SAFETY DATA SHEET

RENOL-GREEN CV64800023-ZN

Substance key: 000000747619	Revision Date: 09/19/2020
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SECTION 1. IDENTIFICATION

Identification of the company:
Avient Colorants Canada Inc.
2 Lone Oak Court
Toronto, Ontario, M9C 5R9
Telephone No.: +1 514-832-2559

Information of the substance/preparation:
Product Stewardship
e-mail: SDS.NORAMMB@avient.com

Emergency tel. number: +1 CANUTEC (613) 996-6666

Trade name: **RENOL-GREEN CV64800023-ZN**
Material number: CV64800023

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 7	1333-86-4	0.1 - 1
C.I. Pigment Brown 24	68186-90-3	1 - 5
polychloro copper phthalocyanine	1328-53-6	1 - 5
C.I. Pigment White 6	13463-67-7	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
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)
Sulphur oxides

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.
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 Brown 24	68186-90-3	TWA	0.5 mg/m3 (antimony)	CA AB OEL
		TWAEV	0.5 mg/m3 (antimony)	CA QC OEL
		TWA	0.5 mg/m3 (antimony)	CA BC OEL
		TWA	0.5 mg/m3 (antimony)	ACGIH
polychloro copper phthalocyanine	1328-53-6	TWA	1 mg/m3 (Copper)	NIOSH REL
C.I. Pigment Black 7	1333-86-4	TWA	3.5 mg/m3	CA AB OEL
		TWA (Inhalable)	3 mg/m3	CA BC OEL
		TWAEV	3.5 mg/m3	CA QC OEL
		TWA (Inhalable particulate matter)	3 mg/m3	ACGIH
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
Polyvinyl chloride	9002-86-2	TWA (Respirable)	1 mg/m3	CA BC OEL
		TWAEV (total dust)	10 mg/m3	CA QC OEL
		TWA (Respirable particulate matter)	1 mg/m3	ACGIH

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	:	green
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

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	:	> 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 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.

Incompatible materials : none
Strong oxidizing agents

Hazardous decomposition products : 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 dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Components:

C.I. Pigment Black 7:

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 : LC0 (Rat): > 0.0046 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: No information available.
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : Remarks: not required

C.I. Pigment Brown 24:

Acute oral toxicity : LD50 (Rat, male and female): > 10,000 mg/kg
Method: BASF test
GLP: no

Acute inhalation toxicity : Remarks: Not applicable

Acute dermal toxicity : Remarks: Not applicable

polychloro copper phthalocyanine:

Acute oral toxicity : LD50 (Rat, male and female): > 6,400 mg/kg
Method: OECD Test Guideline 401
Remarks: No mortality observed at this dose.

Acute inhalation toxicity : Remarks: no data available

Acute dermal toxicity : Remarks: no data available

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

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 Black 7:

Species: Rabbit
Exposure time: 4 - 24 h
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: no

C.I. Pigment Brown 24:

Species: Rabbit
Exposure time: 24 h
Method: Draize Test
Result: No skin irritation
GLP: no

polychloro copper phthalocyanine:

Species: Rabbit
Method: Other
Result: No skin irritation

C.I. Pigment White 6:

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

Polyvinyl chloride:

Remarks: This information is not available.

Serious eye damage/eye irritation

Product:

Result: No eye irritation

Components:

C.I. Pigment Black 7:

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

C.I. Pigment Brown 24:

Species: rabbit eye
Result: slight irritation
Method: FDA guideline
GLP: no

polychloro copper phthalocyanine:

Species: Rabbit
Result: No eye irritation
Method: Other

C.I. Pigment White 6:

Species: rabbit eye
Result: No eye irritation
Method: OECD Test Guideline 405
GLP: No information available.

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

Components:

C.I. Pigment Black 7:

Test Type: Buehler Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Not a skin sensitizer.
GLP: yes

C.I. Pigment Brown 24:

Remarks: Not applicable

polychloro copper phthalocyanine:

Test Type: Maximisation Test
Species: Guinea pig

Method: OECD Test Guideline 406
Result: Not a skin sensitizer.
Remarks: By analogy with a product of similar composition

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.

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

Test Type: Guinea pig maximization test
Exposure routes: Skin contact
Species: Guinea pig
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 Black 7:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test Type: In vitro gene mutation study in mammalian cells
Test system: Rodent cell line

Metabolic activation: without
Method: OECD Test Guideline 476
Result: positive
GLP: No information available.

Test Type: Micronucleus test
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

C.I. Pigment Brown 24:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Concentration: 100 - 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: 2,5 - 5000 µg/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster lung cells
Concentration: 0,5 - 900 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative
GLP: yes

Test Type: In vitro gene mutation study in mammalian cells
Test system: mouse lymphoma cells
Concentration: 3,13 - 100 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

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

polychloro copper phthalocyanine:

Genotoxicity in vitro : Test Type: Ames test

Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: Mammalian cell gene mutation assay
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : Test Type: gene mutation test
Species: Mouse (male and female)
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 484
Result: negative
Remarks: By analogy with a product of similar composition

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

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

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.

Polyvinyl chloride:

Genotoxicity in vitro : Remarks: Not applicable

Germ cell mutagenicity - Assessment : No information available.

Carcinogenicity

Components:

C.I. Pigment Black 7:

Remarks: Carbon Black should not be classified for carcinogenicity according to the criteria of the Globally Harmonized System of Classification and Labelling of Chemicals. Human health studies show that exposure to carbon black does not increase the risk of carcinogenicity. Studies in laboratory animals show that lung tumors are induced in rats as a result of repeated exposure to inert, poorly soluble particles like carbon black and other poorly soluble particles. Rat tumors are a result of a secondary non-genotoxic mechanism associated with the phenomenon of lung overload. This is a species-specific mechanism that has questionable relevance for classification in humans. Thus a carcinogenicity classification for Carbon Black is not warranted.

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

C.I. Pigment Brown 24:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

polychloro copper phthalocyanine:

Carcinogenicity - Assessment : No information available.

C.I. Pigment White 6:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

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

Carcinogenicity - Assessment : No information available.

Polyvinyl chloride:

Carcinogenicity - Assessment : No information available.

Reproductive toxicity

Components:

C.I. Pigment Black 7:

Effects on foetal development : Test Type: Pre-natal
Species: Rabbit, male and female
Strain: New Zealand white
Application Route: Inhalation
Dose: 10% diesel exhaust emission
Duration of Single Treatment: 12 d
Method: OECD Test Guideline 414
Result: No effects on fertility and early embryonic

development were detected.
GLP: no
Remarks: By analogy with a product of similar composition

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

C.I. Pigment Brown 24:

Effects on fertility : Test Type: One generation study
Species: Rat, male and female
Strain: Sprague-Dawley
Application Route: oral (gavage)
Dose: 250 - 500 - 1000 mg/kg
General Toxicity - Parent: NOAEL: >= 1,000 mg/kg body weight
General Toxicity F1: NOAEL: >= 1,000 mg/kg body weight
Method: OECD Test Guideline 422
GLP: yes

Effects on foetal development : Species: Rat
Strain: Sprague-Dawley
Application Route: oral (gavage)
Dose: 250 - 500 - 1000 mg/kg
General Toxicity Maternal: NOAEL: >= 1,000 mg/kg body weight
Teratogenicity: NOAEL: >= 1,000 mg/kg body weight
Method: OECD Test Guideline 422
GLP: yes

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

polychloro copper phthalocyanine:

Effects on foetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Oral
Dose: 40, 200, 1000 mg/kg bw/day
General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight
Developmental Toxicity: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 421
Remarks: By analogy with a product of similar composition

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

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
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.

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 Black 7:

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

C.I. Pigment Brown 24:

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

polychloro copper phthalocyanine:

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

C.I. Pigment White 6:

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 Black 7:

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

C.I. Pigment Brown 24:

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

polychloro copper phthalocyanine:

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

C.I. Pigment White 6:

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 Black 7:

Species: Rat, female
NOAEL: 52 mg/kg bw/day
Application Route: oral (feed)
Exposure time: 1 a - 2 a
Number of exposures: daily
Dose: 2,05 g/kg of chow diet
Group: yes
Method: Other
GLP: No information available.
Remarks: No adverse effect has been observed in chronic toxicity tests.

Species: Rat, male
NOAEL: 0.0011 mg/l
LOAEL: 0.0071 mg/l
Application Route: Inhalation
Test atmosphere: dust/mist
Exposure time: 13 w
Number of exposures: 6 h per day; 5 d per week
Dose: 1,1 - 7,1 - 52,8 mg/m3
Group: yes
Method: Other
GLP: No information available.

Species: Mouse, male and female
Application Route: Skin contact
Exposure time: 12-18 m
Number of exposures: 3 times per week
Dose: 20% carbon black suspensions
Group: yes
Method: Other
GLP: no
Remarks: No adverse effect has been observed in chronic toxicity tests.

C.I. Pigment Brown 24:

Species: Rat, male and female
NOAEL: 500 mg/kg
Application Route: oral (feed)
Exposure time: 90 d
Number of exposures: daily
Dose: 0,5 - 5 - 50 - 500 mg/kg
Group: yes

Method: OECD Test Guideline 408
GLP: No information available.

Application Route: Inhalation
Remarks: not tested.

Application Route: Skin contact
Remarks: not tested.

polychloro copper phthalocyanine:

Species: Rat, male and female
NOAEL: 1000 mg/kg bw/day
Application Route: oral (gavage)
Exposure time: 28 d
Dose: 0, 100, 300, 1000 mg/kg bw/day
Method: Other

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
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

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.

Aspiration toxicity

Components:

C.I. Pigment Black 7:
No aspiration toxicity classification

C.I. Pigment Brown 24:
No aspiration toxicity classification

polychloro copper phthalocyanine:
no data available

C.I. Pigment White 6:
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 Black 7:

Toxicity to fish : LC0 (Danio rerio (zebra fish)): 1,000 mg/l
End point: mortality

Exposure time: 96 h
Test Type: semi-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)): > 5,600 mg/l
End point: Immobilization
Exposure time: 24 h
Test Type: static test
Analytical monitoring: no
Method: OECD Test Guideline 202
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 10,000 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: no
Method: OECD Test Guideline 201
GLP: yes
Remarks: 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 : EC0 (activated sludge): > 400 mg/l
End point: Bacteria toxicity (growth inhibition)
Exposure time: 3 h
Test Type: static test
Method: DIN 38412
GLP: no

Toxicity to soil dwelling organisms : Test Type: Other
Method: Other
GLP: No information available.
Remarks: This product does not have any known adverse effect on the soil organisms tested.

C.I. Pigment Brown 24:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 10,000 mg/l
Exposure time: 96 h
Test Type: static test

Analytical monitoring: no
Method: DIN 38412 T.15
GLP: no
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: no
Method: OECD Test Guideline 202
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: no
Method: OECD Test Guideline 201
GLP: yes
Remarks: 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 : EC50 (Pseudomonas putida): > 10,000 mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 0.5 h
Test Type: aquatic
Analytical monitoring: no
Method: DIN 38412 T.27
GLP: no
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

polychloro copper phthalocyanine:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 Remarks: By analogy with a product of similar composition
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 500 mg/l Exposure time: 48 h Test Type: static test Method: Regulation (EC) No. 440/2008, Annex, C.2
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	:	Remarks: no data available
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): >= 1 mg/l End point: Reproduction rate Exposure time: 21 d Test Type: semi-static test Method: OECD Test Guideline 211
Toxicity to soil dwelling organisms	:	Test Type: artificial soil NOEC (Eisenia fetida (earthworms)): >= 1,000 mg/kg Exposure time: 14 d End point: mortality Method: OECD Test Guideline 207
Sediment toxicity	:	NOEC (Lumbriculus variegatus (Worm)): 1000 mg/kg dry weight (d.w.) Test Type: static test Exposure duration: 28 d Method: OECD 225

Ecotoxicology Assessment

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

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 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
Method: ISO 10253
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to fish (Chronic : LC50 (Oncorhynchus mykiss (rainbow trout)): 7.31 mg/l

toxicity)		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): >= 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 ->= 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.
Sediment toxicity	:	NOEC (Hyalella 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

Ecotoxicology Assessment

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

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 : NOEC (Daphnia magna (Water flea)): 0.286 mg/l

aquatic invertebrates (Chronic toxicity)		Exposure time: 21 d Test Type: semi-static test Analytical monitoring: yes 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 organisms	:	no toxicity, except ingestion Remarks: Not applicable

Persistence and degradability

Components:

C.I. Pigment Black 7:

Biodegradability	:	Remarks: Not applicable

C.I. Pigment Brown 24:

Biodegradability	:	Remarks: Not applicable for inorganic compound.
Physico-chemical removability	:	Remarks: Inorganic product, cannot be eliminated from the water by biological purification processes.

polychloro copper phthalocyanine:

Biodegradability	:	Inoculum: activated sludge, domestic Result: Not biodegradable Biodegradation: < 1 % Exposure time: 28 d Method: OECD Test Guideline 301F Remarks: By analogy with a product of similar composition

C.I. Pigment White 6:

Biodegradability	:	Remarks: Not applicable for inorganic compound.

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

Biodegradability	:	aerobic Inoculum: activated sludge Concentration: 50 mg/l Biochemical Oxygen Demand (BOD) 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 Black 7:

Bioaccumulation : Remarks: Not applicable

C.I. Pigment Brown 24:

Bioaccumulation : Remarks: Not relevant for inorganic substances

polychloro copper phthalocyanine:

Bioaccumulation : Remarks: Not applicable

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

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

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 Black 7:

Distribution among environmental compartments : Adsorption/Soil
Medium: water - soil
Remarks: Not applicable

C.I. Pigment Brown 24:

Distribution among environmental compartments : Remarks: Not applicable

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

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.

Components:

C.I. Pigment Black 7:

Environmental fate and pathways : not available

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 Brown 24:

Environmental fate and : not available

pathways

Results of PBT and vPvB assessment	:	The substance is inorganic, thus a PBT and vPvB criteria assessment is not applicable according to Annex XIII of Regulation (EC) 1907/2006.
Additional ecological information	:	Do not allow to enter ground water, waterways or waste water.

polychloro copper phthalocyanine:

Results of PBT and vPvB assessment	:	The substance is not identified as a PBT or as a vPvB substance.

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.

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.

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
Antimony compounds

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
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 / TWAEV	:	Time-weighted average exposure value
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek

AICS - Australian Inventory of Chemical Substances; AIIC - 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 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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