

RENOL-SILVER SBS3800008-ZN

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SECTION 1. IDENTIFICATION

Identification of the	Avient Colorants Canada Inc.					
company:	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@Clariant.com					
	Emergency tel. number: +1 CANUTEC (613) 996-6666					
Trade name: Material number:	RENOL-SILVER SBS3800008-ZN SBS3800008					
Chemical family:	Colourant preparation Carrier: ABS					

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: ABS

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
C.I. Pigment Brown 24	antimony compounds	68186-90-3	0.1 - 1
C.I. Pigment Yellow 164	antimony compounds	68412-38-4	0.1 - 1
C.I. Pigment Black 28	C.I. Pigment Black 28	68186-91-4	0.1 - 1
Tin dioxide	Tin dioxide	18282-10-5	0.1 - 1
C.I. Pigment White 6	titanium dioxide;	13463-67-7	1 - 5



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	[in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]		
White mineral oil (petroleum)	White mineral oil (petroleum)	8042-47-5	1 - 5
Rutile (TiÓ2)	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	1317-80-2	5 - 10
Mica-Group minerals	Mica-Group minerals	12001-26-2	10 - 30

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 contacts 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	:	The possible symptoms known are those derived from the



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and effects, both acute and delayed		labelling (see section 2). No additional symptoms are known.
Notes to physician	:	Treat symptomatically.
CTION 5. FIREFIGHTING MEA	SU	RES
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: Styrene Hydrogen cyanide (hydrocyanic acid) Acrylonitrile Carbon monoxide Carbon dioxide (CO2) Metal oxides Carbon monoxide and carbon dioxide Take measures to prevent the build up of electrostatic charg Dust can form an explosive mixture in air.
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 breathin 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	:	Avoid dust formation.



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containment and cleaning up		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.		
CTION 7. HANDLING AND ST	OR	AGE		
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.		

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
		TWA	10 mg/m3 (Titanium dioxide)	ACGIH
C.I. Pigment Yellow 164	68412-38-4	TWA	0.5 mg/m3	CA AB OEL



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		1	(antimony)	1
		TWA	0.2 mg/m3 (Manganese)	CA AB OEL
		TWAEV	0.5 mg/m3 (antimony)	CA QC OEL
		TWAEV (total dust)	0.2 mg/m3 (Manganese)	CA QC OEL
		TWA	0.5 mg/m3 (antimony)	CA BC OEL
		TWA (Respirable)	0.02 mg/m3 (Manganese)	CA BC OEL
		TWA (Total)	0.2 mg/m3 (Manganese)	CA BC OEL
		TWA	0.5 mg/m3 (antimony)	ACGIH
		TWA (Inhalable particulate matter)	0.1 mg/m3 (Manganese)	ACGIH
		TWA (Respirable particulate matter)	0.02 mg/m3 (Manganese)	ACGIH
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
		TWA	10 mg/m3 (Titanium dioxide)	ACGIH
Mica-Group minerals	12001-26-2	TWA (Respirable)	3 mg/m3	CA AB OEL
		TWA (Respirable)	3 mg/m3	CA BC OEL
		TWAEV (respirable dust)	3 mg/m3	CA QC OEL
		TWA (Respirable particulate matter)	0.1 mg/m3	ACGIH
Tin dioxide	18282-10-5	TWA	2 mg/m3 (Tin)	CA AB OEL
		TWAEV	2 mg/m3 (Tin)	CA QC OEL
		TWA	2 mg/m3 (Tin)	CA BC OEL
		TWA	2 mg/m3	CA ON OEL



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			(Tin)	
		TWA (Inhalable particulate matter)	2 mg/m3 (Tin)	ACGIH
Rutile (TiO2)	1317-80-2	TWA	10 mg/m3 (Titanium dioxid	ACGIH e)
Engineering measures	ventilation. Provide app places wher Use enginee	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 equipr	nent			
Respiratory protection	manufacture generated. Use respirat	er's recommenda	d respirators followi ations where dust of quipment when usir ae section 8).	r fume may b
Hand protection				
Remarks		loves When han	ious butyl rubber gl dling hot material, ι	
Eye protection	: Safety glass	es with side-shi	elds	
Skin and body protection	to prevent s	kin contact.	luding long sleeves e suitable protective	-
Hygiene measures	during work, the handling	in particular: do	e precautions must not drink, eat or sr and clean hands an	noke during

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Granules
Colour	:	silver colours
Odour	:	characteristic
Odour Threshold	:	Not applicable
рН	:	Not applicable

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Melting point	:	> 90 °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	:	To the best of our current knowledge, no thermal decomposition of the product is expected if it is processed according to good manufacturing practices. See section 10.4. "Conditions to avoid"
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



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SECTION 10. STABILITY AND REACTIVITY Reactivity No dangerous reaction known under conditions of normal use. : Chemical stability : Stable Possibility of hazardous : No dangerous reaction known under conditions of normal use. reactions 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 : Strong acids and oxidizing agents Strong acids and strong bases Strong oxidizing agents Hazardous decomposition : No decomposition if used as directed. products

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes None known.	s of	exposure
Acute toxicity		
Product:		
Acute dermal toxicity	:	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
Components:		
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
C.I. Pigment White 6:		
Acute oral toxicity	:	LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425 GLP: no



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Aguta inholation tovicity	LCE0 (Bot male and famale): 2.4 E.1 mg/l
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
White mineral oil (petroleum):	
Acute oral toxicity :	Remarks: Test data for the substance are not available.
Skin corrosion/irritation	
Product:	
Result: No skin irritation	
Components:	
C.I. Pigment Brown 24:	
Species: Rabbit Exposure time: 24 h	
Method: Draize Test Result: No skin irritation	
GLP: no	
C.I. Pigment White 6:	
Species: Rabbit	
Exposure time: 4 h	
Method: OECD Test Guideline 40 Result: No skin irritation)4
GLP: no	
Serious eye damage/eye irritati	on
Product:	
Result: No eye irritation	
Components:	
C.I. Pigment Brown 24:	
Species: rabbit eye	
Result: slight irritation Method: FDA guideline	
GLP: no	

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C.I. Pigment White 6:

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

Respiratory or skin sensitisation

Product:

Result: non-sensitizing

Components:

C.I. Pigment Brown 24:

Remarks: Not applicable

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.

Germ cell mutagenicity

Components:

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





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	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.
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



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Germ cell mutagenicity - Assessment	: In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects
Carcinogenicity	
Components:	
C.I. Pigment Brown 24:	
Carcinogenicity - Assessment	: Not classifiable as a human carcinogen.
C.I. Pigment White 6:	
Carcinogenicity - Assessment	: Not classifiable as a human carcinogen.
Reproductive toxicity	
Components:	
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.
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



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	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.

STOT - single exposure

Components:

C.I. Pigment Brown 24:

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.

STOT - repeated exposure

Components:

C.I. Pigment Brown 24:

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.

Repeated dose toxicity

Components:

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

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Remarks: not tested.

Application Route: Skin contact Remarks: not tested.

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: Other GLP: no

Aspiration toxicity

Components:

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

C.I. Pigment White 6:

No aspiration toxicity classification

White mineral oil (petroleum):

May be fatal if swallowed and enters airways.

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.





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Ecotoxicity	
Product:	
Toxicity to fish	: Remarks: no data available
Components:	
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 nomina 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 nomina concentration.
Toxicity to algae/aquatic plants	 EC50 (Desmodesmus subspicatus (green algae)): > 100 mg 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 nomina 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



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	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
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



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	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 : 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): >= 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.



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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 th 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.
White mineral oil (petroleur	n):
Toxicity to fish	: Remarks: Test data for the substance are not available.
Ecotoxicology Assessment	
Chronic aquatic toxicity	: May cause long lasting harmful effects to aquatic life.



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Persistence and degradability	,	
Components:		
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.
C.I. Pigment White 6:		
Biodegradability :		Remarks: Not applicable for inorganic compound.
Bioaccumulative potential		
Product:		
Bioaccumulation :		Remarks: not tested.
Components:		
C.I. Pigment Brown 24:		
Bioaccumulation :	:	Remarks: Not relevant for inorganic substances
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
Mobility in soil		
Product:		
Distribution among : environmental compartments	•	Remarks: not tested.
Components:		
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 :	•	Adsorption/Soil



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environmental compartments		Medium: water - soil log Koc: 4.61 Method: Other
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 Brown 24:		
Environmental fate and : pathways	:	not available
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.
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.

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.



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TDG	not restricted
ΙΑΤΑ	not restricted
IMDG	not restricted
SECTION 15. REGULATORY INFO	ORMATION
NPRI Components	: Chromium (III) compound Antimony compounds Manganese Compound Copper Compound Styrene
The components of this pro	duct 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 abbreviation	ons	
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA ON OEL	:	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
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 ON OEL / TWA	:	Time-Weighted Average Limit (TWA)
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

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



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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; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations: UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Revision Date	:	01/18/2022
Date format	:	mm/dd/yyyy

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