Duro-Shield® Universal 2-Part Epoxy Primer – Part B

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Duro-Shield® Universal 2-Part Epoxy Primer – Part B
Version: 1
Identifier: 2-Part Epoxy Primer/Filler – Part B
Chemical Family: Mixture
Product Use: Architectural Coating and Waterproofing

Company Information:
Duro-Last®, a division of Holcim Solutions and Products US, LLC
525 W Morley Dr.
Saginaw, MI 48601
Phone: (800) 248-0280
Internet Address: www.duro-last.com

Emergency Phone (24 hours):
INFOTRAC
1-800-535-5053 (US & Canada)
1-352-323-3500 (International)

SECTION 2 HAZARD(S) IDENTIFICATION

Hazard Classification:
Skin Corrosion/Irritation, Category 2
Eye Damage/Irritation, Category 1
Skin Sensitization, Category 1

Pictogram(s):

Signal Word: DANGER

Hazard Statements:

H315	- Causes skin irritation.
H317	- May cause an allergic skin reaction.
H319	- Causes serious eye irritation.

Precautionary Statements:

Prevention

P260	- Do not breathe dust/fume/gas/mist/vapors/spray.
P262	- Do not get in eyes, on skin, or on clothing.
P264	- Wash skin thoroughly after handling.
P280	- Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302+352	- IF ON SKIN: Wash with plenty of water.
P305+P351+P338 + P310	- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a poison center / physician.
P333 + P313	- If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	- If eye irritation persists get medical advice/attention.
P361 + P363	- Take off contaminated clothing and wash it before reuse.

Storage
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal
P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations.

Other Statements: Harmful to aquatic life with long lasting effects.
7.83% of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients

Chemical Name	CAS Number	Concentration (%)
Silica, Quartz	14808-60-7	0.00 – 40.00
Titanium Dioxide	13463-67-7	0.03 – 35.00
Fatty Acids, C18-unsatd, dimers, polymers with tall-oil fatty acids and triethylenetetramine	68082-29-1	0.00 – 10.00
Fatty Acids, C18-unsatd, dimers, reaction products with polyethylenepolyamines	68410-23-1	0.00 – 10.00
Disodium Oxide	1313-59-3	0.00 – 10.00
Xylene	1330-20-7	1.00 – 5.00
Boron Oxide (dust)	1303-86-2	0.00 – 2.20
Magnesium Oxide	1309-48-4	0.00 – 1.84
Bisephenol A Epoxy Resin	25068-38-6	1.00 – 5.00
Ethylbenzene	100-41-4	1.00 – 5.00
Triethylentetramine	112-24-3	0.10 – 1.00
Vinyl Silane	1067-53-4	0.00 – 1.00
Glacial Acetic Acid	64-19-7	0.00 – 1.00
Ethylene Oxide	75-21-8	0.00 – 1.00

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4 FIRST-AID MEASURES

Inhalation: Move to fresh air. Consult a physician if symptoms develop or persist.

Skin Contact: Remove contaminated clothing immediately and wash skin with soap and water. Wash contaminated clothing before reuse. In case of eczema or other skin disorders, seek medical attention and bring along these instructions.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most Important Symptoms and Effects, Both Acute and Delayed: Skin irritation. May cause redness and pain. May cause allergic skin reaction. Dermatitis. Rash. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Notes to Physician: Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water fog, foam, dry chemical powder, and Carbon Dioxide (CO2).

Unsuitable Extinguishing Media:	Do not use water jet as an extinguisher as this will spread the fire.
Specific Hazards:	During fire, gases hazardous to health may be formed.
Products of Combustion:	May include, and are not limited to: oxides of carbon.
Special Protective Equipment for Firefighters:	In the event of fire, wear a self-contained breathing apparatus and full protective clothing.
Special Fire-Fighting Procedures:	Keep upwind of fire. Move containers from fire area if you can do it without risk.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained.

Methods for Containment:

Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning-Up:

Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Following product recovery, flush area with water. For waste disposal, see Section 13 of this SDS. Never return spills to original containers for re-use.

Large Spill Response

Stop the flow of material, if this is without risk. Where possible, dike the spilled material. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spill Response

Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental Precautions:

Avoid discharge into drains, waterways, or onto the ground.

Regulatory Requirements:

Follow applicable OSHA regulations (29 CFR 1940.120).

SECTION 7 HANDLING AND STORAGE

Handling Precautions:

Follow standard hygiene measures when handling chemical products. Ensure medical personnel are aware of the materials involved, and take precautions to protect themselves. Personal Protective Equipment (PPE) recommended in Section 8 of this SDS. Provide adequate ventilation while using this product.

Storage Requirements:

Store in original container away from incompatible materials. Avoid strong oxidizing agents.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Silica, Quartz (dust)	TWA: 0.05 mg/m³ resp	TWA: 0.1 mg/m³ resp & 10 mg/m³ / %SiO2+2	TWA: 0.05 mg/m³ total
Xylene (mixed isomers)	STEL: 150ppm & 655 mg/m³	TWA: 100ppm & 435 mg/m³	TWA: 100ppm & 435 mg/m³ with IDLH 900ppm
Titanium Dioxide (dust)	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust. Vacated 10 mg/m³ total dust.	IDLH: 5000 mg/m³
Ethylbenzene	ST 125 ppm (545 mg/m³)	TWA 100 ppm (435 mg/m³)	TWA 100 ppm (435 mg/m³)
Disodium Oxide	-	10 mg/m³ resp	10 mg/m³
Boron Oxide (dust)	-	TWA: 15 mg/m³	REL-TWA: 10 mg/m³
Magnesium Oxide	-	TWA: 15 mg/m³	750 mg/m³

Engineering Measures: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

Personal Protective Equipment:

Respiratory Protection
In case of insufficient ventilation, wear suitable respiratory equipment.

Hand Protection
Wear appropriate chemical resistant gloves.

Eye Protection
If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection
Wear appropriate chemical resistant clothing.

Hygiene Measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

Environmental Controls: Environmental manger must be informed of all major releases.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Viscous Brown Liquid	**Evaporation Rate:**	Not Applicable
Odor:	Strong Solvent	**Flammability:**	Not Flammable
Odor Threshold:	Not Applicable	**Lower Flammability Limit:**	Not Applicable
Color:	Brown	**Upper Flammability Limit:**	Not Applicable
Physical State:	Liquid	**Vapor Pressure:**	Not Applicable
pH (at 20°C)	9	**Vapor Density:**	Not Applicable
Melting & Freezing Point:	Not Applicable	**Density:**	10.554 – 10.704 lb/gal
Initial Boiling Point:	Not Applicable	**Specific Gravity:**	1.26 – 1.28
Flash Point:	>200°F/93°C	**Solubility:**	High Solubility in Water
Auto-Ignition Temp:	Not Applicable	**Viscosity (at 20°C) g/L:**	180 ku
Decomposition Temp:	Not Applicable	**Oxidizing Properties:**	Not Applicable
Explosive Properties:	Not Applicable	**VOC:**	<100 g/L (<0.83 lb/gal)
Solvent Content – Organic:	Not Applicable	**Incompatibilities:**	None Known
Solvent Content – Water:	46.86 – 46.87	**Other Information:**	Not Applicable
Solvent Content – Solid:	46.86 – 46.87		

SECTION 10 STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability: Material is stable under normal conditions. The product is stable and non-reactive under normal conditions of use, storage and transport.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Conditions to Avoid: Contact with incompatible materials.

Incompatible Materials: None known.

Hazardous Decomposition Products: No hazardous decomposition products are known.

Hazardous Polymerization: Does not occur.

Other Information: Not applicable.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity	Oral LD_{50}	Dermal LD_{50}	Inhalation LC_{50}
Overall Chemical Acute Toxicity Values	>2000 mg/kg	>2000 mg/kg	>5 mg/kg (dust & mist)

LD50/LC50 Values Relevant to this Classification:

Xylene (mixed isomers)
Oral rat LD50 3523-4000 mg/kg bw
Oral rat LD50 5251-5627 mg/kg bw
Oral rat LD50 4300 mg/kg bw
Oral rat LD50 8400 mg/kg
Derm rabbit LD50 >5000 ml/kg bw (4200 mg/kg)
Inhal rat LC50 6700 ppm (29000 mg/m^3)
Inhal rat LC50 6247 ppm (27124 mg/m^3)

Titanium Dioxide (dust)
Oral mouse LD50 > 5000 mg/kg bw
Oral rat LD50 > 5000 mg/kg bw
Oral rat LD50 > 2000 mg/kg bw
Oral rat LD50 > 11000 mg/kg bw
Inhal rat LC50 3.43-5.09 mg/L air
Inhal rat LC50 > 3.56 mg/L air
Inhal rat LC50 > 2.28 mg/L air
Inhal rat LC50 > 6.82 mg/L air 4hr

Ethylbenzene
Oral rat LD50 3500 mg/klg bw/day
Oral rat LD50 5460 mg/kg bw/day
Inhal mouse LC50 6.2 mg/L air
Inhal rat LC0 > 400 ppm air no deaths
Inhal gp LC50 >3000 ppm air
Inhal mice LC50 > 8000 ppm
Inhal mouse LC50 35.5 mg/L air
Inhal rat LC50 4000 ppm

Fatty acids, C18-unsatd, dimers, polymers with tall-oil fatty acids and triethylenetetramine
Oral rat LD50 >2,000 mg/kg bw
Derm rat LD50 >2,000 mg/kg bw

Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines
Oral rat LD50 >2000 mg/kg bw
Derm rat LD50 >2000 mg/kg bw

Boron Oxide (dust)
Oral rat LD50 > 2 600 mg/kg bw
Inhal rat LC50 > 2 120 mg/m³ air
Derm rabbit LD50 > 2 000 mg/kg bw

Bisephenol A Epoxy Resin
Oral rat LD50 >2000 mg/kg bw
Oral rabbit LD50 19800 mg/kg bw
Oral rat LD50 > 15000 mg/kg bw
Oral rat LD50 22,500 mg/kg bw
Oral rat LD50 11400 mg/kg bw
Oral rat LD50 13,000 mg/kg bw
Oral rat LD50 > 3980 mg/kg bw
Oral mouse LD50 15600 mg/kg bw
Derm rat LD50 > 2000 mg/kg bw
Derm rabbit LD50 23,032 mg/kg bw
Derm mouse LD50 >2000 mg/kg bw
Derm rabbit LD50 >23,000 mg/kg bw
Derm rat LD50 >1600 mg/kg bw
Derm rabbit LD50 >2000 mg/kg bw
Derm rabbit LD50 > 3450 mg/kg bw

Acute Toxicity: Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Likely Routes of Exposure: Skin contact, eye contact, and inhalation.

Eye
Causes serious eye irritation.

Skin
Causes skin irritation. May cause an allergic skin reaction. Prolonged skin contact may cause dryness, redness, or cracking.

Ingestion
Not an expected route of exposure. Expected to be a low ingestion hazard.

Inhalation
Not an expected route of exposure. No adverse effects due to inhalation are expected.

Delayed, Immediate, and Chronic Effects of Short- and Long-Term Exposure:

Skin Corrosion/Irritation
Causes skin irritation.

Serious Eye Damage/Irritation
Causes serious eye damage.

Respiratory Sensitization
Based on available data, this product is not expected to cause respiratory sensitization.

Skin Sensitization
May cause an allergic skin reaction.

Symptoms and Target Organs
Skin irritation. May cause redness and pain. May cause allergic skin reaction. Dermatitis. Rash. Causes severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Chronic Health Effects
No chronic health effects known.

Carcinogenicity
This product is not classified as a carcinogen. Due to the form of the product, exposure to the potentially carcinogenic components is not expected.

Component	OSHA	ACGIH	NTP	IARC
Titanium Dioxide (dust)	Not Listed	A4	Not Listed	2B
Ethylbenzene	Not Listed	A3	Not Listed	2B
Silica, Quartz (dust)	Not Listed	A2	K	1
Ethylene Oxide	Listed	A2	K	1

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS

OSHA =Occupational Safety and Health Administration
Ca/Yes = Expected to be carcinogenic
not listed = Not expected to be carcinogenic

ACGIH =American Conference of Governmental Industrial Hygienists
A1 =Confirmed human carcinogen
A2 =Suspected human carcinogen
A3 =Animal carcinogen
A4 =Not classifiable as a human carcinogen
A5 =Not suspected as a human carcinogen
not listed = Not expected to be carcinogenic

NTP =National Toxicology Program
K =Known to be a carcinogen
R = Reasonably anticipated to be a carcinogen
not listed = Not expected to be carcinogenic

IARC =International Agency for Research on Cancer
1 =Carcinogenic to humans
2A =Probably carcinogenic to humans
2B =Possibly carcinogenic to humans
3 =Not classifiable as to its carcinogenicity to humans
4 =Probably not carcinogenic to humans
not listed = Not expected to be carcinogenic

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive Toxicity: This product is not expected to cause reproductive or developmental effects.

Specific Target Organ Toxicity (STOT):

Single Exposure
Not classified as an STOT - Single Exposure.

Repeated Exposure
May cause damage to organs (ears) through prolonged or repeated exposure.

Aspiration Toxicity: Based on available data, this product is not expected to cause aspiration toxicity.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Acute Aquatic Toxicity: Harmful to aquatic life with long lasting effects.

Chronic Toxicity: Harmful to aquatic life with long lasting effects.

Environmental Effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence/Biodegradability: The product contains substances which are not expected to be readily biodegradable.

Bioaccumulation: No data available.

Mobility: No data available.

Other Adverse Effects: No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal Methods: This material must be disposed of in accordance with all local, state, and federal regulations.

Contaminated Packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Dispose of contents and container in accordance with all local, regional, national and international regulations.

EU Codes: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Residual Waste: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal Instructions).

Disposal Instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents and container in accordance with all local, regional, national and international regulations.

Waste Codes: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

SECTION 14 TRANSPORT INFORMATION

DOT: Not classified as Dangerous Goods for Transport

IATA: Not classified as Dangerous Goods for Transport

IMDG: Not classified as Dangerous Goods for Transport

ICAO/IATA: Not classified as Dangerous Goods for Transport

Reportable Quantity: Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15 REGULATORY INFORMATION

U.S. OSHA Specifically Regulated Substances:

The following components of this product are found at concentrations greater than or equal to 0.1% and are listed as U.S. OSHA Specifically Regulated Substances.

- Ethylene Oxide (75-21-8) – 0.1-1.0%

SARA/CERCLA Reporting Requirements:

The following components of this product are found at concentrations greater than or equal to 0.1% and are subject to SARA/CERCLA reporting requirements.

Material	SARA 302 (EHSs) TPQ	SARA 304 EHSs RQ	CERCLA RQ	SARA 313 Listed	RCRA CODE	CAA 112(r) TQ
Xylene (mixed isomers)	Not Listed	Not Listed	100	313	U239	Not Listed
Ethylbenzene	Not Listed	Not Listed	1000	313	Not Listed	Not Listed
Aluminum Oxide	Not Listed	Not Listed	Not Listed	313	Not Listed	Not Listed
Glacial Acetic Acid	Not Listed	Not Listed	5000	Not Listed	Not Listed	Not Listed
Ethylene Oxide	1000	10	10	313	U115	10000

State Right-to-Know Regulations:

The following components of this product are found at concentrations greater than or equal to 0.1%, subject to state Right-to-Know reporting requirements; or are found at any concentration and are listed under California Proposition 65.

Material	California Proposition 65	Massachusetts Right-to-Know	Minnesota Employee Right-to-Know	New Jersey Community Environmental Hazard Right-to-Know	New Jersey Right-to-Know Substance	Pennsylvania Right-to-Know	Rhode Island Right-to-Know
Xylene (mixed isomers)	Not listed	Listed	Listed	Not listed	Listed	Listed	Listed
Titanium Dioxide (dust)	Cancer (airborne, unbound particles of respirable size)	Listed	Listed	Not Listed	Listed	Listed	Not listed
Ethylbenzene	Cancer	Listed	Listed	Not listed	Listed	Listed	Listed
Silica, Quartz (dust)	Cancer (airborne, unbound particles of respirable size)	Listed	Listed	Listed	Listed	Listed	Not Listed
Boron Oxide (dust)	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Magnesium Oxide	Not listed	Listed	Listed	Not listed	Listed	Listed	Not listed
Triethylentetramine	Not listed	Listed	Not listed	Not listed	Listed	Listed	Not listed
Aluminum Oxide	Not listed	Listed	Listed	Not listed	Listed	Listed	Listed
Glacial Acetic Acid	Not listed	Listed	Not listed	Not listed	Listed	Listed	Listed
Ethylene Oxide	Listed	Listed	Not listed	Not listed	Listed	Listed	Listed
Cumene (mixed isomers)	Cancer	Listed	Listed	Not listed	Listed	Listed	Listed
Toluene	Dev	Listed	Listed	Listed	Listed	Listed	Listed
Benzene (trace)	Cancer, Dev	Listed	Listed	Listed	Listed	Listed	Lis
Napthalene (trace)	Cancer	Listed	Listed	Listed	Listed	Listed	Listed

California Proposition 65: **WARNING**: This product can expose you to chemicals including Ethylbenzene, Ethylene Oxide, Cumene (mixed isomers), Benzene, Titanium Dioxide (dust), Silica, Quartz (dust), and Naphthalene which are known to the State of California to cause cancer, and Toluene and Benzene, which are known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Global Inventories Notification Status	
US - TSCA	All substances are listed
Canada -DSL	All substances are listed
Canada - NDSL	No substances are listed
EU - EINECS	Not all substances are listed
EU - ELINCS	No substances are listed
EU - NLP	At least 1 substance is listed
EU - Reach	All substances are listed
Australia – AICS	All substances are listed
China - EICSC	All substances are listed
Japan - ENCS	All substances are listed
Korea - KECI	All substances are listed
Taiwan - NECI	All substances are listed
New Zealand - NZIoC	All substances are listed
Philippine - PICCS	All substances are listed

EU-REACH Status – Canada WHMIS Classification – Mexico (GHS):

Hazard Classification	Category
Skin Corrosion/Irritation	2
Eye Damage/Irritation	1
Sensitization - Skin	1
Hazardous to the Aquatic Environment – Chronic Hazard	3

SECTION 16 OTHER INFORMATION

NFPA 704 Rating:	Health Hazards 3	Flammability 1	Reactivity 0
HMIS Rating:	Health Hazards 3	Flammability 1	Physical Hazards 0

Previous Editions: First Edition: 03/12/2024

Further Information: This SDS was prepared in accordance with OSHA regulatory standards for Toxic and Hazardous Substances: 29 CFR 1910.1200.

Disclaimer: To the best of our knowledge, the information contained herein is accurate. However, Duro-Last®, a division of Holcim Solutions and Products US, LLC does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be handled with care. Although we have described herein all of the hazards to which we are currently aware, we cannot guarantee that these are the only hazards which exist.