

RENOL-ORANGE EM23800023-PN

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SECTION 1. IDENTIFICATION

Identification of the	Avient Colorants Canada Inc.				
company:	2 Lone Oak Court				
	Toronto, Ontario, M9C 5R9				
	Telephone No.: +1 514-832-2559				
	Information of the substance/preparation: Product Stewardship				
	e-mail: SDS.NORAMMB@avient.com				
	Emergency tel. number: +1 CANUTEC (613) 996-6666				
Trade name: Material number:	RENOL-ORANGE EM23800023-PN EM23800023				
Chemical family:	Colourant preparation Carrier: -				
Primary product use:	Additive for plastic material processing				

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accore Carcinogenicity (Inhalation)		nce with the Hazardous Products Regulations Category 1A
GHS label elements Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H350 May cause cancer by inhalation.
Precautionary statements	:	Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
		Response: P308 + P313 IF exposed or concerned: Get medical advice/ attention.



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Storage:

P405 Store locked up.

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: -

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
C.I. Pigment Yellow 164	antimony compounds	68412-38-4	1 - 5
Calcium distearate	Calcium distearate	1592-23-0	10 - 30
Limestone	Limestone	1317-65-3	30 - 60

Any concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

General advice	:	Ensure that the First Aid Personnel are aware of the product involved, and take precautions to protect themselves (e.g. wear personal protection equipment). Get medical advice/ attention if you feel unwell.
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. Wash off with soap and water. Get medical attention if irritation develops and persists.
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.



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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 dioxide (CO2) Carbon monoxide Metal oxides Nitrogen oxides (NOx) Sulphur dioxide none
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.



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Methods and materials for	:	Non-sparking tools should be used. Avoid dust formation.
containment and cleaning up		
		Take measures to prevent the build up of electrostatic charge.
		Sweep up and shovel into suitable containers for disposal.
		Clean contaminated surface thoroughly.

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. Avoid dust formation. Take measures to prevent the build up of electrostatic charge. Ensure all equipment is electrically grounded before beginning transfer operations. Use only non-sparking tools.
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
C.I. Pigment Yellow 164	68412-38-4	TWA	0.5 mg/m3 (antimony)	CA AB OEL
		TWA	0.2 mg/m3 (Manganese)	CA AB OEL
		TWAEV	0.5 mg/m3 (antimony)	CA QC OEL



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		TWAEV (total dust)	0.2 mg/m3 (Manganese)	CA QC OEL
		TWA	0.5 mg/m3 (antimony)	CA BC OEL
		TWA (Respirable)	0.02 mg/m3 (Manganese)	CA BC OEL
		TWA (Total)	0.2 mg/m3 (Manganese)	CA BC OEL
		TWA	0.5 mg/m3 (antimony)	ACGIH
		TWA (Inhalable particulate matter)	0.1 mg/m3 (Manganese)	ACGIH
		TWA (Respirable particulate matter)	0.02 mg/m3 (Manganese)	ACGIH
Calcium distearate	1592-23-0	TWA	10 mg/m3	CA AB OEL
		TWAEV	10 mg/m3	CA QC OEL
		TWA (Inhalable)	10 mg/m3	CA BC OEL
		TWA (Respirable)	3 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
		TWA (Total dust)	10 mg/m3	CA BC OEL
		TWA (respirable dust fraction)	3 mg/m3	CA BC OEL
		STEL	20 mg/m3	CA BC OEL

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.



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Personal protective equipment

Respiratory protection :	If dusty conditions exist, use NIOSH approved respirator with high efficiency (p-100) filter media.
Hand protection Remarks :	Nitrile rubber gloves. Impervious butyl rubber gloves PVC Neoprene gloves
Eye protection :	Safety glasses with side-shields
Skin and body protection :	Wear protective clothing, including long sleeves and gloves, to prevent skin contact.
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	:	powder
Colour	:	orange
Odour	:	characteristic
Odour Threshold	:	Not applicable
рН	:	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.



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Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	not available
Density	:	approx. 2.56 g/cm3 Value determined from data on raw material.
Solubility(ies) Water solubility	:	not determined
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



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	Dust d surfac	ntrations in air. eposits should not be allowed to accumulate on es, as these may form an explosive mixture if they are ed into the atmosphere in sufficient concentration.
Incompatible materials	: Strong Strong none	acids and oxidizing agents acids
Hazardous decomposition	: No dec	composition if used as directed.

products

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Inhalation Eye contact Skin contact Acute toxicity Components: Calcium distearate: 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 Acute dermal toxicity LD50 (Rat): > 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

Skin corrosion/irritation

Product:

Result: No skin irritation

Components:

Calcium distearate:

Species: Rabbit Exposure time: 4 h Method: OECD Test Guideline 404 Result: No skin irritation GLP: yes Remarks: By analogy with a product of similar composition



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Serious eye damage/eye irritation

Product:

Result: No eye irritation

Components:

Calcium distearate:

Species: rabbit eve Result: No eye irritation Method: OECD Test Guideline 405 GLP: yes Remarks: By analogy with a product of similar composition

Respiratory or skin sensitisation

Product:

Result: non-sensitizing

Components:

Calcium distearate:

Test Type: Local lymph node assay (LLNA) Exposure routes: Dermal Species: Mouse Method: OECD Test Guideline 429 Result: Not a skin sensitizer. GLP: yes Remarks: By analogy with a product of similar composition

Test Type: Respiratory system Exposure routes: Inhalation Remarks: This information is not available.

Germ cell mutagenicity

Components:

Calcium distearate:

Genotoxicity in vitro

Test Type: Ames test Test system: Salmonella typhimurium Method: OECD Test Guideline 471 **Result:** negative GLP: yes

Test Type: In vitro gene mutation study in mammalian cells Test system: mouse lymphoma cells Method: OECD Test Guideline 476 **Result:** negative GLP: yes Remarks: By analogy with a product of similar composition



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		Test Type: Cytogenetic assay Test system: V79 cells (embryonic lung fibroblasts) of the Chinese hamster Method: OECD Test Guideline 473 Result: negative GLP: yes Remarks: By analogy with a product of similar composition
Germ cell mutagenicity - Assessment	:	It is concluded that the product is not mutagenic based on evaluation of several mutagenicity tests.
Carcinogenicity		
Components:		
Calcium distearate: Carcinogenicity - Assessment	:	Not classifiable as a human carcinogen.
Reproductive toxicity		
Components:		
Calcium distearate:		
Effects on fertility	:	Species: Rat Application Route: Oral General Toxicity - Parent: NOAEL: > 1,000 mg/kg body weigh General Toxicity F1: NOAEL: > 1,000 mg/kg body weight Method: OECD Test Guideline 421 GLP: yes
Effects on foetal development	:	Species: Rat Application Route: Oral Teratogenicity: NOAEL: > 1,000 mg/kg body weight Method: OECD Test Guideline 414 GLP: yes Remarks: By analogy with a product of similar composition
Reproductive toxicity - Assessment	:	No reproductive toxicity to be expected. No teratogenic effects to be expected.

Components:

Calcium distearate:

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



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STOT - repeated exposure

Components:

Calcium distearate:

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

Repeated dose toxicity

Components:

Calcium distearate:

Species: Rat NOAEL: > 2,000 mg/kg Application Route: Oral Method: OECD Test Guideline 407 GLP: yes

Aspiration toxicity

Components:

Calcium distearate:

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 <u>Product:</u> Toxicity to fish	Remarks: no data available
<u>Components:</u> Calcium distearate:	
Toxicity to fish	LC50 (Orycias latipes): > 100 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: static test



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	Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic : plants	EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes
Toxicity to fish (Chronic : toxicity)	Remarks: not required
Toxicity to daphnia and other : aquatic invertebrates (Chronic toxicity)	NOEC (Daphnia magna (Water flea)): > 0.22 mg/l Exposure time: 21 d Test Type: semi-static test Method: OECD Test Guideline 211 GLP: yes Remarks: By analogy with a product of similar composition
Toxicity to microorganisms :	EC50 (activated sludge): > 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: By analogy with a product of similar composition
Toxicity to soil dwelling : organisms	Remarks: Not applicable
Plant toxicity :	Remarks: Not applicable
Sediment toxicity :	Remarks: no data available
Toxicity to terrestrial : organisms	Remarks: Not applicable
Ecotoxicology Assessment	
Chronic aquatic toxicity :	This product has no known ecotoxicological effects.
Persistence and degradability	
Components:	
Calcium distearate: Biodegradability :	Result: Readily biodegradable. Biodegradation: 93 % Method: OECD Test Guideline 301C Result: Readily biodegradable.
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	Biodegradation: 99 %
	Method: OECD Test Guideline 301B
Bioaccumulative potential	
Product:	
Bioaccumulation :	Remarks: not tested.
Components:	
Calcium distearate:	
Bioaccumulation :	Remarks: Due to the low logPow bioaccumulation is not
	expected
Mobility in soil	
Product:	
Distribution among :	Remarks: not tested.
environmental compartments	
Other adverse effects	
Product:	
Results of PBT and vPvB :	Remarks: No information is available as no chemical safety
assessment	report (CSR) is required.
Additional ecological :	Do not allow to enter ground water, waterways or waste water.
information	
Components:	
Calcium distearate:	
Results of PBT and vPvB :	The substance is not identified as a PBT or as a vPvB
assessment	substance.
Additional ecological :	Do not allow to enter ground water, waterways or waste water.
information	

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal	methods
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Waste from residues	:	Dispose of this product in accordance with all applicable local, state and federal regulations.
Contaminated packaging	:	Regulations concerning reuse or disposal of used packaging materials must be observed.



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SECTION 14. TRANSPORT INFORMATION

TDG	not restricted
ΙΑΤΑ	not restricted
IMDG	not restricted

SECTION 15. REGULATORY INFORMATION

NPRI Components	:	Antimony compounds Manganese Compound
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 CA AB OEL		USA. ACGIH Threshold Limit Values (TLV) Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL CA QC OEL		Canada. British Columbia OEL Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / TWA CA AB OEL / TWA CA BC OEL / TWA CA BC OEL / STEL CA QC OEL / TWAEV	:	8-hour, time-weighted average 8-hour Occupational exposure limit 8-hour time weighted average short-term exposure limit Time-weighted average exposure value

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 -



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

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