
Exposure time: 10 d
Method: OECD Test Guideline 301C

Bioaccumulative potential

Components:

Calcium Compounds:

Bioaccumulation : Remarks: Read-across (Analogy)

Species: Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): < 225
Exposure time: 14 d
Concentration: 2.22 mg/l
Method: OECD Test Guideline 305
GLP: yes
Remarks: referring to carboxylic acid content

Partition coefficient: n-octanol/water : Remarks: Not applicable

Distillates (petroleum), hydrotreated light:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : log Pow: > 4
Method: calculated

isodecyl diphenyl phosphite:

Bioaccumulation : Bioconcentration factor (BCF): 606.5

Method: QSAR

Partition coefficient: n-octanol/water : log Pow: 8.52 (25 °C)
Method: QSAR

Distillates (petroleum), hydrotreated light:

Bioaccumulation : Remarks: No data available

Zinc Compounds:

Bioaccumulation : Remarks: Read-across (Analogy)

Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: > 5.7 (20 °C)
Method: OECD Test Guideline 107
GLP: no

triisodecyl phosphite:

Bioaccumulation : Remarks: study scientifically unjustified

Partition coefficient: n-octanol/water : log Pow: 12.31 (25 °C)
Method: QSAR

2-(2-butoxyethoxy)ethanol:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 1 (20 °C)
pH: 7
Method: OECD Test Guideline 117
GLP: yes

phenol:

Bioaccumulation : Species: Danio rerio (zebra fish)
Bioconcentration factor (BCF): 17.5
Exposure time: 5 h
Temperature: 25 °C
Method: OECD Test Guideline 305
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 1.47 (30 °C)

Mobility in soil

Components:

Calcium Compounds:

Mobility : Remarks: No data available

Distillates (petroleum), hydrotreated light:

Mobility : Remarks: No data available

isodecyl diphenyl phosphite:

Mobility : Remarks: No data available

Distillates (petroleum), hydrotreated light:

Mobility : Method: QSAR
Remarks: Predicted distribution to environmental compartments
Air

Zinc Compounds:

Mobility : Remarks: Read-across (Analogy)

Method: QSAR
Remarks: Predicted distribution to environmental compartments
Water

2-(2-butoxyethoxy)ethanol:

Mobility : Method: QSAR
Remarks: Predicted distribution to environmental compartments
Water

phenol:

Mobility : Method: QSAR
Remarks: Predicted distribution to environmental compartments
Water

Other adverse effects

Product:

Results of PBT and vPvB assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

Calcium Compounds:

Results of PBT and vPvB assessment : Based on available data, the classification criteria are not met.

Endocrine disrupting potential : No information available.

Distillates (petroleum), hydrotreated light:

Results of PBT and vPvB : Based on available data, the classification criteria are not met.

assessment

Endocrine disrupting potential : No information available.

isodecyl diphenyl phosphite:

Results of PBT and vPvB assessment : Based on available data, the classification criteria are not met.

Endocrine disrupting potential : No information available.

Distillates (petroleum), hydrotreated light:

Results of PBT and vPvB assessment : Based on available data, the classification criteria are not met.

Endocrine disrupting potential : No information available.

Zinc Compounds:

Results of PBT and vPvB assessment : Based on available data, the classification criteria are not met.

Endocrine disrupting potential : No information available.

triisodecyl phosphite:

Results of PBT and vPvB assessment : Based on available data, the classification criteria are not met.

Endocrine disrupting potential : No information available.

2-(2-butoxyethoxy)ethanol:

Results of PBT and vPvB assessment : Based on available data, the classification criteria are not met.

Endocrine disrupting potential : No information available.

phenol:

Results of PBT and vPvB assessment : Based on available data, the classification criteria are not met.

Endocrine disrupting potential : No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Consult an expert on the disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations.

Dispose in accordance with local, state and federal regulations.

Contaminated packaging : Empty containers must be handled with care due to product residue.

SECTION 14. TRANSPORT INFORMATION

National Regulations

DOT
Not dangerous goods in containers < 119 gallons (non-bulk)

For Bulk containers:

UN/ID/NA number	:	NA 1993
Proper shipping name	:	COMBUSTIBLE LIQUID, N.O.S. (Distillates (petroleum), hydrotreated light, solution)
Class	:	3
Packing group	:	III
Labels	:	Combustible Liquid
Marine pollutant	:	yes

International Regulations

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Distillates (petroleum), hydrotreated light, diphenyl(isodecyl)phosphite, solution)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964

IMDG-Code

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Distillates (petroleum), hydrotreated light, diphenyl(isodecyl)phosphite, solution)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

SARA 313 : This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

Components	CAS-No.	Wt.
Zinc Compounds (N982)	Not Assigned	10.6
Glycol ethers (N230)	112-34-5	4.0
Naphthalene	91-20-3	0.16-0.24

The components of this product are reported in the following inventories:

EINECS	listed
TSCA	listed
DSL	listed
AICS	listed
ECL	listed
IECSC	listed
PICCS	listed

SECTION 16. OTHER INFORMATION

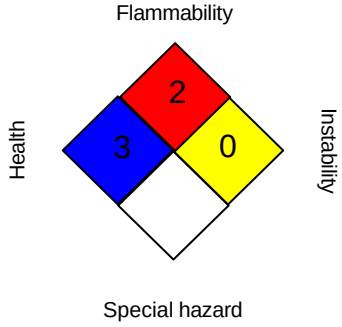
Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New

Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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