SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Issuing Date 02-Jul-2019 **Revision Date** 03-Nov-2020 **Revision Number** 3

1. Identification

Product identifier

Product Name DuraGard H-170

Other means of identification

Synonyms DuraGard H-170 Polyol, DuraGard H-170 Resin, DuraGard H-170 – Part A

Recommended use of the chemical and restrictions on use

Recommended use Resin for Chemical Resistant Coating

Restrictions on use No information available.

Details of the supplier of the safety data sheet

Initial supplier identifier
Cloverdale Paint Inc.
400-2630 Croydon Drive
Surrey, British Columbia V3Z 6T3
1-604-596-6261

Manufacturer Address
LifeLast, Inc.
3813 Helios Way
Suite 190
Pflugerville, TX 78660
Phone #: 512-628-2112

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

Skin sensitization	Category 1
Reproductive toxicity	Category 1B

Label elements

Danger

Hazard statements
May cause an allergic skin reaction
May damage fertility or the unborn child

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Skin
IF ON SKIN: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other information
May be harmful if swallowed.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms DuraGard H-170 Polyol, DuraGard H-170 Resin, DuraGard H-170 – Part A

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)	
Titanium dioxide	13463-67-7	.1-10 *	03336662	2019-07-16	
Aromatic diamine	Trade secret	5-10 *	03336662	2019-07-16	
Wollastonite (Ca(SiO3))	13983-17-0	.1-5 *	03336662	2019-07-16	
Iron oxide	1309-37-1	.1-5 *	03336662	2019-07-16	
C.I. Pigment Blue 15	147-14-8	.1-5 *	03336662	2019-07-16	
Carbon black	1333-86-4	.1-5 *	03336662	2019-07-16	
Aliphatic amine	Trade secret	1-5 *	03336662	2019-07-16	
Organic metallic complex	Trade secret	.1-1.0 *	03336662	2019-07-16	

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

Skin contact Wash with soap and water. May cause an allergic skin reaction. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Avoid generation of dust. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits .

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 15 mg/m^3 total dust (vacated) TWA: 10 mg/m^3 total dust	IDLH: 5000 mg/m^3 TWA: 2.4 mg/m^3 CIB 63 fine TWA: 0.3 mg/m^3 CIB 63 ultrafine, including engineered nanoscale	
Wollastonite (Ca(SiO3)) 13983-17-0	TWA: 1 mg/m^3 inhalable particulate matter, particulate matter containing no asbestos and <1% crystalline silica	-	-	
Iron oxide 1309-37-1	TWA: 5 mg/m^3 respirable particulate matter	TWA: 10 mg/m^3 fume TWA: 15 mg/m^3 total dust TWA: 5 mg/m^3 respirable fraction (vacated) TWA: 10 mg/m^3 fume and total dust Iron oxide (vacated) TWA: 5 mg/m^3 respirable fraction regulated under Rouge	IDLH: 2500 mg/m^3 Fe dust and fume TWA: 5 mg/m^3 Fe dust and fume	
C.I. Pigment Blue 15 147-14-8	TWA: 1 mg/m^3 Cu dust and mist	-	IDLH: 100 mg/m^3 Cu dust and mist TWA: 1 mg/m^3 Cu dust and mist	
Carbon black	TWA: 3 mg/m^3 inhalable	TWA: 3.5 mg/m^3	IDLH: 1750 mg/m^3	

1333-86-4	particulate matter	(vacated) TWA: 3.5 mg/m^3	TWA: 3.5 mg/m^3 TWA: 0.1 mg/m^3 Carbon black in presence of Polycyclic aromatic hydrocarbons PAH	
Organic metallic complex	STEL: 0.2 mg/m^3 Sn TWA: 0.1 mg/m^3 Sn S*	TWA: 0.1 mg/m^3 Sn (vacated) TWA: 0.1 mg/m^3 Sn (vacated) S*	IDLH: 25 mg/m^3 Sn TWA: 0.1 mg/m^3 except Cyhexatin Sn	

Chemical name	Alberta	British Columbia	Ontario	Quebec	
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 10 mg/m^3 TWA: 3 mg/m^3	TWA: 10 mg/m^3	TWA: 10 mg/m^3	
Wollastonite (Ca(SiO3)) 13983-17-0				TWA: 10 mg/m^3 TWA: 5 mg/m^3	
Iron oxide 1309-37-1	TWA: 5 mg/m^3	TWA: 10 mg/m^3 TWA: 3 mg/m^3 TWA: 5 mg/m^3 STEL: 10 mg/m^3	TWA: 5 mg/m^3	TWA: 5 mg/m^3 TWA: 10 mg/m^3	
Carbon black 1333-86-4	TWA: 3.5 mg/m^3	TWA: 3 mg/m^3	TWA: 3 mg/m^3	TWA: 3.5 mg/m^3	
Organic metallic complex	TWA: 0.1 mg/m^3 STEL: 0.2 mg/m^3 Skin	TWA: 0.1 mg/m^3 STEL: 0.2 mg/m^3 Skin	TWA: 0.1 mg/m^3 STEL: 0.2 mg/m^3 Skin	TWA: 0.1 mg/m^3 STEL: 0.2 mg/m^3 Skin	

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Impervious gloves.

Skin and body protection Impervious clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state Liquid

Color Varies

Odor No information available

Odor threshold No information available

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	> 232 °C / > 449 °F	

Flash point	> 226 °C > 438 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.3 - 1.4 @25 °C	
Water solubility	No data available	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Avoid sanding and grinding surfaces containing dried paint film.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information .

Inhalation No known effects under normal use conditions.

Eye contact No known effects under normal use conditions.

Skin contact May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 3655.50 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide	> 10000 mg/kg (Rat)		
Iron oxide	> 10000 mg/kg (Rat)		
C.I. Pigment Blue 15	> 10000 mg/kg (Rat)		
Carbon black	> 15400 mg/kg (Rat)		
Aliphatic amine	= 1000 mg/kg (Rat)		
Organic metallic complex	= 45 mg/kg (Rat)	= 630 mg/kg (Rabbit)	

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. This product contains carbon black in a non-respirable form. Inhalation of carbon black is unlikely to occur from exposure to this product.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	X
Wollastonite (Ca(SiO3)) 13983-17-0	-	Group 3	-	-
Iron oxide 1309-37-1	-	Group 3	-	-
Carbon black 1333-86-4	A3	Group 2B	-	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity Classification based on data available for ingredients. May damage fertility or the unborn child.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Skin, Gastrointestinal tract (GI), Reproductive System.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Persistence and degradability No information available.

Bioaccumulation

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Component Information

Chemical name	Partition coefficient
C.I. Pigment Blue 15 147-14-8	6.6
Aliphatic amine	2.03

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
C.I. Pigment Blue 15 147-14-8	Toxic
Organic metallic complex	Toxic

14. Transport information

DOT Not regulated (If shipped in NON BULK packaging by ground transport)

TDG Not regulated (If shipped in NON BULK packaging by ground transport)

IATA

UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Transport hazard class(es)	9
Packing group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s.(Aromatic diamine), 9, III

IMDG

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
Marine pollutant	Yes
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Aromatic diamine), 9, III, Marine pollutant

15. Regulatory information

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

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Complies.
DSL/NDSL	Complies.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
C.I. Pigment Blue 15 - 147-14-8	1.0

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
C.I. Pigment Blue 15 147-14-8	-	X	-	-

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen
Carbon black - 1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Titanium dioxide 13463-67-7	X	X	X
C.I. Pigment Blue 15 147-14-8	X	-	X
Iron oxide 1309-37-1	X	X	X
Carbon black 1333-86-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA **Health hazards** 2 **Flammability** 1 **Instability** 0 **Physical and chemical properties** -

HMIS **Health hazards** 2 * **Flammability** 1 **Physical hazards** 0 **Personal protection** X

Chronic Hazard Star Legend ** = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

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Revision Note	Edits for Canadian CBI claim.

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet