SAFETY DATA SHEET

ABS PVC 003.000% M38537 RUBBER DUCKY

Substance key: 000000649985	Revision Date: 09/22/2020
Version : 1 - 1 / CDN	Date of printing :12/20/2021

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@Clariant.com **Emergency tel. number:** +1 CANUTEC (613) 996-6666
Trade name:	**ABS PVC 003.000% M38537 RUBBER DUCKY**
Material number:	SB13754422
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)
Limestone	1317-65-3	0.1 - 1
Aluminium oxide	1344-28-1	0.1 - 1
Styrene	100-42-5	0.1 - 1
N,N'-Ethylenedi(stearamide)	110-30-5	1 - 5
C.I. Pigment White 6	13463-67-7	10 - 30
2-Propenenitrile, polymer with ethenylbenzene	9003-54-7	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 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: Styrene Hydrogen cyanide (hydrocyanic acid)

Acrylonitrile
Carbon monoxide
Carbon dioxide (CO2)
Nitrogen oxides (NOx)
Sulphur dioxide
Hydrogen chloride
Emits toxic fumes under fire conditions. This product presents no unusual fire or explosion hazards while sealed in a shipping container. During usage, if a dust cloud is generated, organic powders have the potential to be explosive with static spark or flame initiation.

Take measures to prevent the build up of electrostatic charge.
Dust can form an explosive mixture in air.
Styrene
Hydrocarbons

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 : Take measures to prevent the build up of electrostatic charge.

fire and explosion

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
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
Limestone	1317-65-3	TWA	10 mg/m3	CA AB OEL
		TWAEV (total dust)	10 mg/m3	CA QC OEL
Aluminium oxide	1344-28-1	TWA	10 mg/m3	CA AB OEL
		TWAEV (total dust)	10 mg/m3 (Aluminium)	CA QC OEL
		TWA (Respirable)	1 mg/m3 (Aluminium)	CA BC OEL
		TWA (Respirable particulate matter)	1 mg/m3 (Aluminium)	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
Styrene	100-42-5	TWA	20 ppm 85 mg/m3	CA AB OEL
		STEL	40 ppm 170 mg/m3	CA AB OEL
		TWA	20 ppm	CA BC OEL
		STEL	40 ppm	CA BC OEL
		TWA	35 ppm	CA ON OEL
		STEL	100 ppm	CA ON OEL
		STEV	100 ppm 426 mg/m3	CA QC OEL
		TWAEV	50 ppm 213 mg/m3	CA QC OEL
		TWA	20 ppm	ACGIH
		STEL	40 ppm	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	:	yellow
Odour	:	characteristic
Odour Threshold	:	Not applicable
pH	:	Not applicable
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

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
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	:	None. no data available Strong acids and oxidizing agents Strong acids and strong bases
Hazardous decomposition products	:	No decomposition if stored and applied as directed. 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: 3,645 mg/kg Method: Calculation method

Components:

Styrene:

Acute oral toxicity	:	LD50 (Rat): 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 11.8 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg

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

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

Skin corrosion/irritation

Product:

Result: No skin irritation

Components:

Styrene:

Result: Irritating to skin.

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

Components:

Styrene:

Result: Irritating to eyes.

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:

Styrene:

Result: Does not cause skin sensitisation.

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.
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:

Styrene:

Genotoxicity in vitro	:	Remarks: no data available
Germ cell mutagenicity - Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

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 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:

Styrene:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

N,N'-Ethylenedi(stearamide):

Carcinogenicity - Assessment : No information available.

C.I. Pigment White 6:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

Components:

Styrene:

Effects on fertility	:	Remarks: Based on available data, the classification criteria are not met.
Reproductive toxicity - Assessment	:	Suspected human reproductive toxicant

N,N'-Ethylenedi(stearamide):

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

STOT - single exposure

Components:

Styrene:

Assessment: May cause respiratory irritation.

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:

Styrene:

Target Organs: hearing organs
Assessment: Causes damage to organs through prolonged or 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.

Repeated dose toxicity

Components:

Styrene:

Remarks: This information is not available.

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

Aspiration toxicity

Components:

Styrene:

May be fatal if swallowed and enters airways.

N,N'-Ethylenedi(stearamide):

no data available

C.I. Pigment White 6:

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:

Styrene:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 4.02 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.7 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 4.9 mg/l
Exposure time: 72 h

Toxicity to fish (Chronic toxicity)	:	Remarks: no data available
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	Remarks: no data available
Toxicity to microorganisms	:	EC50 (Bacteria): 500 mg/l Exposure time: 0.5 h
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

Ecotoxicology Assessment

Chronic aquatic toxicity	:	Harmful to aquatic life with long lasting effects.

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 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)	:	EC50 (Daphnia magna (Water flea)): 0.0056 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 Remarks: No toxicity at the limit of solubility
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
Sediment toxicity	:	NOEC: >= 1000 mg/kg dry weight (d.w.) 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: 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 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.

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.

Persistence and degradability

Components:

Styrene:

Biodegradability : aerobic
Result: Readily biodegradable.
Biodegradation: 70.9 %
Exposure time: 28 d

N,N'-Ethylenedi(stearamide):

Biodegradability : aerobic
Inoculum: activated sludge

Carbon dioxide (CO_2)
Result: Not readily biodegradable.
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:

Bioaccumulation : Remarks: not tested.

Components:

Styrene:

Bioaccumulation : Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

N,N'-Ethylenedi(stearamide):

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

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

Mobility in soil

Product:

Distribution among environmental compartments : Remarks: not tested.

Components:

Styrene:

Distribution among environmental compartments : Remarks: no data available

N,N'-Ethylenedi(stearamide):

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

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

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:

Styrene:

Environmental fate and pathways	:	no data available
Results of PBT and vPvB assessment	:	This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Additional ecological information	:	The product should not be allowed to enter drains, water courses or the soil.

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

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
ACGIH / STEL : Short-term exposure limit
CA AB OEL / TWA : 8-hour Occupational exposure limit
CA AB OEL / STEL : 15-minute occupational exposure limit
CA BC OEL / TWA : 8-hour time weighted average
CA BC OEL / STEL : short-term exposure limit
CA ON OEL / TWA : Time-Weighted Average Limit (TWA)
CA ON OEL / STEL : Short-Term Exposure Limit (STEL)
CA QC OEL / TWAEV : Time-weighted average exposure value
CA QC OEL / STEV : Short-term 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 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	:	09/22/2020
Date format	:	mm/dd/yyyy