

PVC 9630 005.000% SPECTRUM RED

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Substance key: 000000766516

Revision Date: 05/08/2019

Version : 1 - 0 / CDN

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SECTION 1. IDENTIFICATION**Identification of the company:**

Clariant Plastics & Coatings Canada Inc.
2 Lone Oak Court
Toronto, Ontario, M9C 5R9
Telephone No.: +1 514-832-2559

Information of the substance/preparation:

BU Masterbatches
Product Stewardship, +1-704-331-7710
e-mail: SDS.NORAM@clariant.com

Emergency tel. number: +1 CANUTEC (613) 996-6666**Trade name:****PVC 9630 005.000% SPECTRUM RED****Material number:**

CV34765615

Chemical family:

Colourant preparation
Carrier: PVC

Primary product use:

Additive for plastic material processing

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the Hazardous Products Regulations**

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

Hazards Not Otherwise Classified:

If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

: Colourant preparation
Carrier: PVC

Components

Chemical name	CAS-No.	Concentration (% w/w)
C.I. Pigment Black 28	68186-91-4	0.1 - 1
Resin acids and Rosin acids, barium salts	68188-14-7	0.1 - 1
Barium bis[6-chloro-4-[(2-hydroxy-1-naphthyl)azo]toluene-3-sulphonate]	73612-34-7	0.1 - 1
C.I. Pigment White 6	13463-67-7	1 - 5
Calcium distearate	1592-23-0	1 - 5

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C.I. Pigment Red 53:1	5160-02-1	1 - 5
Di-n-octyltin-bis-(2-ethylhexylthioglycolate)	15571-58-1	1 - 5
Polyvinyl chloride	9002-86-2	60 - 80

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200) and by the Canadian WHMIS 2015 Hazardous Products Regulations (SOR/2015-17)., The hazardous ingredients of this product are encapsulated, therefore the material is not GHS classified for health and environmental hazards as exposure is not expected., Any concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

- If inhaled : Move the victim to fresh air.
Give oxygen or artificial respiration if needed.
Get immediate medical advice/ attention.
Never give anything by mouth to an unconscious person.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
In case of burns apply cold water until pain subsides then seek medical advice.
Burns must be treated by a physician.
If molten polymer contact the skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical attention for thermal burn. Skin absorption of reground pellets is unlikely.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Get medical attention immediately if irritation develops and persists.
- If swallowed : Rinse mouth.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.
Get medical advice/ attention.
- Most important symptoms and effects, both acute and delayed : The possible symptoms known are those derived from the labelling (see section 2).
No additional symptoms are known.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry chemical

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- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : In case of fire hazardous decomposition products may be produced such as:
Hydrogen chloride
Carbon monoxide
Carbon dioxide (CO₂)
Metal oxides
See chapter 10.
- Further information : Combustible material
In the event of fire and/or explosion do not breathe fumes.
During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion
Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Do not allow run-off from fire fighting to enter drains or water courses.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
Avoid contact with skin, eyes and clothing.
Wash thoroughly after handling.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
Prevent product from entering drains.
- Methods and materials for containment and cleaning up : Avoid dust formation.
Take measures to prevent the build up of electrostatic charge.
Sweep up and shovel into suitable containers for disposal.
Take up uncontaminated material and pass on for further processing.
After cleaning, flush away traces with water.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Take measures to prevent the build up of electrostatic charge.
- Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Use only with adequate ventilation/personal protection.

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For personal protection see section 8.
 Avoid contact with skin, eyes and clothing.
 Use only with adequate ventilation.
 When handling hot melts use suitable protective clothing.
 Avoid dust formation. Keep away from sources of ignition.
 Lead off electrostatic charges.

- Conditions for safe storage : Keep container tightly closed in a cool, well-ventilated place.
 Protect from moisture.
 Keep away from direct sunlight.
- Further information on storage conditions : Store in a cool, dry, well-ventilated area. Keep container sealed when not in use.
 Keep in an area equipped with sprinklers.
 Minimize dust generation and accumulation.
- Materials to avoid : not required

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
C.I. Pigment Black 28	68186-91-4	TWA	1 mg/m3 (Copper)	NIOSH REL
C.I. Pigment White 6	13463-67-7	TWA	10 mg/m3	CA AB OEL
		TWA (Total dust)	10 mg/m3	CA BC OEL
		TWA (respirable dust fraction)	3 mg/m3	CA BC OEL
		TWAEV (total dust)	10 mg/m3	CA QC OEL
Calcium distearate	1592-23-0	TWA	10 mg/m3	CA AB OEL
		TWA	10 mg/m3	CA BC OEL
		TWA (Inhalable fraction)	10 mg/m3	ACGIH
		TWA (Respirable fraction)	3 mg/m3	ACGIH
Polyvinyl chloride	9002-86-2	TWA (Respirable)	1 mg/m3	CA BC OEL
		TWAEV (total dust)	10 mg/m3	CA QC OEL
		TWA (Respirable fraction)	1 mg/m3	ACGIH

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C.I. Pigment Red 53:1	5160-02-1	TWA	1 mg/m3	US WEEL
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Engineering measures : Use only in area provided with appropriate exhaust ventilation.
Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.
Use engineering controls such as local or general exhaust to maintain airborne concentrations below exposure limits.

Personal protective equipment

Respiratory protection : Use NIOSH/MSHA approved respirators following manufacturer's recommendations where dust or fume may be generated.
Use respiratory protective equipment when using this product at elevated temperatures (see section 8).

Hand protection
Remarks

: Nitrile rubber gloves. Impervious butyl rubber gloves PVC Neoprene gloves When handling hot material, use heat resistant gloves.

Eye protection : Safety glasses with side-shields

Skin and body protection : Wear protective clothing, including long sleeves and gloves, to prevent skin contact.
When handling hot melts use suitable protective clothing.

Hygiene measures : The usual Industrial Hygiene precautions must be taken during work, in particular: do not drink, eat or smoke during the handling of the product and clean hands and face during work intervals and after work.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Granules

Colour : red

Odour : characteristic

Odour Threshold : Not applicable

pH : Not applicable

Melting point : > 70 °C

Boiling point : Not applicable

Flash point : Not applicable

Evaporation rate : Not applicable

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Flammability (solid, gas)	: not determined
Self-ignition	: Not applicable
Upper explosion limit / upper flammability limit	: not tested.
Lower explosion limit / Lower flammability limit	: not tested.
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Relative density	: not available
Density	: not tested.
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: This property is not applicable for mixtures.
Decomposition temperature	: No decomposition up to 200 °C.
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Explosive properties	: no data available no data available
Oxidizing properties	: not available
Surface tension	: Not relevant
Particle size	: Product specific

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable
Possibility of hazardous reactions	: Lithium
Conditions to avoid	: To avoid thermal decomposition, do not overheat. Heating can release hazardous gases. Keep away from heat, sparks, open flames, and other sources

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of ignition.

If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

This product contains a diarylide or other benzidine based pigment. These pigments should not be used in polymers where the processing temperature could exceed 200 °C, due to the possibility of thermal decomposition, products of which include traces of aromatic amines. 3,3'-dichlorobenzidine may be formed at temperatures > 200 °C.

3,3'-Dichlorobenzidine: Danger! According to the harmonised classification and labelling approved by the European Union, this substance may cause cancer (H350), is very toxic to aquatic life (H400), is very toxic to aquatic life with long lasting effects (H410), is harmful in contact with skin (H312) and may cause an allergic skin reaction (H317). Obtain special instructions before use (P201), avoid release to the environment (P273), wear protective gloves/protective clothing (P280), if exposed or concerned: Get medical advice/attention (P308 + P313)

Incompatible materials	: none Strong acids and oxidizing agents
Hazardous decomposition products	: 3,3'-Dichlorobenzidine can be formed at temperatures > 200 °C. 3,3'-Dichlorobenzidine - List in accordance with Paragraph 4a of the German Hazardous Substances Regulation (GefStoffV): Carc. Cat. 2, T = Toxic. When handled and stored appropriately, no dangerous decomposition products are known The product does not contain any chemical groups which suggest self-reactive properties, nor is the estimated SADT less than 75 °C, nor is the exothermic decomposition energy higher than 300 J/g.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

None known.

Acute toxicity**Product:**

Acute inhalation toxicity	: Acute toxicity estimate: 122.09 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

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Components:**Barium bis[6-chloro-4-[(2-hydroxy-1-naphthyl)azo]toluene-3-sulphonate]:**

Acute oral toxicity : Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhalation toxicity

C.I. Pigment White 6:

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg
Method: OECD Test Guideline 425
GLP: no

Acute inhalation toxicity : LC50 (Rat, male and female): 3.4 - 5.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: no
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal toxicity
Remarks: not required

Calcium distearate:

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

Acute inhalation toxicity : LC50 (Rat): > 3 mg/l
Exposure time: 4 h
Method: OECD Test Guideline 403
GLP: yes
Remarks: By analogy with a product of similar composition

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Remarks: By analogy with a product of similar composition

C.I. Pigment Red 53:1:

Acute oral toxicity : LD50 (Rat, male and female): > 10,000 mg/kg
Method: OECD Test Guideline 401
GLP: no
Remarks: No significant adverse effects were reported

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.24 mg/l
Exposure time: 4 h

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Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : Remarks: not required

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Acute oral toxicity : LD50 (Rat, male and female): 2,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute inhalation toxicity : Remarks: Not applicable

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Polyvinyl chloride:

Acute oral toxicity : Remarks: Not relevant

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : Remarks: Not relevant

Skin corrosion/irritation**Product:**

Result: No skin irritation

Components:**C.I. Pigment White 6:**

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

Calcium distearate:

Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: yes
Remarks: By analogy with a product of similar composition

C.I. Pigment Red 53:1:

Species: Rabbit
Exposure time: 4 h

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Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

Polyvinyl chloride:

Remarks: This information is not available.

Serious eye damage/eye irritation**Product:**

Result: No eye irritation

Components:**C.I. Pigment White 6:**

Species: rabbit eye

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: No information available.

Calcium distearate:

Species: rabbit eye

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: yes

Remarks: By analogy with a product of similar composition

C.I. Pigment Red 53:1:

Species: Rabbit

Result: No eye irritation

Exposure time: 24 h

Method: OECD Test Guideline 405

GLP: yes

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Species: rabbit eye

Result: non-irritant

Exposure time: 96 h

Method: OECD Test Guideline 405

GLP: yes

Polyvinyl chloride:

Remarks: This information is not available.

Respiratory or skin sensitisation**Product:**

Result: non-sensitizing

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Components:**C.I. Pigment White 6:**

Test Type: Local lymph node assay (LLNA)

Exposure routes: Dermal

Species: Mouse

Method: OECD Test Guideline 429

Result: Not a skin sensitizer.

GLP: No information available.

Test Type: Buehler Test

Exposure routes: Dermal

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Not a skin sensitizer.

GLP: yes

Test Type: Respiratory system

Exposure routes: inhalation (dust/mist/fume)

Species: Mouse

Method: Other

Result: Does not cause respiratory sensitisation.

GLP: No information available.

Calcium distearate:

Test Type: Local lymph node assay (LLNA)

Exposure routes: Dermal

Species: Mouse

Method: OECD Test Guideline 429

Result: Not a skin sensitizer.

GLP: yes

Remarks: By analogy with a product of similar composition

Test Type: Respiratory system

Exposure routes: Inhalation

Remarks: This information is not available.

C.I. Pigment Red 53:1:

Test Type: Local lymph node assay (LLNA)

Exposure routes: Dermal

Species: Mouse

Method: OECD Test Guideline 429

Result: Not a skin sensitizer.

GLP: yes

Remarks: By analogy with a product of similar composition

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Test Type: Guinea pig maximization test

Exposure routes: Skin contact

Species: Guinea pig

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Method: OECD Test Guideline 406
Result: May cause sensitisation by skin contact.
GLP: yes

Polyvinyl chloride:

Exposure routes: Skin contact
Result: not known

Germ cell mutagenicity**Components:****C.I. Pigment White 6:**

- Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Concentration: 333 - 5000 µg/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes
- Test Type: Ames test
Test system: Escherichia coli
Concentration: 333 - 5000 µg/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes
- Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Strain: ICR
Cell type: Erythrocytes
Application Route: oral (gavage)
Exposure time: single treatment
Dose: 500 - 1000 - 2000 mg/kg
Method: OECD Test Guideline 474
Result: negative
GLP: yes
- Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects
- Calcium distearate:**
- Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Method: OECD Test Guideline 471
Result: negative
GLP: yes
- Test Type: In vitro gene mutation study in mammalian cells
Test system: mouse lymphoma cells

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Method: OECD Test Guideline 476

Result: negative

GLP: yes

Remarks: By analogy with a product of similar composition

Test Type: Cytogenetic assay

Test system: V79 cells (embryonic lung fibroblasts) of the Chinese hamster

Method: OECD Test Guideline 473

Result: negative

GLP: yes

Remarks: By analogy with a product of similar composition

Germ cell mutagenicity -
Assessment

: It is concluded that the product is not mutagenic based on evaluation of several mutagenicity tests.

C.I. Pigment Red 53:1:

Genotoxicity in vitro

: Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Concentration: 1,25 - 15 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: no data available

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells

Concentration: 5 - 500 µg/ml

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

GLP: no data available

Test Type: unscheduled DNA synthesis assay

Test system: rat hepatocytes

Concentration: 10 - 1000 µM

Metabolic activation: without

Method: OECD Test Guideline 482

Result: negative

GLP: no

Test Type: Ames test

Test system: Salmonella typhimurium

Concentration: 4 - 5000 µg/plate

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

GLP: yes

Genotoxicity in vivo

: Test Type: Micronucleus test
Species: Rat (male)
Cell type: Bone marrow cells
Application Route: oral (gavage)

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Exposure time: 24 - 48 h
Dose: 500 - 1000 - 2000 mg/kg
Method: OECD Test Guideline 475
Result: negative
GLP: no data available

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Genotoxicity in vitro : Test Type: In vitro gene mutation study in mammalian cells
Test system: mouse lymphoma cells
Concentration: 0,006 - 100 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Test Type: Ames test
Test system: Salmonella typhimurium
Concentration: 150 - 12150 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: no

Genotoxicity in vivo : Test Type: Chromosome Aberration Test
Species: Mouse (male and female)
Cell type: Bone marrow cells
Application Route: oral (gavage)
Exposure time: 30 h
Dose: 2250 - 4500 - 9000 mg/kg
Method: OECD Test Guideline 474
Result: negative
GLP: No information available.
Test substance: other TS

Test Type: Chromosome Aberration Test
Species: Mouse (male and female)
Strain: CD1
Cell type: Bone marrow cells
Application Route: oral (gavage)
Exposure time: 72 h
Dose: 2250 - 4500 - 9000 mg/kg
Method: OECD Test Guideline 474
Result: negative
GLP: No information available.
Test substance: other TS

Germ cell mutagenicity - Assessment : It is concluded that the product is not mutagenic based on evaluation of several mutagenicity tests.

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Polyvinyl chloride:

Genotoxicity in vitro : Remarks: Not applicable

Germ cell mutagenicity -
Assessment : No information available.**Carcinogenicity****Components:****C.I. Pigment White 6:**Carcinogenicity -
Assessment : Not classifiable as a human carcinogen.**Calcium distearate:**Carcinogenicity -
Assessment : Not classifiable as a human carcinogen.**C.I. Pigment Red 53:1:**

Species: Rat, (male and female)

Application Route: oral (feed)

Exposure time: 2 a

Dose: 1000 - 3000 ppm

Group: yes

Frequency of Treatment: daily

Method: OECD Test Guideline 451

GLP: no

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

Carcinogenicity -
Assessment : No evidence of carcinogenicity in animal studies.**Di-n-octyltin-bis-(2-ethylhexylthioglycolate):**Carcinogenicity -
Assessment : No information available.**Polyvinyl chloride:**Carcinogenicity -
Assessment : No information available.**Reproductive toxicity****Components:****C.I. Pigment White 6:**

Effects on fertility : Remarks: no data available

Effects on foetal
development : Test Type: Pre-natal
Species: Rat, female
Strain: wistar

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Application Route: oral (gavage)
Dose: 100, 300, 1000 mg/kg bw
Duration of Single Treatment: 14 d
Frequency of Treatment: 1 daily
General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight
Developmental Toxicity: NOAEL: 1,000 mg/kg body weight
Embryo-foetal toxicity: NOEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 414
GLP: yes
Remarks: No significant adverse effects were reported

Reproductive toxicity -
Assessment : No evidence of adverse effects on sexual function and fertility,
or on development, based on animal experiments.
Did not show teratogenic effects in animal experiments.

Calcium distearate:

Effects on fertility : Species: Rat
Application Route: Oral
General Toxicity - Parent: NOAEL: > 1,000 mg/kg body weight
General Toxicity F1: NOAEL: > 1,000 mg/kg body weight
Method: OECD Test Guideline 421
GLP: yes

Effects on foetal
development : Species: Rat
Application Route: Oral
Teratogenicity: NOAEL: > 1,000 mg/kg body weight
Method: OECD Test Guideline 414
GLP: yes
Remarks: By analogy with a product of similar composition

Reproductive toxicity -
Assessment : No reproductive toxicity to be expected.
No teratogenic effects to be expected.

C.I. Pigment Red 53:1:

Effects on fertility : Species: Rat, male and female
Strain: Sprague-Dawley
Application Route: oral (feed)
Dose: 0,05 - 0,5 - 1,5 - 5 mg/kg
General Toxicity - Parent: NOAEL: 5 mg/kg body weight
General Toxicity F1: NOAEL: 5 mg/kg body weight
General Toxicity F2: NOAEL: 5 mg/kg body weight
Method: Other
GLP: no
Remarks: Based on available data, the classification criteria
are not met.

Effects on foetal
development : Test Type: Pre-natal
Species: Rat, male and female
Strain: Sprague-Dawley
Application Route: oral (gavage)
Dose: 1,5 - 5 - 15 mg/kg
General Toxicity Maternal: NOAEL: 15 mg/kg body weight

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Teratogenicity: NOAEL: 15 mg/kg body weight
Method: OECD Test Guideline 414
GLP: no
Remarks: Based on available data, the classification criteria are not met.

Reproductive toxicity - Assessment : No reproductive toxicity to be expected.
No teratogenic effects to be expected.

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Strain: Sprague-Dawley
Application Route: oral (feed)
Dose: 20 - 60 -200 ppm
General Toxicity - Parent: NOAEL: ca. 1.6 mg/kg body weight
General Toxicity F1: NOAEL: 1.6 mg/kg body weight
Method: OECD Test Guideline 416
GLP: yes
Remarks: By analogy with a product of similar composition

Effects on foetal development : Species: Rabbit
Strain: New Zealand white
Application Route: oral (gavage)
Dose: 4 - 20 - 80 mg/kg
General Toxicity Maternal: NOAEL: 20 mg/kg body weight
Teratogenicity: NOAEL: 80 mg/kg body weight
Method: OECD Test Guideline 414
GLP: yes

Reproductive toxicity - Assessment : Clear evidence of adverse effects on development, based on animal experiments.
Classification as "teratogenic" is not justifiable.

Polyvinyl chloride:

Effects on fertility : Remarks: This information is not available.

Effects on foetal development : Remarks: This information is not available.

Reproductive toxicity - Assessment : No information available.
No information available.

STOT - single exposure**Components:****C.I. Pigment White 6:**

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

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Calcium distearate:

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

C.I. Pigment Red 53:1:

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

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

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

Polyvinyl chloride:

Remarks: no data available

STOT - repeated exposure**Components:****C.I. Pigment White 6:**

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

Calcium distearate:

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

C.I. Pigment Red 53:1:

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

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Assessment: Causes damage to organs through prolonged or repeated exposure.

Polyvinyl chloride:

Remarks: no data available

Repeated dose toxicity**Components:****C.I. Pigment White 6:**

Species: Rat, male
NOEL: > 24000 mg/kg bw/day
Application Route: oral (gavage)
Exposure time: 29 d
Number of exposures: daily
Dose: 24000 mg/kg

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Group: yes

Method: OECD Test Guideline 407

GLP: No information available.

Species: Rat, male and female

NOAEL: 0.01 mg/l

Application Route: Inhalation

Exposure time: 2 a

Number of exposures: 6 hours/day, 5 days/week

Dose: 0,0106 - 0,0507 - 0,250 mg/l

Group: yes

Method: Repeated Dose Toxicity (chronic Toxicity)

GLP: no

Calcium distearate:

Species: Rat

NOAEL: > 2,000 mg/kg

Application Route: Oral

Method: OECD Test Guideline 407

GLP: yes

C.I. Pigment Red 53:1:

Species: Mouse, male and female

NOAEL: 100 mg/kg bw/day

Application Route: oral (feed)

Exposure time: 18 month

Number of exposures: daily

Dose: 0, 50, 250, 1000 ppm in diet

Method: OECD Test Guideline 453

GLP: no

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Species: Rat, male and female

NOAEL: 0.5 mg/kg

Application Route: oral (feed)

Exposure time: 90 d

Number of exposures: daily

Dose: 10-25-50-100-250-500-1000 ppm

Group: yes

Method: OECD Test Guideline 408

GLP: no

Polyvinyl chloride:

Remarks: This information is not available.

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Aspiration toxicity**Components:****C.I. Pigment White 6:**

No aspiration toxicity classification

Calcium distearate:

No aspiration toxicity classification

C.I. Pigment Red 53:1:

No aspiration toxicity classification

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

No aspiration toxicity classification

Polyvinyl chloride:

No aspiration toxicity classification

Experience with human exposure**Product:**

General Information : The possible symptoms known are those derived from the labelling (see section 2).

Further information**Components:****C.I. Pigment White 6:**

Remarks: Lung damage possible.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish :
Remarks: no data available

Components:**C.I. Pigment White 6:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l
Exposure time: 96 h
Test Type: static test
Analytical monitoring: no
Method: EPA
GLP: yes

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Remarks: The details of the toxic effect relate to the nominal concentration.

LC50 (*Oncorhynchus mykiss* (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Test Type: static test

Analytical monitoring: no

Method: OECD Test Guideline 203

GLP: No information available.

Remarks: The details of the toxic effect relate to the nominal concentration.

LC50 (*Cyprinodon variegatus* (sheepshead minnow)): > 10,000 mg/l

Exposure time: 96 h

Test Type: semi-static test

Analytical monitoring: no data available

Method: OECD Test Guideline 203

GLP: yes

Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to daphnia and other aquatic invertebrates : LC50 (*Daphnia magna* (Water flea)): > 100 mg/l

Exposure time: 48 h

Test Type: static test

Analytical monitoring: no data available

Method: OECD Test Guideline 202

GLP: no data available

Remarks: The details of the toxic effect relate to the nominal concentration.

LC50 (*Acartia tonsa*): > 10,000 mg/l

Exposure time: 48 h

Analytical monitoring: no data available

Method: ISO 14669 and PARCOM method

GLP: yes

Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to algae/aquatic plants : EC50 (*Pseudokirchneriella subcapitata* (microalgae)): 61 mg/l

End point: Growth rate

Exposure time: 72 h

Test Type: static test

Analytical monitoring: no

Method: EPA

GLP: No information available.

Remarks: The details of the toxic effect relate to the nominal concentration.

EC50 (*Skeletonema costatum* (marine diatom)): > 10,000 mg/l

End point: Growth rate

Exposure time: 72 h

Analytical monitoring: no data available

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Method: ISO 10253

GLP: yes

Remarks: The details of the toxic effect relate to the nominal concentration.

- Toxicity to fish (Chronic toxicity) : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 7.31 mg/l
Exposure time: 28 d
Test Type: static test
Analytical monitoring: yes
Method: Other
GLP: No information available.
Remarks: By analogy with a product of similar composition
- Toxicity to microorganisms : EC50 (activated sludge of a predominantly domestic sewage): > 1,000 mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 3 h
Test Type: aquatic
Method: OECD Test Guideline 209
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.
- NOEC (activated sludge of a predominantly domestic sewage): $\geq 1,000$ mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 3 h
Test Type: aquatic
Method: OECD Test Guideline 209
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.
- Toxicity to soil dwelling organisms : Test Type: artificial soil
NOEC (*Folsomia candida*): 0,1 $\rightarrow \geq 10$ %
Exposure time: 28 d
End point: mortality
Method: ISO 11267
GLP: no
Remarks: By analogy with a product of similar composition
This product does not have any known adverse effect on the soil organisms tested.
- Plant toxicity : NOEC: ≥ 10 %
Exposure time: 20 h
End point: Growth
Species: *Lactuca sativa* (lettuce)
Analytical monitoring: yes
Method: Other
GLP: no
Remarks: By analogy with a product of similar composition
No effect on the growth was observed.

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Sediment toxicity : NOEC (Hyaella azteca (Scud)): ≥ 100000 %
Analytical monitoring: no
Sediment: artificial soil
Exposure duration: 28 d
Nominal / Measured: nominal
Basis for effect: mortality
Method: Other
GLP: no
Remarks: By analogy with a product of similar composition

NOEC: ≥ 14989 mg/kg dry weight (d.w.)
Analytical monitoring: no data available
Sediment: Natural sediment
Exposure duration: 10 d
Nominal / Measured: nominal
Basis for effect: mortality
Method: Other
GLP: yes

Calcium distearate:

Toxicity to fish : LC50 (Oryzias latipes): > 100 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)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

Toxicity to fish (Chronic toxicity) : Remarks: not required

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 0.22 mg/l
Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211
GLP: yes
Remarks: By analogy with a product of similar composition

Toxicity to microorganisms : EC50 (activated sludge): $> 1,000$ mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 3 h
Test Type: aquatic

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Method: OECD Test Guideline 209

GLP: yes

Remarks: By analogy with a product of similar composition

Toxicity to soil dwelling organisms : Remarks: Not applicable

Plant toxicity : Remarks: Not applicable

Sediment toxicity : Remarks: no data available

Toxicity to terrestrial organisms : Remarks: Not applicable

C.I. Pigment Red 53:1:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 500 mg/l

End point: mortality

Exposure time: 96 h

Test Type: static test

Analytical monitoring: no

Method: OECD Test Guideline 203

GLP: yes

Remarks: The details of the toxic effect relate to the nominal concentration.

NOEC (Danio rerio (zebra fish)): 500 mg/l

End point: mortality

Exposure time: 96 h

Test Type: static test

Analytical monitoring: no

Method: OECD Test Guideline 203

GLP: yes

Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 3.8 mg/l

End point: Immobilization

Exposure time: 48 h

Test Type: static test

Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

NOEC (Daphnia magna (Water flea)): 3.8 mg/l

End point: Immobilization

Exposure time: 48 h

Test Type: static test

Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l

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End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes
Remarks: By analogy with a product of similar composition
The details of the toxic effect relate to the nominal concentration.

NOEC (*Pseudokirchneriella subcapitata* (green algae)): 3.2 mg/l

End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes
Remarks: By analogy with a product of similar composition
The details of the toxic effect relate to the nominal concentration.

Toxicity to fish (Chronic toxicity) : Remarks: not required

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: not required

Toxicity to microorganisms : NOEC (activated sludge): 100 mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 3 h
Test Type: aquatic
Analytical monitoring: no
Method: OECD Test Guideline 209
GLP: yes
Remarks: By analogy with a product of similar composition

Toxicity to soil dwelling organisms : Test Type: artificial soil
LC0 (*Eisenia fetida* (earthworms)): 1,000 mg/kg
Exposure time: 14 d
End point: mortality
Method: OECD Test Guideline 207
GLP: yes
Remarks: By analogy with a product of similar composition

Test Type: artificial soil
LC50 (*Eisenia fetida* (earthworms)): > 1,000 mg/kg
Exposure time: 14 d
End point: mortality
Method: OECD Test Guideline 207
GLP: yes
Remarks: By analogy with a product of similar composition

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Sediment toxicity : NOEC (*Lumbriculus variegatus* (Worm)): 1000 mg/kg dry weight (d.w.)
Analytical monitoring: no
Sediment: artificial soil
Exposure duration: 28 d
Nominal / Measured: nominal
Basis for effect: mortality
Method: OECD 225
GLP: yes
Remarks: By analogy with a product of similar composition

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Toxicity to fish : LC50 (*Brachydanio rerio* (zebrafish)): > 24 mg/l
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 0.17 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : EC50 (*Desmodesmus subspicatus* (green algae)): 0.17 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: Directive 87/302/EEC, part C, p. 89
GLP: yes

NOEC (*Desmodesmus subspicatus* (green algae)): 0.04 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : Remarks: not required

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): 0.286 mg/l
Exposure time: 21 d
Test Type: semi-static test
Analytical monitoring: yes

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Method: OECD Test Guideline 211
GLP: yes

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 3 h
Test Type: aquatic
Analytical monitoring: no
Method: Directive 87/302/EEC, part C, p. 118
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to soil dwelling organisms : Remarks: Not applicable

Plant toxicity : Remarks: Not applicable

Sediment toxicity : Remarks: Not applicable

Toxicity to terrestrial organisms : Remarks: Not applicable

Polyvinyl chloride:Toxicity to fish : no toxicity, except ingestion
Remarks: Not applicable

Toxicity to daphnia and other aquatic invertebrates : Remarks: Not applicable

Toxicity to algae/aquatic plants : Remarks: Not applicable

Toxicity to fish (Chronic toxicity) : no toxicity, except ingestion
Remarks: Not applicable

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: Not applicable

Toxicity to microorganisms : Remarks: Not applicable

Toxicity to soil dwelling organisms : Remarks: Not applicable

Plant toxicity : Remarks: Not applicable

Sediment toxicity : Remarks: Not applicable

Toxicity to terrestrial : no toxicity, except ingestion

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organisms

Remarks: Not applicable

Persistence and degradability**Components:****C.I. Pigment White 6:**

Biodegradability : Remarks: Not applicable for inorganic compound.

Calcium distearate:Biodegradability : Result: Readily biodegradable.
Biodegradation: 93 %
Method: OECD Test Guideline 301CResult: Readily biodegradable.
Biodegradation: 99 %
Method: OECD Test Guideline 301B**C.I. Pigment Red 53:1:**Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 33 mg/l
Carbon dioxide (CO₂)
Result: Not biodegradable
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes
Remarks: By analogy with a product of similar compositionaerobic
Inoculum: activated sludge
Concentration: 100 mg/l
Biochemical Oxygen Demand (BOD)
Result: Not biodegradable
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301C
GLP: no
Remarks: By analogy with a product of similar compositionStability in water : Test Type: abiotic
Hydrolysis: (0 %)
Method: OECD Test Guideline 111
GLP: no**Di-n-octyltin-bis-(2-ethylhexylthioglycolate):**Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 50 mg/l
Biochemical Oxygen Demand (BOD)

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Result: Not readily biodegradable.
Biodegradation: 30 - 40 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: yes

Polyvinyl chloride:

Biodegradability : Result: Not readily biodegradable.
Remarks: The polymer is too large to be bioavailable.
Not applicable due to insolubility in water. This product does not come into contact with the effluent when it is used for its purpose, otherwise it can be removed by filtration operations.

Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: not tested.

Components:**C.I. Pigment White 6:**

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): 20 - 200
Exposure time: 14 d
Concentration: 0.1 - 1 mg/l
Method: Other
GLP: No information available.
Remarks: Does not accumulate in organisms.

Partition coefficient: n-octanol/water : Remarks: inorganic

Calcium distearate:

Bioaccumulation : Remarks: Due to the low logPow bioaccumulation is not expected

C.I. Pigment Red 53:1:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): < 6.9
Exposure time: 42 d
Temperature: 25 °C
Concentration: 0.03 mg/l
Method: OECD Test Guideline 305C
GLP: no data available
Remarks: By analogy with a product of similar composition
Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: -0.62 (23 °C)
Method: OECD Test Guideline 107
GLP: no

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Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): 99 - 1,294
Exposure time: 30 d
Concentration: DOT: 0,25 - 2,5 µg/l
Method: OECD Guide-line 305 B
GLP: yes

Polyvinyl chloride:

Bioaccumulation : Remarks: Not applicable

Mobility in soil**Product:**

Distribution among environmental compartments : Remarks: not tested.

Components:**C.I. Pigment White 6:**

Mobility : Remarks: Adsorption to solid soil phase is possible.

Distribution among environmental compartments : Adsorption/Soil
Medium: water - soil
log Koc: 4.61
Method: Other

C.I. Pigment Red 53:1:

Distribution among environmental compartments : adsorption
Medium: Soil
Remarks: Not expected to adsorb on soil.

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

Distribution among environmental compartments : Remarks: Not applicable

Polyvinyl chloride:

Distribution among environmental compartments : Remarks: The product is insoluble and sinks in water.

Other adverse effects**Product:**

Results of PBT and vPvB assessment : Remarks: No information is available as no chemical safety report (CSR) is required.

Additional ecological information : Do not allow to enter ground water, waterways or waste water.

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Components:**C.I. Pigment White 6:**

- Environmental fate and pathways : not available
- Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
- Additional ecological information : Do not allow to enter ground water, waterways or waste water.

Calcium distearate:

- Results of PBT and vPvB assessment : The substance is not identified as a PBT or as a vPvB substance.
- Additional ecological information : Do not allow to enter ground water, waterways or waste water.

C.I. Pigment Red 53:1:

- Results of PBT and vPvB assessment : The substance is not identified as a PBT or as a vPvB substance.
- Additional ecological information : The product should not be allowed to enter drains, water courses or the soil.

Di-n-octyltin-bis-(2-ethylhexylthioglycolate):

- Environmental fate and pathways : not available
- Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
- Additional ecological information : Do not allow to enter ground water, waterways or waste water.

Polyvinyl chloride:

- Environmental fate and pathways : no data available
- Results of PBT and vPvB assessment : Remarks: Not applicable
- Additional ecological information : Has not been tested due to insolubility in water.

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Dispose of this product in accordance with all applicable local, state and federal regulations.
- Contaminated packaging : Regulations concerning reuse or disposal of used packaging materials must be observed.

SECTION 14. TRANSPORT INFORMATION

TDG	not restricted
IATA	not restricted
IMDG	not restricted

SECTION 15. REGULATORY INFORMATION

- NPRI Components** : Chromium (III) compound
Copper Compound

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

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

Canadian lists

No substances are subject to a Significant New Activity Notification.

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
- NIOSH REL : USA. NIOSH Recommended Exposure Limits
- US WEEL : USA. Workplace Environmental Exposure Levels (WEEL)
- ACGIH / TWA : 8-hour, time-weighted average
- CA AB OEL / TWA : 8-hour Occupational exposure limit
- CA BC OEL / TWA : 8-hour time weighted average
- CA QC OEL / TWA EV : Time-weighted average exposure value
- NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
- US WEEL / TWA : 8-hr TWA

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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

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