

RENOL-SILVER SBS3800007-ZN

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 Substance key: 000000823098
 Revision Date: 09/21/2020

 Version: 1 - 1 / CDN
 Date of printing: 04/06/2022

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@avient.com

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

Trade name: RENOL-SILVER SBS3800007-ZN

Material number: SBS3800007

Chemical family: Colourant preparation

Carrier: ABS

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: ABS

Components

Chemical name	CAS-No.	Concentration (% w/w)
C.I. Pigment Brown 24	68186-90-3	0.1 - 1
C.I. Pigment Yellow 164	68412-38-4	0.1 - 1
Tin dioxide	18282-10-5	0.1 - 1
N,N'-Ethylenedi(stearamide)	110-30-5	1 - 5
C.I. Pigment White 6	13463-67-7	1 - 5
Rutile (TiO2)	1317-80-2	1 - 5
White mineral oil (petroleum)	8042-47-5	1 - 5
Mica-Group minerals	12001-26-2	5 - 10



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Aluminium powder (stabilized) 7429-90-5 5 - 10

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 : In case of fire hazardous decomposition products may be



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firefighting produced such as:

Styrene

Hydrogen cyanide (hydrocyanic acid)

Acrylonitrile
Carbon monoxide
Carbon dioxide (CO2)

Take measures to prevent the build up of electrostatic charge.

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

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 of

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.



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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
N,N'-Ethylenedi(stearamide)	110-30-5	TWA	10 mg/m3	CA AB OEL
		TWA	10 mg/m3	CA BC OEL
		TWA (Inhalable particulate matter)	10 mg/m3	ACGIH
		TWA (Respirable particulate matter)	3 mg/m3	ACGIH
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
C.I. Pigment Yellow 164	68412-38-4	TWA	0.5 mg/m3 (antimony)	CA AB OEL
		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



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		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 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
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)	3 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 (Tin)	CA ON OEL
		TWA (Inhalable particulate matter)	2 mg/m3 (Tin)	ACGIH
Aluminium powder (stabilized)	7429-90-5	TWA (Dust)	10 mg/m3	CA AB OEL
		TWAEV	10 mg/m3	CA QC OEL
		TWAEV (Welding fumes)	5 mg/m3 (Aluminium)	CA QC OEL
		TWA (Respirable particulate matter)	1 mg/m3 (Aluminium)	ACGIH



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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 : silver colours

Odour : characteristic

Odour Threshold : Not applicable

pH : Not applicable

Melting point : > 90 °C

Boiling point : Not applicable

Flash point : Not applicable



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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

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.



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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.

Keep away from heat and sources of ignition.

Incompatible materials : no data available

Hazardous decomposition

products

No hazardous decomposition products if stored and handled

as prescribed

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

None known.

Acute toxicity

Product:

Acute dermal toxicity : Acute toxicity estimate: 3,086 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

N,N'-Ethylenedi(stearamide):

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

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male and female): > 6.3 mg/l

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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

Method: OECD Test Guideline 402



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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

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

N,N'-Ethylenedi(stearamide):

Species: Rabbit

Method: OECD Test Guideline 404

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

Serious eye damage/eye irritation

Product:

Result: No eye irritation



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Components:

C.I. Pigment Brown 24:

Species: rabbit eye Result: slight irritation Method: FDA guideline

GLP: no

N,N'-Ethylenedi(stearamide):

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

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

N,N'-Ethylenedi(stearamide):

Species: Mouse

Method: OECD Test Guideline 429 Result: Not a skin sensitizer.

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.

CLD

GLP: yes

Test Type: Respiratory system



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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

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.

N,N'-Ethylenedi(stearamide):

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



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Test Type: Chromosome aberration test in vitro Test system: Chinese hamster lung cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: Mammalian cell gene mutation assay

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Germ cell mutagenicity -

Assessment

In vitro 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

Carcinogenicity

Components:

C.I. Pigment Brown 24:

Carcinogenicity - Assessment

Not classifiable as a human carcinogen.



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N,N'-Ethylenedi(stearamide):

Carcinogenicity -

No information available.

Assessment

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 : Species: Rat

development 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.

N,N'-Ethylenedi(stearamide):

Effects on foetal : Test Type: Pre-natal

development Species: Rat

Strain: Sprague-Dawley

Application Route: oral (gavage)

General Toxicity Maternal: NOAEL: >= 1,000 mg/kg body

weight

Method: OECD Test Guideline 414

Reproductive toxicity -

No evidence of adverse effects on sexual function and fertility,

Assessment or on development, based on animal experiments.

C.I. Pigment White 6:



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Effects on fertility : Remarks: no data available

Effects on foetal : Test Type: Pre-natal development : 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.

STOT - single exposure

Components:

C.I. Pigment Brown 24:

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

N,N'-Ethylenedi(stearamide):

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.

N,N'-Ethylenedi(stearamide):

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.



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Repeated dose toxicity

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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

Remarks: not tested.

Application Route: Skin contact

Remarks: not tested.

N,N'-Ethylenedi(stearamide):

Species: Rat, male and female NOEL: >= 1000 mg/kg bw/day Application Route: oral (gavage) Method: OECD Test Guideline 408

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

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Aspiration toxicity

Components:

C.I. Pigment Brown 24:

No aspiration toxicity classification

N,N'-Ethylenedi(stearamide):

no data available

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.

SECTION 12. ECOLOGICAL INFORMATION

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 nominal

concentration.

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h



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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

N,N'-Ethylenedi(stearamide):

Toxicity to fish : LC50 (Oryzias latipes (Orange-red killifish)): 0.027 mg/l

End point: mortality Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.0022 mg/l

Exposure time: 48 h



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Test Type: semi-static test

Method: OECD Test Guideline 202

Remarks: No toxicity at the limit of solubility

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (algae)): 0.053 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: No toxicity at the limit of solubility

Toxicity to fish (Chronic

toxicity)

Remarks: no data available

Toxicity to daphnia and other :

aquatic invertebrates (Chronic toxicity)

Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: No toxicity at the limit of solubility

EC50 (Daphnia magna (Water flea)): 0.0056 mg/l

Toxicity to microorganisms EC50 (activated sludge): > 1,000 mg/l

> Exposure time: 3 h Test Type: static test

Method: OECD Test Guideline 209

Toxicity to soil dwelling

organisms

NOEC (Eisenia fetida (earthworms)): >= 1,000 mg/kg

Exposure time: 56 d

Method: OECD Test Guideline 222

NOEC: >= 1000 mg/kg dry weight (d.w.)Sediment toxicity

> Test Type: static test Sediment: Artificial sediment Exposure duration: 28 d

Method: OECD Test Guideline 218

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: ves

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



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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: ves

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



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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



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> Method: Other GLP: yes

Ecotoxicology Assessment

Chronic aquatic toxicity This product has no known ecotoxicological effects.

White mineral oil (petroleum):

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.

Persistence and degradability

Components:

C.I. Pigment Brown 24:

Biodegradability : Remarks: Not applicable for inorganic compound.

Physico-chemical

water by biological purification processes. removability

N,N'-Ethylenedi(stearamide):

Biodegradability aerobic

> Inoculum: activated sludge Carbon dioxide (CO2)

Result: Not readily biodegradable.

Remarks: Inorganic product, cannot be eliminated from the

Biodegradation: 5.5 % Exposure time: 28 d

Method: OECD Test Guideline 301B

C.I. Pigment White 6:

Biodegradability Remarks: Not applicable for inorganic compound.

Bioaccumulative potential

Product:

Remarks: not tested. Bioaccumulation

Components:

C.I. Pigment Brown 24:

Bioaccumulation Remarks: Not relevant for inorganic substances

N,N'-Ethylenedi(stearamide):

Bioaccumulation Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

Remarks: Not applicable



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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

N,N'-Ethylenedi(stearamide):

Distribution among : log Koc: 8.6 - 8.91 environmental compartments Method: calculated

C.I. Pigment White 6:

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

Distribution among : Adsorption/Soil 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



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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.

N,N'-Ethylenedi(stearamide):

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.

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
Manganese Compound
Aluminium powder (stabilized)



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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 ON OEL : Ontario Table of Occupational Exposure Limits made under

the Occupational Health and Safety Act.

CA QC OEL : Québec. Regulation respecting occupational health and

safety, Schedule 1, Part 1: Permissible exposure values for

airborne contaminants

ACGIH / TWA : 8-hour, time-weighted average
CA AB OEL / TWA : 8-hour Occupational exposure limit
CA 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

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



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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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