

**SumTech FMG-1**

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**SECTION 1. IDENTIFICATION**

Product name : SumTech FMG-1  
Article-No. : 320443  
Other means of identification : No data available

**Manufacturer or supplier's details**

Company name of supplier : Klüber Lubrication NA LP  
9010 CR 2120  
Tyler, Texas 75707  
Phone: (903) 534-8021  
Fax: (903) 581-4376

32 Industrial Drive  
Londonderry, NH 03053  
Phone: (603) 647-4104  
Fax: (603) 647-4106

E-mail address of person responsible for the SDS : mcm@us.kluber.com  
Material Compliance Management

Emergency telephone number : +1-517-545-7070 NCEC

**Recommended use of the chemical and restrictions on use**

Recommended use : Grease  
Restrictions on use : Restricted to professional users.

**SECTION 2. HAZARDS IDENTIFICATION**

**GHS classification in accordance with the Hazardous Products Regulations**

Not a hazardous substance or mixture.

**GHS label elements**

This chemical is not considered hazardous by the Canadian Hazardous Products Regulations (WHMIS 2015).

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

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Chemical nature : Mineral oil.  
aluminium complex soap  
Synthetic hydrocarbon oil

**Components**

Chemical name	CAS-No.	Concentration (% w/w)
Mineral Oil	Proprietary	Trade secret ( $\geq 60 - < 80$ )
Mineral Oil	Proprietary	Trade secret ( $\geq 5 - < 10$ )
(benzoato-O,O')hydroxy(octadecanoato-O,O')aluminium	54326-11-3	Trade secret ( $\geq 5 - < 10$ )
Dec-1-ene, homopolymer, hydrogenated	68037-01-4	Trade secret ( $\geq 1 - < 5$ )
disodium sebacate	17265-14-4	Trade secret ( $\geq 1 - < 5$ )
Zinc oxide	1314-13-2	Trade secret ( $\geq 1 - < 5$ )
Silane, dichlorodimethyl-, reaction products with silica	68611-44-9	Trade secret ( $\geq 1 - < 5$ )

See Section 15 for HMIRA information.

Actual concentration or concentration range is withheld as a trade secret

**SECTION 4. FIRST AID MEASURES**

If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.  
Keep patient warm and at rest.  
If unconscious, place in recovery position and seek medical advice.  
Keep respiratory tract clear.  
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
Wash off with soap and water.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.  
If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.  
If unconscious, place in recovery position and seek medical advice.  
Keep respiratory tract clear.  
Do not induce vomiting without medical advice.  
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and : No information available.  
None known.



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delayed

Notes to physician : No information available.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon oxides  
Oxides of phosphorus  
Metal oxides
- Further information : Standard procedure for chemical fires.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.  
Exposure to decomposition products may be a hazard to health.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).  
Do not breathe vapours, aerosols.  
Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Clean up promptly by sweeping or vacuum.  
Keep in suitable, closed containers for disposal.

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**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.



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Wash hands and face before breaks and immediately after handling the product.  
Do not ingest.  
Do not repack.  
These safety instructions also apply to empty packaging which may still contain product residues.  
Keep container closed when not in use.

Conditions for safe storage : Store in original container.  
Keep container closed when not in use.  
Keep in a dry, cool and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Store in accordance with the particular national regulations.  
Keep in properly labelled containers.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Mineral Oil	Proprietary	TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL
		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
Mineral Oil	Proprietary	TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL
		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
(benzoato-O,O')hydroxy(octadecanoato-O,O')aluminium	54326-11-3	TWA	10 mg/m3	CA AB OEL
		TWA	10 mg/m3	CA BC OEL
		TWA (Inhalable particulate matter)	10 mg/m3	ACGIH

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		TWA (Respirable particulate matter)	3 mg/m3	ACGIH
Zinc oxide	1314-13-2	TWA (Respirable)	2 mg/m3	CA AB OEL
		STEL (Respirable)	10 mg/m3	CA AB OEL
		TWA (Respirable)	2 mg/m3	CA BC OEL
		STEL (Respirable)	10 mg/m3	CA BC OEL
		TWAEV (Fumes)	5 mg/m3	CA QC OEL
		TWAEV (total dust)	10 mg/m3	CA QC OEL
		STEV (Fumes)	10 mg/m3	CA QC OEL
		TWA (Respirable particulate matter)	2 mg/m3	ACGIH
		STEL (Respirable particulate matter)	10 mg/m3	ACGIH

**Engineering measures** : none

**Personal protective equipment**

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type P

Hand protection  
Material : Nitrile rubber  
Break through time : > 10 min  
Protective index : Class 1

Remarks : For prolonged or repeated contact use protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

Eye protection : Safety glasses with side-shields

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the spe-

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cific work-place.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : paste

Colour : white

Odour : characteristic

Odour Threshold : No data available

  

pH : Not applicable

  

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : Combustible Solids

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : < 0.001 hPa (20 °C)

Relative vapour density : No data available

Relative density : 0.88 (20 °C)  
Reference substance: Water  
The value is calculated

Bulk density : No data available

Solubility(ies)  
Water solubility : insoluble

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Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

    Viscosity, dynamic : No data available

    Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : No conditions to be specially mentioned.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : No decomposition if stored and applied as directed.

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**SECTION 11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

**Product:**

Acute oral toxicity : Remarks: This information is not available.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Remarks: This information is not available.

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**Components:**

**Mineral Oil:**

- Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes
- Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
GLP: yes  
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes  
Assessment: The substance or mixture has no acute dermal toxicity

**Mineral Oil:**

- 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: dust/mist  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

**Dec-1-ene, homopolymer, hydrogenated:**

- Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 423  
GLP: yes
- Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
GLP: yes  
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg



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Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

**disodium sebacate:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 401  
GLP: no

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes  
Assessment: The substance or mixture has no acute dermal toxicity

**Zinc oxide:**

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

Acute inhalation toxicity : LC50 (Rat): > 5.7 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes  
Assessment: The substance or mixture has no acute dermal toxicity

**Silane, dichlorodimethyl-, reaction products with silica:**

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

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

**Skin corrosion/irritation**

**Product:**

Remarks : This information is not available.

**Components:**

**Mineral Oil:**

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

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Result : No skin irritation  
GLP : yes

**Mineral Oil:**

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

**Dec-1-ene, homopolymer, hydrogenated:**

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

**disodium sebacate:**

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

**Zinc oxide:**

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

**Silane, dichlorodimethyl-, reaction products with silica:**

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

**Serious eye damage/eye irritation**

**Product:**

Remarks : This information is not available.

**Components:**

**Mineral Oil:**

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

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GLP : yes

**Mineral Oil:**

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

**Dec-1-ene, homopolymer, hydrogenated:**

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

**disodium sebacate:**

Species : Rabbit  
Result : Irritating to eyes.  
Assessment : Irritating to eyes.  
Method : OECD Test Guideline 437  
GLP : yes

**Zinc oxide:**

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

**Silane, dichlorodimethyl-, reaction products with silica:**

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

**Respiratory or skin sensitisation**

**Product:**

Remarks : This information is not available.

**Components:**

**Mineral Oil:**

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

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Result : Does not cause skin sensitisation.  
GLP : yes

**Mineral Oil:**

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

**Dec-1-ene, homopolymer, hydrogenated:**

Test Type : Maximisation Test  
Species : Guinea pig  
Assessment : Does not cause skin sensitisation.  
Method : OECD Test Guideline 406  
Result : Does not cause skin sensitisation.  
GLP : yes

**disodium sebacate:**

Species : Guinea pig  
Assessment : Did not cause sensitisation on laboratory animals.  
Result : Did not cause sensitisation on laboratory animals.

**Zinc oxide:**

Test Type : Maximisation Type  
Species : Guinea pig  
Assessment : Does not cause skin sensitisation.  
Method : OECD Test Guideline 406  
Result : Does not cause skin sensitisation.  
GLP : yes

**Silane, dichlorodimethyl-, reaction products with silica:**

Assessment : Does not cause skin sensitisation.  
Result : Does not cause skin sensitisation.

**Germ cell mutagenicity**

**Product:**

Genotoxicity in vitro : Remarks: No data available  
Genotoxicity in vivo : Remarks: No data available

**Components:**

**Mineral Oil:**

Genotoxicity in vitro : Test Type: Ames test  
Method: Mutagenicity (Salmonella typhimurium - reverse mu-

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tation assay)  
Result: negative  
GLP: yes

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**Mineral Oil:**

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**Dec-1-ene, homopolymer, hydrogenated:**

Genotoxicity in vitro : Test Type: Ames test  
Method: Mutagenicity (Escherichia coli - reverse mutation assay)  
Result: negative  
GLP: yes

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**disodium sebacate:**

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**Zinc oxide:**

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**Silane, dichlorodimethyl-, reaction products with silica:**

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

**Carcinogenicity**

**Product:**

Remarks : No data available

**Components:**

**Mineral Oil:**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

**Mineral Oil:**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

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**Dec-1-ene, homopolymer, hydrogenated:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**Zinc oxide:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

**Silane, dichlorodimethyl-, reaction products with silica:**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

**Reproductive toxicity**

**Product:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

**Components:**

**Mineral Oil:**

Reproductive toxicity - Assessment : - Fertility -  
No toxicity to reproduction  
- Teratogenicity -  
No effects on or via lactation

**Mineral Oil:**

Reproductive toxicity - Assessment : - Fertility -  
No toxicity to reproduction  
- Teratogenicity -  
No effects on or via lactation

**Dec-1-ene, homopolymer, hydrogenated:**

Reproductive toxicity - Assessment : - Fertility -  
No toxicity to reproduction  
- Teratogenicity -  
Did not show teratogenic effects in animal experiments.

**disodium sebacate:**

Reproductive toxicity - Assessment : - Fertility -

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No toxicity to reproduction  
- Teratogenicity -  
No effects on or via lactation

**Zinc oxide:**

Reproductive toxicity - Assessment : - Fertility -  
No toxicity to reproduction  
- Teratogenicity -  
No toxicity to reproduction

**Silane, dichlorodimethyl-, reaction products with silica:**

Reproductive toxicity - Assessment : - Fertility -  
No toxicity to reproduction  
- Teratogenicity -  
No effects on or via lactation

**STOT - single exposure**

**Components:**

**Mineral Oil:**

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

**Mineral Oil:**

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

**Zinc oxide:**

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

**Silane, dichlorodimethyl-, reaction products with silica:**

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

**STOT - repeated exposure**

**Components:**

**Mineral Oil:**

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

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**Mineral Oil:**

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

**Zinc oxide:**

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

**Silane, dichlorodimethyl-, reaction products with silica:**

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

**Repeated dose toxicity**

**Product:**

Remarks : This information is not available.

**Components:**

**Mineral Oil:**

NOAEL : 1,800 mg/kg  
Exposure time : 90 d

**Aspiration toxicity**

**Product:**

This information is not available.

**Components:**

**Mineral Oil:**

No aspiration toxicity classification

**Mineral Oil:**

May be fatal if swallowed and enters airways.

**Dec-1-ene, homopolymer, hydrogenated:**

May be fatal if swallowed and enters airways.

**disodium sebacate:**

No aspiration toxicity classification

**Zinc oxide:**

No aspiration toxicity classification



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**Silane, dichlorodimethyl-, reaction products with silica:**

No aspiration toxicity classification

**Further information**

**Product:**

Remarks : Information given is based on data on the components and the toxicology of similar products.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Product:**

Toxicity to fish : Remarks: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

**Components:**

**Mineral Oil:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): > 100 mg/l  
Exposure time: 48 h  
Test Type: Immobilization  
Method: OECD Test Guideline 202

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): >= 1,000 mg/l  
Exposure time: 21 d

**Mineral Oil:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203

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- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : NOEC (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 28 d  
Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): >= 1,000 mg/l  
Exposure time: 21 d  
Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
- Toxicity to microorganisms : LC50 (Bacteria): > 1,000 mg/l  
Exposure time: 40 h  
Test Type: Growth inhibition

**Dec-1-ene, homopolymer, hydrogenated:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203  
GLP: yes
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l  
Exposure time: 48 h  
Test Type: Immobilization  
Method: OECD Test Guideline 202  
GLP: yes
- Toxicity to algae/aquatic plants : ErC50 (Scenedesmus capricornutum (fresh water algae)): > 1,000 mg/l  
Exposure time: 72 h  
Test Type: Growth inhibition  
Method: OECD Test Guideline 201  
GLP: yes
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 125 mg/l  
Exposure time: 21 d

**disodium sebacate:**

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- Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203  
GLP: yes
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Test Type: semi-static test  
Method: OECD Test Guideline 202  
GLP: yes
- Toxicity to algae/aquatic plants : EL50 (Skeletonema costatum (marine diatom)): 38.7 mg/l  
Exposure time: 72 h  
Test Type: static test  
Method: ISO 10253  
GLP: yes
- Zinc oxide:**
- Toxicity to fish : LC50 (Danio rerio (zebra fish)): 1.55 mg/l  
Exposure time: 96 h  
Test Type: static test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.136 mg/l  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201  
GLP: yes
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : (Daphnia magna (Water flea)): 0.04 mg/l  
Exposure time: 21 d  
Test Type: semi-static test  
Method: OECD Test Guideline 211
- M-Factor (Chronic aquatic toxicity) : 1
- Toxicity to microorganisms : EC50 (activated sludge): > 1,000 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209  
GLP: yes

**Silane, dichlorodimethyl-, reaction products with silica:**

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Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 10,000 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

**Persistence and degradability**

**Product:**

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

**Components:**

**Mineral Oil:**

Biodegradability : Primary biodegradation  
Inoculum: activated sludge  
Result: Not rapidly biodegradable  
Biodegradation: 31 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

**Mineral Oil:**

Biodegradability : Biodegradation: 31 %  
Exposure time: 28 d

**Dec-1-ene, homopolymer, hydrogenated:**

Biodegradability : Primary biodegradation  
Inoculum: activated sludge  
Result: Not readily biodegradable.  
Method: OECD Test Guideline 301B

**disodium sebacate:**

Biodegradability : Result: Biodegradable  
Biodegradation: 89 %  
Exposure time: 28 d

**Zinc oxide:**

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

**Silane, dichlorodimethyl-, reaction products with silica:**

Biodegradability : Result: Not readily biodegradable.

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**Bioaccumulative potential**

**Product:**

Bioaccumulation : Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).  
This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

**Components:**

**Mineral Oil:**

Partition coefficient: n-octanol/water : Pow: > 6

**Mineral Oil:**

Partition coefficient: n-octanol/water : log Pow: > 6

**Dec-1-ene, homopolymer, hydrogenated:**

Partition coefficient: n-octanol/water : log Pow: > 6.5 (20 °C)

**disodium sebacate:**

Partition coefficient: n-octanol/water : log Pow: -4.9 (20 °C)  
pH: 7.8

**Silane, dichlorodimethyl-, reaction products with silica:**

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

**Mobility in soil**

**Product:**

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

**Other adverse effects**

**Product:**

Additional ecological information : Harmful to aquatic life with long lasting effects.

**Components:**

**Mineral Oil:**

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Results of PBT and vPvB assessment : Non-classified PBT substance Non-classified vPvB substance

**Mineral Oil:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

**Dec-1-ene, homopolymer, hydrogenated:**

Results of PBT and vPvB assessment : Non-classified PBT substance Non-classified vPvB substance

**Zinc oxide:**

Results of PBT and vPvB assessment : Remarks: Not applicable

**Silane, dichlorodimethyl-, reaction products with silica:**

Results of PBT and vPvB assessment : Non-classified vPvB substance Non-classified PBT substance

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**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Do not dispose of with domestic refuse.  
Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product.  
Dispose of waste product or used containers according to local regulations.

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**SECTION 14. TRANSPORT INFORMATION**

**International Regulations**

**UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

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

Not applicable for product as supplied.

**National Regulations**

**TDG**

Not regulated as a dangerous good

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**SECTION 15. REGULATORY INFORMATION**

**NPRI Components** : Zinc oxide, 2,6-Di-tert-butyl-p-cresol

**Canadian lists**

No substances are subject to a Significant New Activity Notification.

No substances are subject to a Significant New Activity Notification.

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**SECTION 16. OTHER INFORMATION**

**Full text of other abbreviations**

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)  
CA BC OEL : Canada. British Columbia OEL  
CA QC OEL : Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants  
ACGIH / TWA : 8-hour, time-weighted average  
ACGIH / STEL : Short-term exposure limit  
CA AB OEL / TWA : 8-hour Occupational exposure limit  
CA AB OEL / STEL : 15-minute occupational exposure limit  
CA BC OEL / TWA : 8-hour time weighted average  
CA BC OEL / STEL : short-term exposure limit  
CA QC OEL / TWAEV : Time-weighted average exposure value  
CA QC OEL / STEV : Short-term exposure value

AICC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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 Or-



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ganisation 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

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