Substance key: 000000733369	Revision Date: 03/16/2018
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SECTION 1. IDENTIFICATION

Identification of the company:	Clariant Plastics and Coatings Canada Inc. 2 Lone Oak Court Toronto, Ontario M9C 5R9, Telephone No.: +1 416-847-7000 **Information of the substance/preparation:** BU Masterbatches Product Stewardship, +1-704-331-7710 e-mail: SDS.NORAM@clariant.com **Emergency tel. number:** 800-424-9300 (CHEMTREC)

Trade name:	**RENOL-5777 BROWN-ZN**
Material number:	SB84800020
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

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
N,N'-Ethylenedi(stearamide)	110-30-5	3 - 5
C.I. Pigment Black 7	1333-86-4	5 - 7
Iron(III)oxide	1309-37-1	25 - 40

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

Acrylonitrile
Carbon monoxide
Carbon dioxide (CO2)
Take measures to prevent the build up of electrostatic charge.
Dust can form an explosive mixture in air.
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.
When handling hot melts use suitable protective clothing.
Avoid dust formation. Keep away from sources of ignition.

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	:	brown
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

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 Strong oxidizing agents
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: 3,850 mg/kg Method: Calculation method

Components:

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 Black 7:

Acute oral toxicity	:	LD50 (Rat, male and female): > 8,000 mg/kg Method: OECD Test Guideline 401 GLP: no
Acute inhalation toxicity	:	LC0 (Rat): > 0.0046 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Other GLP: No information available.

Components:

N,N'-Ethylenedi(stearamide):

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

C.I. Pigment Black 7:

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

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:

N,N'-Ethylenedi(stearamide):

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

C.I. Pigment Black 7:

Test Type: Buehler Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: non-sensitizing
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.

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:

N,N'-Ethylenedi(stearamide):

Carcinogenicity - Assessment : No information available.

C.I. Pigment Black 7:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Iron(III)oxide:

Species: Rat, (male and female)
Application Route: oral (gavage)
Exposure time: 798 d

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

STOT - single exposure

Components:

N,N'-Ethylenedi(stearamide):

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

C.I. Pigment Black 7:

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.

STOT - repeated exposure

Components:

N,N'-Ethylenedi(stearamide):

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

C.I. Pigment Black 7:

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:

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 Black 7:

Species: Rat, female
NOAEL: 52 mg/kg
Application Route: oral (feed)
Exposure time: 1 a - 2 a

Aspiration toxicity

Components:

N,N'-Ethylenedi(stearamide):
no data available

C.I. Pigment Black 7:
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).

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish :
Remarks: no data available

Components:

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 : 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

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.

NOEC (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 reasonable

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: not reasonable

Toxicity to microorganisms : EC0 (activated sludge, domestic): > 400 mg/l
Exposure time: 3 h
Test Type: static test
Analytical monitoring: no
Method: DEV L 3
GLP: no
Remarks: The details of the toxic effect relate to the nominal concentration.

Sediment toxicity : Remarks: Not applicable

Iron(III)oxide:

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

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not tested.

Components:

N,N'-Ethylenedi(stearamide):

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

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

C.I. Pigment Black 7:

Bioaccumulation : Remarks: Not applicable

Iron(III)oxide:

Bioaccumulation : Remarks: Does not accumulate in organisms.

Mobility in soil

Product:

Distribution among environmental compartments : Remarks: not tested.

Components:

N,N'-Ethylenedi(stearamide):

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

C.I. Pigment Black 7:

Mobility : Remarks: Known distribution to environmental compartments

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

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 : Remarks: No information is available as no chemical safety

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 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 BC OEL / STEL	:	short-term exposure limit
CA QC OEL / TWAEV	:	Time-weighted average 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; CPR - Controlled Products Regulations; 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