

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

SECTION 1. IDENTIFICATION

Product name : STINGER® ENVIRO
Other means of identification : No data available
SDS-Identcode : 344G

Manufacturer or supplier's details

Company name of supplier : Bestolife Corporation
Address : 2777 N. Stemmons Frwy Ste 1800
Dallas TX 75207,
Telephone : 855-243-9164/972-865-8961
Telefax : 214-631-3047
E-mail address : www.bestolife.com

Recommended use of the chemical and restrictions on use

Recommended use : Industrial use
Thread Compound (Pipe Dope) and Jacking grease for use in
Offshore industries
Mining, (without offshore industries)
Restrictions on use : Do not use on oxygen lines or in oxygen enriched atmos-
pheres.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Skin sensitization : Category 1

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H317 May cause an allergic skin reaction.

Precautionary Statements :

Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P272 Contaminated work clothing should not be allowed out of
the workplace.
P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/
attention.
P362 + P364 Take off contaminated clothing and wash it before
reuse.

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	>= 10 - < 30
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	>= 10 - < 30
Talc	14807-96-6	>= 10 - < 30
Graphite	7782-42-5	>= 10 - < 30
Dilithium azelate	38900-29-7	>= 1 - < 5
Quartz	14808-60-7	>= 1 - < 5
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	>= 1 - < 5
Tris[bis(2-ethylhexyl)dithiocarbamate-S,S'] antimony	15991-76-1	>= 1 - < 5
2,5-Bis(octyldithio)-1,3,4-thiadiazole	13539-13-4	>= 0.1 - < 1
Diocetyl disulphide	822-27-5	>= 0.1 - < 1

Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.
Remove contaminated clothing and shoes.
Get medical attention.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : Flush eyes with water as a precaution.
Get medical attention if irritation develops and persists.
- If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : May cause an allergic skin reaction.

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media : None known.

Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides
Metal oxides
Silicon oxides
Nitrogen oxides (NO_x)
Sulfur oxides

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions : Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
 Date of first issue: 05/18/2015

- Advice on safe handling : Do not get on skin or clothing.
 Do not swallow.
 Avoid contact with eyes.
 Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
 Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labeled containers.
 Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:
 Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	TWA (Mist)	5 mg/m ³	CA AB OEL
		STEL (Mist)	10 mg/m ³	CA AB OEL
		TWAEV (Mist)	5 mg/m ³	CA QC OEL
		STEV (Mist)	10 mg/m ³	CA QC OEL
		TWA (Mist)	1 mg/m ³	CA BC OEL
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	TWA (Inhalable fraction)	5 mg/m ³	ACGIH
		TWA (Mist)	5 mg/m ³	CA AB OEL
		STEL (Mist)	10 mg/m ³	CA AB OEL
		TWAEV (Mist)	5 mg/m ³	CA QC OEL
		STEV (Mist)	10 mg/m ³	CA QC OEL
Talc	14807-96-6	TWA (Mist)	1 mg/m ³	CA BC OEL
		TWAEV (respirable dust)	3 mg/m ³	CA QC OEL
		TWA (Respirable particulates)	2 mg/m ³	CA AB OEL
		TWA (Respirable)	2 mg/m ³	CA BC OEL
		TWA	2 fibres per cubic centimeter	CA ON OEL
		TWA (Respirable fraction)	2 mg/m ³	CA ON OEL
		TWA (Respirable fraction)	2 mg/m ³	ACGIH

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
 Date of first issue: 05/18/2015

Graphite	7782-42-5	TWA (Respirable)	2 mg/m ³	CA BC OEL
		TWA (Respirable)	2 mg/m ³	CA AB OEL
		TWAEV (respirable dust)	2 mg/m ³	CA QC OEL
		TWA (Respirable fraction)	2 mg/m ³	ACGIH
Quartz	14808-60-7	TWA (Respirable particulates)	0.025 mg/m ³	CA AB OEL
		TWA (Respirable fraction)	0.1 mg/m ³	CA ON OEL
		TWAEV (respirable dust)	0.1 mg/m ³	CA QC OEL
		TWA (Respirable)	0.025 mg/m ³ (Silica)	CA BC OEL
		TWA (Respirable fraction)	0.025 mg/m ³ (Silica)	ACGIH
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	TWA (Mist)	1 mg/m ³	CA BC OEL
		TWA (Inhalable fraction)	5 mg/m ³	ACGIH
Tris[bis(2-ethylhexyl)dithiocarbamate-S,S'] antimony	15991-76-1	TWA	0.5 mg/m ³ (antimony)	CA AB OEL
		TWAEV	0.5 mg/m ³ (antimony)	CA QC OEL
		TWA	0.5 mg/m ³ (antimony)	CA BC OEL
		TWA	0.5 mg/m ³ (antimony)	ACGIH

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Quartz

Engineering measures : Minimize workplace exposure concentrations. Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at workplaces have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for Particulates Not Otherwise Regulated of 15 mg/m³ - total dust, 5 mg/m³ - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m³ - respirable particles, 10 mg/m³ - inhalable particles.

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
- Filter type : Combined particulates and organic vapor type
- Hand protection
- Material : Chemical-resistant gloves
- Remarks : For prolonged or repeated contact use protective gloves. Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.
- Eye protection : Wear the following personal protective equipment:
Safety glasses
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
- Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place.
When using do not eat, drink or smoke.
Wash contaminated clothing before re-use.
-

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Viscous semi-solid
- Color : black
- Odor : Petroleum
- Odor Threshold : No data available
- pH : Not applicable (not an aqueous solution)
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : No data available
- Flash point : ≥ 200 °C
Method: ASTM D 92, Cleveland open cup
Distillates (petroleum), hydrotreated heavy naphthenic
- Evaporation rate : Not applicable
- Flammability (solid, gas) : Not classified as a flammability hazard
- Upper explosion limit / Upper flammability limit : No data available

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Lower explosion limit / Lower flammability limit : No data available

Vapor pressure : Not applicable

Relative vapor density : Not applicable

Relative density : 1.3

Density : No data available

Solubility(ies)
Water solubility : negligible

Partition coefficient: n-octanol/water : Not applicable

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity
Viscosity, dynamic : No data available
Viscosity, kinematic : Not applicable

Flow time : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available
Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Can react with strong oxidizing agents.
Conditions to avoid : None known.
Incompatible materials : Oxidizing agents
Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 5.53 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
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Distillates (petroleum), hydrotreated heavy paraffinic:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 5.53 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
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Talc:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Remarks: Based on data from similar materials

Graphite:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 423

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): > 2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Dilithium azelate:

Acute oral toxicity : LD50 (Rat): > 300 - 2,000 mg/kg
Method: OECD Test Guideline 420
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Quartz:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Lubricating oils (petroleum), hydrotreated spent:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 4,480 mg/kg

Tris[bis(2-ethylhexyl)dithiocarbamate-S,S'] antimony:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Remarks: Based on data from similar materials

2,5-Bis(octyldithio)-1,3,4-thiadiazole:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 3.08 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Diocetyl disulphide:

Acute oral toxicity : LD50 (Rat): > 290 - 500 mg/kg
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): 5.05 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Remarks: Based on data from similar materials

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:

Species : Rabbit
Result : No skin irritation
Remarks : Based on data from similar materials

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rabbit
Result : No skin irritation
Remarks : Based on data from similar materials

Talc:

Species : Rabbit
Result : No skin irritation

Graphite:

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

Dilithium azelate:

Method : OECD Test Guideline 439
Result : No skin irritation
Remarks : Based on data from similar materials

2,5-Bis(octyldithio)-1,3,4-thiadiazole:

Species : Rabbit
Result : Skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:

Species : Rabbit
Result : No eye irritation
Remarks : Based on data from similar materials

Distillates (petroleum), hydrotreated heavy paraffinic:

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

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Remarks : Based on data from similar materials

Talc:

Species : Rabbit
Result : No eye irritation

Graphite:

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

Dilithium azelate:

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

2,5-Bis(octyldithio)-1,3,4-thiadiazole:

Species : Rabbit
Result : Irritation to eyes, reversing within 21 days

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:

Test Type : Buehler Test
Routes of exposure : Skin contact
Species : Guinea pig
Result : negative
Remarks : Based on data from similar materials

Distillates (petroleum), hydrotreated heavy paraffinic:

Test Type : Buehler Test
Routes of exposure : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : negative
Remarks : Based on data from similar materials

Talc:

Routes of exposure : Skin contact
Species : Humans
Result : negative

STINGER® ENVIRO

Version	Revision Date:	SDS Number:	Date of last issue: 10/01/2018
5.2	10/11/2018	118097-00014	Date of first issue: 05/18/2015

Graphite:

Test Type : Local lymph node assay (LLNA)
 Routes of exposure : Skin contact
 Species : Mouse
 Result : negative

Dilithium azelate:

Test Type : Local lymph node assay (LLNA)
 Routes of exposure : Skin contact
 Species : Mouse
 Method : OECD Test Guideline 429
 Result : negative
 Remarks : Based on data from similar materials

2,5-Bis(octyldithio)-1,3,4-thiadiazole:

Routes of exposure : Skin contact
 Species : Guinea pig
 Result : positive

Assessment : Probability or evidence of skin sensitization in humans

Germ cell mutagenicity

Not classified based on available information.

Components:**Distillates (petroleum), hydrotreated heavy naphthenic:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
 Method: OECD Test Guideline 471
 Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
 Species: Mouse
 Application Route: Intraperitoneal injection
 Method: OECD Test Guideline 474
 Result: negative
 Remarks: Based on data from similar materials

Distillates (petroleum), hydrotreated heavy paraffinic:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
 Method: OECD Test Guideline 471
 Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
 Species: Mouse
 Application Route: Intraperitoneal injection
 Method: OECD Test Guideline 474
 Result: negative
 Remarks: Based on data from similar materials

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Talc:

- Genotoxicity in vitro : Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)
Result: negative
- Genotoxicity in vivo : Test Type: Chromosome aberration test in vitro
Species: Rat
Application Route: Ingestion
Result: negative

Graphite:

- Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
- Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative
- Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative

Dilithium azelate:

- Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
- Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative
Remarks: Based on data from similar materials
- Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

Product:

- Carcinogenicity - Assessment : Petroleum distillates have been classified as not carcinogenic based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L).

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:

- Species : Mouse
Application Route : Skin contact
Exposure time : 78 weeks

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Method : OECD Test Guideline 451
Result : negative

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Mouse
Application Route : Skin contact
Exposure time : 78 weeks
Method : OECD Test Guideline 451
Result : negative
Remarks : Based on data from similar materials

Talc:

Species : Mouse
Application Route : inhalation (dust/mist/fume)
Exposure time : 2 Years
Result : negative

Quartz:

Species : Humans
Application Route : inhalation (dust/mist/fume)
Result : positive
Remarks : IARC: (International Agency for Research on Cancer)
These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Carcinogenicity - Assessment : Positive evidence from human epidemiological studies (inhalation)

Reproductive toxicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Result: negative
Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Skin contact
Method: OECD Test Guideline 414
Result: negative
Remarks: Based on data from similar materials

Talc:

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat
Application Route: Ingestion

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Result: negative

Graphite:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative

Dilithium azelate:

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening test
Species: Rat
Application Route: Skin contact
Result: negative
Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Reproduction/Developmental toxicity screening test
Species: Rat
Application Route: Skin contact
Result: negative
Remarks: Based on data from similar materials

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Components:

Quartz:

Routes of exposure : inhalation (dust/mist/fume)
Target Organs : Lungs
Assessment : Shown to produce significant health effects in animals at concentrations of 0.02 mg/l/6h/d or less.

Repeated dose toxicity

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:

Species : Rat
NOAEL : > 0.98 mg/l

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Application Route : inhalation (dust/mist/fume)
Exposure time : 28 Days
Remarks : Based on data from similar materials

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rabbit
NOAEL : 1,000 mg/kg
Application Route : Skin contact
Exposure time : 4 Weeks
Method : OECD Test Guideline 410
Remarks : Based on data from similar materials

Species : Rat
NOAEL : > 980 mg/m³
Application Route : inhalation (dust/mist/fume)
Exposure time : 4 Weeks

Dilithium azelate:

Species : Rat
NOAEL : 1,089.75 mg/kg
Application Route : Skin contact
Exposure time : 28 Days
Remarks : Based on data from similar materials

Quartz:

Species : Humans
LOAEL : 0.053 mg/m³
Application Route : inhalation (dust/mist/fume)
Remarks : These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 48 h
Remarks: Based on data from similar materials

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 10 mg/l
Exposure time: 21 d
Remarks: Based on data from similar materials

Toxicity to microorganisms : NOEC: > 1.93 mg/l
Exposure time: 10 min
Remarks: Based on data from similar materials

Distillates (petroleum), hydrotreated heavy paraffinic:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 10 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

Toxicity to microorganisms : NOEC: > 1.93 mg/l
Exposure time: 10 min
Method: DIN 38 412 Part 8
Remarks: Based on data from similar materials

Talc:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 100,000 mg/l
Exposure time: 24 h

Graphite:

Toxicity to fish : LL50 (Danio rerio (zebra fish)): > 100 mg/l
Exposure time: 96 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 202

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 201

NOELR (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50: > 1,012.5 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Dilithium azelate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae : NOEC (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l
Exposure time: 72 h
Remarks: Based on data from similar materials

ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Remarks: Based on data from similar materials

Quartz:

Ecotoxicology Assessment

Acute aquatic toxicity : No toxicity at the limit of solubility.

Chronic aquatic toxicity : No toxicity at the limit of solubility.

Lubricating oils (petroleum), hydrotreated spent:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test substance: Water Accommodated Fraction
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

Test substance: Water Accommodated Fraction
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (Daphnia magna (Water flea)): 1,000 mg/l
Exposure time: 21 d
Test substance: Water Accommodated Fraction
Remarks: Based on data from similar materials

Tris[bis(2-ethylhexyl)dithiocarbamate-S,S'] antimony:

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.02 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

Ecotoxicology Assessment

Chronic aquatic toxicity : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 2 - 4 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Distillates (petroleum), hydrotreated heavy paraffinic:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 31 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Dilithium azelate:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 83 %
Exposure time: 30 d
Method: OECD Test Guideline 301D
Remarks: Based on data from similar materials

Tris[bis(2-ethylhexyl)dithiocarbamate-S,S'] antimony:

Biodegradability : Result: Not readily biodegradable.
Remarks: Based on data from similar materials

Bioaccumulative potential

Components:

Dilithium azelate:

Partition coefficient: n- : log Pow: -3.53

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.
If not otherwise specified: Dispose of as unused product.

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

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

Not applicable for product as supplied.

Domestic regulation

TDG

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

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

DSL : All components of this product are on the Canadian DSL

TSCA : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

AICS : All ingredients listed or exempt.

SAFETY DATA SHEET



STINGER® ENVIRO

Version 5.2 Revision Date: 10/11/2018 SDS Number: 118097-00014 Date of last issue: 10/01/2018
Date of first issue: 05/18/2015

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 ON OEL	:	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
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
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 ON OEL / TWA	:	Time-Weighted Average Limit (TWA)
CA QC OEL / TWAEV	:	Time-weighted average exposure value
CA QC OEL / STEV	:	Short-term exposure value

AICS - Australian Inventory of Chemical Substances; 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; CPR - Controlled Products Regulations; 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 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; 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

Sources of key data used to : Internal technical data, data from raw material SDSs, OECD

SAFETY DATA SHEET



STINGER® ENVIRO

Version	Revision Date:	SDS Number:	Date of last issue: 10/01/2018
5.2	10/11/2018	118097-00014	Date of first issue: 05/18/2015

compile the Material Safety
Data Sheet

eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 10/11/2018

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8