

EVA 003.000% RUBY RED

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SECTION 1. IDENTIFICATION

Identification of the Clariant Plastics & Coatings Canada Inc.

company: 2 Lone Oak Court

Toronto, Ontario, M9C 5R9 Telephone No.: +1 514-832-2559

Information of the substance/preparation:

BU Masterbatches

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

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

Trade name: EVA 003.000% RUBY RED

Material number: PR33754410

Chemical family: Colourant preparation

Carrier: crosslinked PE

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: crosslinked PE

Components

Chemical name	CAS-No.	Concentration (% w/w)
C.I. Pigment Black 7	1333-86-4	0.1 - 1
Vinyl acetate	108-05-4	0.1 - 1
C.I. Pigment White 6	13463-67-7	1 - 5
C.I. Pigment Red 122	980-26-7	5 - 10
Iron(III)oxide	1309-37-1	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-



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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:

Carbon monoxide



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Carbon dioxide (CO2) Nitrogen oxides (NOx)

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.

Metal oxides Sulphur oxides

Further information : Combustible material

In the event of fire and/or explosion do not breathe fumes. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

Do not allow run-off from fire fighting to enter drains or water

courses.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment :

for firefighters

Wear an approved positive pressure self-contained breathing

apparatus in addition to standard fire fighting gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Refer to protective measures listed in sections 7 and 8.

Avoid contact with skin, eyes and clothing.

Wash thoroughly after handling.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Prevent product from entering drains.

Methods and materials for containment and cleaning up

Avoid dust formation.

Take measures to prevent the build up of electrostatic charge. Sweep up and shovel into suitable containers for disposal. Take up uncontaminated material and pass on for further

processing.

After cleaning, flush away traces with water.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion

Take measures to prevent the build up of electrostatic charge.

Advice on safe handling

Handle in accordance with good industrial hygiene and safety

practice.

Use only with adequate ventilation/personal protection.

For personal protection see section 8. Avoid contact with skin, eyes and clothing.

Use only with adequate ventilation.



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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
Iron(III)oxide	1309-37-1	TWA (Respirable)	5 mg/m3	CA AB OEL
		TWA (Fumes)	5 mg/m3 (Iron)	CA BC OEL
		TWA (Dust)	5 mg/m3 (Iron)	CA BC OEL
		STEL (Fumes)	10 mg/m3 (Iron)	CA BC OEL
		TWAEV (fume and dust)	5 mg/m3 (Iron)	CA QC OEL
		TWA (Respirable particulate matter)	5 mg/m3	ACGIH
C.I. Pigment Black 7	1333-86-4	TWA	3.5 mg/m3	CA AB OEL
		TWA (Inhalable)	3 mg/m3	CA BC OEL
		TWAEV	3.5 mg/m3	CA QC OEL
		TWA (Inhalable particulate matter)	3 mg/m3	ACGIH
C.I. Pigment White 6	13463-67-7	TWA	10 mg/m3	CA AB OEL
		TWA (Total dust)	10 mg/m3	CA BC OEL
		TWA (respirable	3 mg/m3	CA BC OEL



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		dust fraction)		
		TWAEV (total dust)	10 mg/m3	CA QC OEL
Vinyl acetate	108-05-4	TWA	10 ppm 35 mg/m3	CA AB OEL
		STEL	15 ppm 53 mg/m3	CA AB OEL
		TWA	10 ppm	CA BC OEL
		STEL	15 ppm	CA BC OEL
		TWAEV	10 ppm 35 mg/m3	CA QC OEL
		STEV	15 ppm 53 mg/m3	CA QC OEL
		TWA	10 ppm	ACGIH
		STEL	15 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 : red



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Odour : characteristic

Odour Threshold : Not applicable

pH : Not applicable

Melting point : Not applicable

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



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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.

Incompatible materials : none

Strong oxidizing agents Halogenated hydrocarbons

Hazardous decomposition

products

Stable under recommended storage conditions.

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: > 5,000 mg/kg

Method: Calculation method

Components:

C.I. Pigment Black 7:

Acute oral toxicity : LD50 (Rat, male and female): > 10,000 mg/kg

Method: OECD Test Guideline 401



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GLP: no

Remarks: No significant adverse effects were reported

Acute inhalation toxicity : LC0 (Rat): > 0.0046 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403 GLP: No information available.

Assessment: The substance or mixture has no acute

inhalation toxicity

Acute dermal toxicity : Remarks: not required

C.I. Pigment 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

C.I. Pigment Red 122:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg

Method: OECD Test Guideline 423

GLP: yes

Assessment: The substance or mixture has no acute oral

toxicity

Remarks: No significant adverse effects were reported

Acute inhalation toxicity : LC0 (Rat, male and female): 3.055 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Assessment: The substance or mixture has no acute

inhalation toxicity

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

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: By analogy with a product of similar composition



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Iron(III)oxide:

Acute oral toxicity : LD50 (Rat, male): > 10,000 mg/kg

Method: Other

GLP: No information available.

Acute inhalation toxicity : LC0 (Rat, male): > 0.21 mg/l

Exposure time: 14 d

Method: OECD Test Guideline 412

GLP: yes

Acute dermal toxicity : Remarks: no data available

Acute toxicity (other routes of :

administration)

LD50 (Rat): 5,550 mg/kg

Application Route: Intraperitoneal injection

Skin corrosion/irritation

Product:

Result: No skin irritation

Components:

C.I. Pigment Black 7:

Species: Rabbit

Exposure time: 4 - 24 h

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: no

C.I. Pigment White 6:

Species: Rabbit Exposure time: 4 h

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: no

C.I. Pigment Red 122:

Species: Rabbit Exposure time: 4 h

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

Iron(III)oxide:

Species: Rabbit Exposure time: 4 h

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes



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Serious eye damage/eye irritation

Product:

Result: No eye irritation

Components:

C.I. Pigment Black 7:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

GLP: no

C.I. Pigment White 6:

Species: rabbit eye Result: No eye irritation

Method: OECD Test Guideline 405 GLP: No information available.

C.I. Pigment Red 122:

Species: Rabbit

Result: No eye irritation Exposure time: 72 h

Method: OECD Test Guideline 405

GLP: yes

Iron(III)oxide:

Species: rabbit eye Result: No eye irritation Exposure time: 192 h

Method: OECD Test Guideline 405

GLP: yes

Respiratory or skin sensitisation

Product:

Result: non-sensitizing

Components:

C.I. Pigment Black 7:

Test Type: Buehler Test Exposure routes: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406 Result: Not a skin sensitizer.

GLP: yes



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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.

C.I. Pigment Red 122:

Test Type: Maximisation Test Exposure routes: Dermal Species: Guinea pig

Method: OECD Test Guideline 406 Result: Not a skin sensitizer.

GLP: yes

Test Type: Local lymph node assay (LLNA)

Exposure routes: Dermal

Species: Mouse

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

GLP: yes

Iron(III)oxide:

Test Type: Maurer optimisation test Exposure routes: Skin contact

Species: Guinea pig Method: Other

Result: Not a skin sensitizer. GLP: No information available.

Germ cell mutagenicity

Components:

C.I. Pigment Black 7:

Genotoxicity in vitro : Test Type: Ames test

Test system: Salmonella typhimurium



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Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative GLP: yes

Test Type: In vitro gene mutation study in mammalian cells

Test system: Rodent cell line Metabolic activation: without Method: OECD Test Guideline 476

Result: positive

GLP: No information available.

Test Type: Micronucleus test

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 487

Result: negative GLP: yes

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

C.I. Pigment 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



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C.I. Pigment Red 122:

Genotoxicity in vitro : Test Type: Ames test

Test system: Salmonella typhimurium Concentration: 3 - 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: 3 - 5000 µg/plate

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative GLP: yes

Test Type: In vitro gene mutation study in mammalian cells

Test system: Chinese hamster lung cells

Concentration: 2 - 20 µg/ml

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative GLP: yes

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

Concentration: 0,31 - 200 µg/ml

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative GLP: yes

Remarks: By analogy with a product of similar composition

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse (male and female)

Strain: NMRI

Cell type: Bone marrow cells Application Route: oral (gavage) Exposure time: single administration

Dose: 2500 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

Iron(III)oxide:

Genotoxicity in vitro : Test Type: Ames test

Test system: Salmonella typhimurium Concentration: 8 - 5000 µg/plate



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Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

GLP: No information available.

Remarks: By analogy with a product of similar composition

Test Type: HGPRT assay

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

Chinese hamster

Concentration: 6 - 36 µg/ml

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

GLP: yes

Remarks: By analogy with a product of similar composition

Test Type: Chromosome aberration test in vitro

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

Chinese hamster

Concentration: 6,25 - 25 µg/ml

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

GLP: yes

Remarks: By analogy with a product of similar composition

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Rat (male) Strain: Sprague-Dawley

Application Route: oral (gavage)

Exposure time: 24 h Dose: 3,75 mg/kg Method: Other Result: negative

GLP: No information available.

Germ cell mutagenicity -

Assessment

It is concluded that the product is not mutagenic based on

evaluation of several mutagenicity tests.

Carcinogenicity

Components:

C.I. Pigment Black 7:

Carcinogenicity - Assessment

: Not classifiable as a human carcinogen.

C.I. Pigment White 6:

Carcinogenicity -Assessment : Not classifiable as a human carcinogen.



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C.I. Pigment Red 122:

Carcinogenicity -

No information available.

Assessment

Iron(III)oxide:

Species: Rat, (male and female) Application Route: oral (gavage)

Exposure time: 798 d Dose: 10 - 40 mg/kg

Group: yes

Frequency of Treatment: every other week

Method: Other

GLP: No information available.

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

Species: Rat, (male and female)

Application Route: Intraperitoneal injection

Exposure time: 790 - 914 d

Dose: 200 mg/kg Group: ves

Frequency of Treatment: 3 injections; every 8 weeks

Method: Other

GLP: No information available.

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

Carcinogenicity -

Carcinogenicity classification not possible from current data.

Assessment

Reproductive toxicity

Components:

C.I. Pigment Black 7:

Effects on foetal Test Type: Pre-natal

Species: Rabbit, male and female development

> Strain: New Zealand white Application Route: Inhalation

Dose: 10% diesel exhaust emission Duration of Single Treatment: 12 d Method: OECD Test Guideline 414

Result: No effects on fertility and early embryonic

development were detected.

GLP: no

Remarks: By analogy with a product of similar composition

Reproductive toxicity -

Assessment

No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

C.I. Pigment White 6:

Effects on fertility Remarks: no data available

Effects on foetal : Test Type: Pre-natal



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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.

C.I. Pigment Red 122:

Reproductive toxicity -

Assessment

No information available.

Iron(III)oxide:

Effects on fertility : Remarks: Not applicable

Effects on foetal

development

Remarks: Not applicable

Reproductive toxicity -

Assessment

No reproductive toxicity to be expected. No teratogenic effects to be expected.

STOT - single exposure

Components:

C.I. Pigment Black 7:

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

C.I. Pigment White 6:

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

C.I. Pigment Red 122:

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

Iron(III)oxide:

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



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STOT - repeated exposure

Components:

C.I. Pigment Black 7:

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

C.I. Pigment White 6:

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

C.I. Pigment Red 122:

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

Iron(III)oxide:

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

Repeated dose toxicity

Components:

C.I. Pigment Black 7:

Species: Rat, female NOAEL: 52 mg/kg bw/day Application Route: oral (feed) Exposure time: 1 a - 2 a Number of exposures: daily Dose: 2,05 g/kg of chow diet

Group: yes Method: Other

GLP: No information available.

Remarks: No adverse effect has been observed in chronic toxicity tests.

Species: Rat, male NOAEL: 0.0011 mg/l LOAEL: 0.0071 mg/l Application Route: Inb.

Application Route: Inhalation Test atmosphere: dust/mist Exposure time: 13 w

Number of exposures: 6 h per day; 5 d per week

Dose: 1,1 - 7,1 - 52,8 mg/m3

Group: yes Method: Other

GLP: No information available.

Species: Mouse, male and female Application Route: Skin contact Exposure time: 12-18 m

Number of exposures: 3 times per week



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Dose: 20% carbon black suspensions

Group: yes Method: Other GLP: no

Remarks: No adverse effect has been observed in chronic toxicity tests.

C.I. Pigment 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

C.I. Pigment Red 122:

Species: Rat, male and female NOAEL: 1000 mg/kg bw/day Application Route: oral (gavage)

Exposure time: 91 d

Number of exposures: Once a day Dose: 0, 50, 200, 1000 mg/kg

Group: yes

Method: OECD Test Guideline 408

GLP: yes

Iron(III)oxide:

Species: Rat, male

Application Route: oral (feed)

Exposure time: 21 d Number of exposures: daily Dose: 112,3 - 330,1 mg/100g diet

Group: yes

Method: Repeated Dose Toxicity (subacute study)

GLP: yes

Target Organs: Liver

Remarks: No adverse effect has been observed in chronic toxicity tests.

Species: Rat, male



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Application Route: Inhalation

Exposure time: 2 w

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

Dose: 185,2- 195,7 - 210,2 mg/m3

Group: yes

Method: OECD Test Guideline 412

GLP: yes

Remarks: No adverse effect has been observed in chronic toxicity tests.

Application Route: Skin contact

Method: Repeated Dose Toxicity (subacute study)

Remarks: The study is not necessary from a scientific perspective.

Aspiration toxicity

Components:

C.I. Pigment Black 7:

No aspiration toxicity classification

C.I. Pigment White 6:

No aspiration toxicity classification

C.I. Pigment Red 122:

No aspiration toxicity classification

Iron(III)oxide:

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



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Components:

C.I. Pigment Black 7:

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

End point: mortality
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: no

Method: OECD Test Guideline 203

GLP: yes

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

concentration.

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 5,600 mg/l

End point: Immobilization Exposure time: 24 h Test Type: static test Analytical monitoring: no

Method: OECD Test Guideline 202

GLP: yes

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

concentration.

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): > 10,000

mg/l

End point: Growth rate Exposure time: 72 h Test Type: static test Analytical monitoring: no

Method: OECD Test Guideline 201

GLP: yes

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

concentration.

Toxicity to fish (Chronic

toxicity)

Remarks: not required

Toxicity to daphnia and other :

aquatic invertebrates (Chronic toxicity)

Remarks: not required

Toxicity to microorganisms : EC0 (activated sludge): > 400 mg/l

End point: Bacteria toxicity (growth inhibition)

Exposure time: 3 h Test Type: static test Method: DIN 38412

GLP: no

Toxicity to soil dwelling

organisms

Test Type: Other Method: Other

GLP: No information available.

Remarks: This product does not have any known adverse

effect on the soil organisms tested.



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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: ves

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.



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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



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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.

C.I. Pigment Red 122:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

End point: mortality
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: no

Method: OECD Test Guideline 203

GLP: yes

Remarks: By analogy with a product of similar composition

The details of the toxic effect relate to the nominal

concentration.

NOEC (Danio rerio (zebra fish)): 100 mg/l

End point: mortality Exposure time: 96 h Test Type: semi-static test Analytical monitoring: no

Method: OECD Test Guideline 203

GLP: yes

Remarks: By analogy with a product of similar composition

The details of the toxic effect relate to the nominal

concentration.



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Toxicity to daphnia and other :

aquatic invertebrates

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

End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: no

Method: OECD Test Guideline 202

GLP: yes

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

concentration.

NOEC (Daphnia magna (Water flea)): 100 mg/l

End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: no

Method: OECD Test Guideline 202

GLP: yes

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

concentration.

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): > 10 mg/l

End point: Growth rate Exposure time: 72 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

Remarks: No toxicity at the limit of solubility
The details of the toxic effect relate to the nominal

concentration.

NOEC (Desmodesmus subspicatus (green algae)): 10 mg/l

End point: Growth rate Exposure time: 72 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

Remarks: No toxicity at the limit of solubility
The details of the toxic effect relate to the nominal

concentration.

Toxicity to fish (Chronic

toxicity)

NOEC (Danio rerio (zebra fish)): >= 10 mg/l

End point: Other Exposure time: 28 d Test Type: semi-static test Analytical monitoring: no

Method: OECD Test Guideline 215

GLP: yes

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

concentration.

LOEC (Danio rerio (zebra fish)): > 10 mg/l



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End point: Other Exposure time: 28 d Test Type: semi-static test Analytical monitoring: no

Method: OECD Test Guideline 215

GLP: yes

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

concentration.

Toxicity to daphnia and other :

aquatic invertebrates (Chronic toxicity)

NOEC (Daphnia magna (Water flea)): > 0.02 mg/l

End point: Reproduction rate

Exposure time: 21 d Test Type: semi-static test Analytical monitoring: no

Method: OECD Test Guideline 211

GLP: yes

Remarks: No toxicity at the limit of solubility

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

End point: Bacteria toxicity (respiration inhibition)

Exposure time: 3 h
Test Type: aquatic
Analytical monitoring: no

Method: OECD Test Guideline 209

GLP: yes

Toxicity to soil dwelling

organisms

Test Type: artificial soil

LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg

Exposure time: 14 d End point: mortality

Method: OECD Test Guideline 207

GLP: yes

Remarks: By analogy with a product of similar composition

Test Type: artificial soil

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

Exposure time: 14 d End point: mortality

Method: OECD Test Guideline 207

GLP: ves

Remarks: By analogy with a product of similar composition

Sediment toxicity : NOEC (Lumbriculus variegatus (Worm)): 993 mg/kg dry

weight (d.w.)

Analytical monitoring: no

Solvent: yes Duration: 28 d

Sediment: Artificial sediment Basis for effect: mortality Method: OECD 225

GLP: yes

Iron(III)oxide:



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Toxicity to fish : LC50 (Danio rerio (zebra fish)): approx. 100,000 mg/l

Exposure time: 96 h Test Type: static test

Analytical monitoring: no data available Method: Umweltbundesamt, 1984

GLP: no

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

concentration.

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h Test Type: static test Analytical monitoring: no

Method: OECD Test Guideline 202

GLP: yes

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

concentration.

Toxicity to algae/aquatic

plants

Remarks: no data available

Toxicity to fish (Chronic

toxicity)

Remarks: not reasonable

Toxicity to daphnia and other :

aquatic invertebrates (Chronic toxicity)

Remarks: not reasonable

Toxicity to microorganisms

EC50 (activated sludge of a predominantly domestic sewage):

> 10,000 mg/l

End point: Bacteria toxicity (respiration inhibition)

Exposure time: 3 h Test Type: aquatic Method: ISO 8192

GLP: no

Toxicity to soil dwelling

organisms

Remarks: The study is not necessary from a scientific

perspective.

Plant toxicity : Remarks: The study is not necessary from a scientific

perspective.

Sediment toxicity : Remarks: The study is not necessary from a scientific

perspective.

Toxicity to terrestrial

organisms

: Remarks: The study is not necessary from a scientific

perspective.

Persistence and degradability

Components:

C.I. Pigment Black 7:

Biodegradability : Remarks: Not applicable



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C.I. Pigment White 6:

Biodegradability : Remarks: Not applicable for inorganic compound.

C.I. Pigment Red 122:

Biodegradability : aerobic

Inoculum: activated sludge Concentration: 40 mg/l

Biochemical Oxygen Demand (BOD) Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301F

GLP: yes

Physico-chemical

removability

Remarks: Not readily biodegradable.

Iron(III)oxide:

Biodegradability : Remarks: Not applicable for inorganic compound.

Physico-chemical

removability

: Remarks: Not applicable

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not tested.

Components:

C.I. Pigment Black 7:

Bioaccumulation : 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

C.I. Pigment Red 122:

Bioaccumulation : Remarks: Low potential for bioaccumulation (log Pow < 3).



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Partition coefficient: n-

octanol/water

log Pow: 2.2 (24 °C)

pH: 7

Method: Other

GLP: no data available

Remarks: Calculated on the basis of measured solubilities in

water at pH 7 and in n-octanol.

Iron(III)oxide:

Bioaccumulation : Remarks: Does not accumulate in organisms.

Mobility in soil

Product:

Distribution among

environmental compartments

Remarks: not tested.

Components:

C.I. Pigment Black 7:

Distribution among environmental compartments

Adsorption/Soil Medium: water - soil Remarks: Not applicable

C.I. Pigment White 6:

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

Distribution among environmental compartments

Adsorption/Soil Medium: water - soil log Koc: 4.61

Method: Other

C.I. Pigment Red 122:

Distribution among environmental compartments

adsorption Medium: Soil

Remarks: Not expected to adsorb on soil.

Iron(III)oxide:

Mobility : Remarks: Known distribution to environmental compartments

Distribution among

environmental compartments

Remarks: Not applicable

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



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information

Components:

C.I. Pigment Black 7:

Environmental fate and

pathways

not available

Results of PBT and vPvB

assessment

The substance is not identified as a PBT or as a vPvB

substance.

Additional ecological

information

Do not allow to enter ground water, waterways or waste water.

C.I. Pigment 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.

C.I. Pigment Red 122:

Environmental fate and

pathways

not available

Results of PBT and vPvB

assessment

The substance is not identified as a PBT or as a vPvB

substance.

Additional ecological

information

The product should not be allowed to enter drains, water

courses or the soil.

Iron(III)oxide:

Environmental fate and

pathways

not available

Results of PBT and vPvB

assessment

The substance is not identified as a PBT or as a vPvB

substance.

Additional ecological

information

Do not allow to enter ground water, waterways or waste water.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of this product in accordance with all applicable local,



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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 : Vinyl acetate

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

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

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table

2: OEL)

CA BC OEL : Canada. British Columbia OEL

CA QC OEL : Québec. Regulation respecting occupational health and

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

airborne contaminants

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 QC OEL / TWAEV : Time-weighted average exposure value

CA QC OEL / STEV : Short-term exposure value

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; 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;



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IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration: ICAO - International Civil Aviation Organization: IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization: ISHL - Industrial Safety and Health Law (Japan): ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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