SAFETY DATA

February, 2020

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: 779162

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Marking.

1.3 Details of the supplier of the safety data sheet

49 Schooner Street
Coquitlam, British Columbia
Canada V3K 0B3
TEL: 604-523-8665
FAX: 604-526-5381
TOLL FREE TEL: 1-800-472-7685

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance/mixture according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and globally harmonized system of classification and labelling of chemicals(GHS)

Physical hazards

No information available.

Health hazards

No information available.

Environmental hazards

No information available.

2.2 Label Elements

Hazard Pictogram(s): None.

Signal Word: None.

Hazard Statements

No information available.

Precautionary statements

No information available.

2.3 Other hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

1.Red

Component	Concentration/%	CAS NO.	GHS
Calcium carbonate($CaCO_3$)	75~80	471-34-1	No data available.
Red iron oxide-pigment	20~25	1309-37-1	No data available.

2.Yellow

Component	Concentration/%	CAS NO.	GHS
Calcium carbonate($CaCO_3$)	75~80	471-34-1	No data available.
Yellow Iron Oxide	20~25	51274-00-1	No data available.

3. Blue

Component	Concentration/%	CAS NO.	GHS
Calcium carbonate($CaCO_3$)	80~85	471-34-1	No data available.
Ultramarine blue	15~20	57455-37-5	No data available.

4. Black

Component	Concentration/%	CAS NO.	GHS
Calcium carbonate($CaCO_3$)	70~75	471-34-1	No data available.
Black Iron Oxide	25~30	1309-38-2	No data available.

5.Green

Component	Concentration/%	CAS NO.	GHS
Calcium carbonate($CaCO_3$)	85~90	471-34-1	No data available.
Fluorescent green	10~15	1328-53-6	No data available.

6.Orange

Component	Concentration/%	CAS NO.	GHS
Calcium carbonate($CaCO_3$)	85~90	471-34-1	No data available.
Fluorescent orange	10~15	1719-72-8	No data available.

7.White

Component	Concentration/%	CAS NO.	GHS
Calcium carbonate($CaCO_3$)	100	471-34-1	No data available.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact Immediately rinse open eyes with running water for at least 15 minutes. Obtain medical attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention immediately if symptoms occur.

Ingestion Do not induce vomiting without medical advice. Clean mouth with water. Never administer anything by mouth to an unconscious person. Obtain medical aid immediately.

Inhalation If breathed in, move person into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical aid immediately if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Water spray. Carbon dioxide (CO_2). Dry chemical. Chemical foam.

Extinguishing media which shall not be used for safety reasons

No information available.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Ensure adequate ventilation, Avoid dust formation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid breathing vapors, mist, gas or dust.

6.1.2 For emergency responders

Use suitable protective equipment for personal protection.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Sweep up, vacuum, or absorb with inert material (e.g. sand, silica gel, acid binder, universal binder, sawdust) and collect in suitable, closed containers for recovery or disposal.

6.4 Reference to other sections

If appropriate Sections 8 and 13 shall be referred to.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment. Avoid direct physical contact. Do not breathe dust. Do not breathe vapors or spray mist. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke while handling. Keep far away from flammable materials and heat source. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool, dry, well-ventilated location in a tightly sealed container or cylinder. To maintain product quality, do not store in heat or direct sunlight. Keep away from incompatible materials, ignition sources and untrained individuals. Secure and label area. Protect containers/cylinders from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure limit values

Component	ACGIH TLV	OSHA PEL	NIOSH
Calcium carbonate($CaCO_3$) (471-34-1)	No data available.	TWA 15 mg/m^3 (total) TWA 5 mg/m^3 (resp)	TWA 10 mg/m^3 (total) TWA 5 mg/m^3 (resp)
Diiron trioxide (1309-37-1)	No data available.	TWA 15 mg/m^3 (total) TWA 5 mg/m^3 (resp)	No data available.

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2 Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures

Eye protection	Safety glasses with side-shields
Hand protection	Protective gloves
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory protection	Use a NIOSH or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	:	Solid.
Appearance	:	Red,Blue,White,Orange,Green,Black,Yellow.
Odor	:	Odorless.
Odor Threshold	:	No data available.
pH	:	8 - 9.
Melting point/freezing point	:	825°C / 1517°F.
Initial boiling point and boiling range	:	No data available.
Flash point	:	No data available.
Evaporation rate	:	No data available.
Upper/lower explosive limits	:	No data available.
Vapour pressure/ density	:	No data available.
Relative density	:	No data available.
Solubility(ies)	:	No data available.
Partition coefficient: n-octanol / water	:	No data available.
Auto-ignition temperature	:	No data available.
Decomposition temperature	:	No data available.
Viscosity	:	No data available.

9.2 Other information

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Hazardous polymerization does not occur.

10.2 Chemical stability

Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products, exposure to moist air or water,keep away from fire.

10.5 Incompatible materials

Strong oxidizer,Strong acids.

10.6 Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO_2).

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) acute Toxicity

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium carbonate($CaCO_3$) (471-34-1)	6450 mg/kg (Rat)	No data available.	No data available.
Diiron trioxide (1309-37-1)	> 10000 mg/kg (Rat)	No data available.	No data available.

(b) skin corrosion/irritation No information available.

(c) serious eye damage/irritation No information available.

(d) respiratory or skin sensitisation

Respiratory No information available.

Skin No information available.

(e) germ cell mutagenicity No information available.

(f) carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	Germany	EU	UK
Diiron trioxide (1309-37-1)	Cat. 3B	No data available.	No data available.

(g) reproductive toxicity No information available.

(h) STOT-single exposure No information available.

(i) STOT-repeated exposure No information available.

Target Organs No information available.

(j) aspiration hazard No information available.

Other Adverse Effects The toxicological properties have not been fully investigated.

Endocrine Disruptor Information None known.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity effects Do not empty into drains.The product contains following substance(s) which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Diiron trioxide (1309-37-1)	No data available.	LC0: > 50000 mg/L/96h (Danio rerio)	No data available.	EC50: >100 mg/L/48h
Pigment Green 7 (1328-53-6)	No data available	LC50:>250 ppm 48h (Oryzias latipes)	No data available	No data available

12.2 Persistence and degradability No information available.

12.3 Bioaccumulative potential No information available.

12.4 Mobility in soil No information available.

12.5 Results of PBT and vPvB assessment No data available for assessment.

12.6 Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from Residues / Unused Products	Chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.
Contaminated Packaging	Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

14. TRANSPORT INFORMATION

IMDG/IMO	Not regulated.
14.1. UN number	
14.2. UN proper shipping name	
14.3. Transport hazard class(es)	
14.4. Packing group	
ADR/RID	Not regulated.
14.1. UN number	
14.2. UN proper shipping name	
14.3. Transport hazard class(es)	
14.4. Packing group	
ICAO/IATA	Not regulated.
14.1. UN number	
14.2. UN proper shipping name	
14.3. Transport hazard class(es)	
14.4. Packing group	
14.5. Environmental hazards	No hazards identified.
14.6. Special precautions for user	No special precautions required.

14.7 Transport in bulk according to Annex II of Marpol73/78 and the IBC Code Not applicable, packaged goods.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories X = listed

Component	EINECS	NZIoC	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECI
Calcium carbonate($CaCO_3$)	207-439-9	X	X	X	-	X	X	X	X	X
Diiron trioxide	215-168-2	X	X	X	-	X	X	X	X	X
Iron hydroxide oxide yellow	257-098-5	X	X	X	-	X	X	X	X	X
C.I. Pigment Blue 29	611-533-9	X	X	X	-	X	X	X	X	X
Magnetite	215-169-8	X	X	X	-	X	X	X	X	X
Pigment Green 7	215-524-7	X	X	X	-	X	X	X	X	X
1,3-Diphenyl-5-(a-naphthyl)formazan	-	-	-	-	-	-	-	-	-	-

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS - European Inventory of Existing Commercial Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECI - Korea Existing Chemicals Inventory

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted.

16. OTHER INFORMATION

This SDS is in accordance with Regulation 2012 OSHA Hazard Communication Standard(29 CFR 1910.1200) and globally harmonized system of classification and labelling of chemicals(GHS).

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