



FlintBoard® H ISO HD

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Date of Issue: 06/03/2021

Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Article

Product Name: FlintBoard® H ISO HD

Intended Use of the Product

Roofing insulation

Name, Address, and Telephone of the Responsible Party

Company

Saint Gobain CertainTeed
20 Moores Road
Malvern, PA 19355
Professional: 800-233-8990
Consumer: 800-782-8777
www.certainteed.com

Emergency Telephone Number

Emergency Number :

ChemTel LLC
Domestic: 1-800-255-3924
International: +1-813-248-0585
Australia: 1-300-954-583
Brazil: 0-800-591-6042
China: 400-120-0751
India: 000-800-100-4086
Mexico: 800-099-0731

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification

No classification required according to 29 CFR 1910.1200 and the Hazardous Products Regulations (HPR) SOR/2015-17.

Label Elements

GHS Labeling

No labeling applicable according to 29 CFR 1910.1200 and the Hazardous Products Regulations (HPR) SOR/2015-17.

Other Hazards

Within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200] and the Canadian Hazardous Products Regulations (HPR): this product is considered a manufactured article and is not considered a hazard when used in a manner which is consistent with the labeled directions.

Unknown acute toxicity

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Synonyms	Product Identifier	%*	GHS Ingredient Classification
Polyisocyanurate foam	Polyurethane modified polyisocyanurate polymer	(CAS-No.) Not available	50 – 60	Not classified
Carbonic acid, calcium salt (1:1)	C.I. Pigment White 18 / Calcium carbonate / C.I. 77220	(CAS-No.) 471-34-1	40 – 50	Not classified
n-Pentane	Pentane / Normal pentane / Pentane, n-	(CAS-No.) 109-66-0	< 10	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Glass, oxide, chemicals	Sodium calcium polyphosphate silicate / Calcium aluminum borosilicate / Fiberglass	(CAS-No.) 65997-17-3	1 – 5	Not classified

FlintBoard® H ISO HD

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

Within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200] and the Canadian Hazardous Products Regulations (HPR): this product is considered a manufactured article and is not considered a hazard when used in a manner which is consistent with the labeled directions

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: The need for first aid is not anticipated under normal conditions of use.

Inhalation: Not expected to be a primary route of exposure. For particulates, dust, or fumes from processing: Remove person to fresh air and keep comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Not expected to present a significant dermal hazard under anticipated conditions of normal use. For particulates, dust, or fumes from processing: Brush off loose particles from skin. Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists.

Eye Contact: Not expected to be a primary route of exposure. For particulates, dust, or fumes from processing: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

Ingestion: Not expected to be a primary route of exposure.

Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: For particulates and dust: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

Skin Contact: Direct contact may cause irritation by mechanical abrasion. For particulates and dust: Exposure may produce an allergic reaction.

Eye Contact: Contact may cause irritation due to mechanical abrasion.

Ingestion: Not expected to present a significant hazard under anticipated conditions of normal use.

Chronic Symptoms: None expected under normal conditions of use. For particulates and dust: Exposure may produce an allergic reaction.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam.

Unsuitable Extinguishing Media: Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any fire.

Firefighting Instructions: Use firefighting measures appropriate for the surrounding fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Calcium oxides. Carbon oxides (CO, CO₂). Isocyanates.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Accidental release of the product does not present a hazard under normal conditions of use.

For Non-Emergency Personnel

Protective Equipment: Use of personal protective equipment (PPE) is not generally required but should be evaluated based on the extent and severity of accidental release.

Emergency Procedures: Evacuate the area if accidental release presents a significant hazard.

FlintBoard® H ISO HD

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection as conditions warrant.

Emergency Procedures: Upon arrival at the scene a first responder is expected to protect oneself and the public, secure the area, and call for the assistance of trained personnel as conditions permit.

Environmental Precautions

The product does not pose a significant hazard to the environment.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain the product and collect as any solid.

Methods for Cleaning Up: Clean up accidental release immediately and dispose of waste safely.

Reference to Other Sections

See Section 8 for advice on personal protective equipment and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Further processing of the product requires an evaluation of potential hazards based upon intended use.

Precautions for Safe Handling: There are no specific precautions necessary for safe handling of the product. The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: Avoid breathing dust.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: No technical measures are necessary for storage of the product.

Storage Conditions: Store in a dry, cool place.

Incompatible Materials: Chlorine. Acetone. Chloroform. Dimethyl sulfoxide. Dimethylformamide. Ethylene dichloride. Hydrogen peroxide. MEK. Tetrahydrofuran.

Specific End Use(s)

Roofing insulation

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

n-Pentane (109-66-0)		
USA ACGIH	ACGIH OEL TWA	1000 ppm (Pentane, all isomers)
USA OSHA	OSHA PEL TWA	2950 mg/m ³
USA OSHA	OSHA PEL TWA	1000 ppm
USA NIOSH	NIOSH REL TWA	350 mg/m ³
USA NIOSH	NIOSH REL TWA	120 ppm
USA NIOSH	NIOSH REL (Ceiling)	1800 mg/m ³
USA NIOSH	NIOSH REL C	610 ppm
USA IDLH	IDLH	1500 ppm (10% LEL)
Glass, oxide, chemicals (65997-17-3)		
USA OSHA	OSHA PEL TWA	15 mg/m ³ total dust, 5 mg/m ³ , respirable fraction 8 hr
USA NIOSH	NIOSH REL TWA	3 fibers/cm ³ (fibers ≤3.5 μm in diameter & ≥10μm in length), TWA 5mg/m ³ (total)
Carbonic acid, calcium salt (1:1) (471-34-1)		
USA NIOSH	NIOSH REL TWA	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)

Exposure Controls

Appropriate Engineering Controls: Engineering controls are not required for normal use of this product.

Personal Protective Equipment: Personal protective equipment is not generally required but should be evaluated based on conditions of use.

Materials for Protective Clothing: Not available

Hand Protection: Wear protective gloves to protect from abrasion.

FlintBoard® H ISO HD

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Eye Protection: In case of excessive dust production, safety goggles are recommended.

Skin and Body Protection: Not generally required, if conditions warrant: Wear suitable protective clothing.

Respiratory Protection: The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: Wear a NIOSH approved respirator that is properly fitted and is in good condition when exposed to dust above exposure limits.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Light yellow foam
Odor	: Slight or odorless
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: 1.5 – 2.5 (water=1)
Specific Gravity	: Not available
Solubility	: Water: Insoluble
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Avoid dust formation. Extremely high or low temperatures. Incompatible materials. Moisture.

Incompatible Materials: Chlorine. Acetone. Chloroform. Dimethyl sulfoxide. Dimethylformamide. Ethylene dichloride. Hydrogen peroxide. MEK. Tetrahydrofuran.

Hazardous Decomposition Products: Under conditions of fire this material may produce: Calcium oxides. Carbon oxides (CO, CO₂). Isocyanates.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

FlintBoard® H ISO HD

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Symptoms/Effects After Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. For particulates and dust:

Symptoms/Effects After Skin Contact: Direct contact may cause irritation by mechanical abrasion. For particulates and dust: Exposure may produce an allergic reaction.

Symptoms/Effects After Eye Contact: Contact may cause irritation due to mechanical abrasion.

Symptoms/Effects After Ingestion: Not expected to present a significant hazard under anticipated conditions of normal use.

Chronic Symptoms: None expected under normal conditions of use. For particulates and dust: Exposure may produce an allergic reaction.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

n-Pentane (109-66-0)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat	364 g/m ³ (Exposure time: 4 h)
LC50 Inhalation Rat	> 20 mg/l/4h
Carbonic acid, calcium salt (1:1) (471-34-1)	
LD50 Oral Rat	6450 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Glass, oxide, chemicals (65997-17-3)	
IARC Group	3
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

n-Pentane (109-66-0)	
LC50 Fish 1	9.87 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Crustacea	9.74 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	11.59 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
NOEC Chronic Algae	2 mg/l

Persistence and Degradability

FlintBoard® H ISO HD	
Persistence and Degradability	Not established.

Bioaccumulative Potential

FlintBoard® H ISO HD	
Bioaccumulative Potential	Not established.

n-Pentane (109-66-0)	
Partition coefficient n-octanol/water (Log Pow)	3.39
Carbonic acid, calcium salt (1:1) (471-34-1)	
BCF Fish	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose in a safe manner in accordance with local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

Not regulated for transport according to: US DOT, IMDG, IATA, and Canada's TDG

FlintBoard® H ISO HD

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Polyisocyanurate foam (Not available)	Not applicable	Not applicable	Not applicable	No
n-Pentane (109-66-0)	Not applicable	Not applicable	Not applicable	No
Glass, oxide, chemicals (65997-17-3)	Not applicable	Not applicable	Not applicable	No
Carbonic acid, calcium salt (1:1) (471-34-1)	Not applicable	Not applicable	Not applicable	No

SARA 311/312 Not present

US TSCA Flags Not present

US State Regulations

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Polyisocyanurate foam (Not available)	No	No	No	No
n-Pentane (109-66-0)	No	No	No	No
Glass, oxide, chemicals (65997-17-3)	No	No	No	No
Carbonic acid, calcium salt (1:1) (471-34-1)	No	No	No	No

State Right-To-Know Lists

Polyisocyanurate foam

U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No

n-Pentane (109-66-0)

U.S. - Massachusetts - Right To Know List - Yes
U.S. - New Jersey - Right to Know Hazardous Substance List - Yes
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - Yes

Glass, oxide, chemicals (65997-17-3)

U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No

Carbonic acid, calcium salt (1:1) (471-34-1)

U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No

Canadian Regulations

Polyisocyanurate foam

Not listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)

n-Pentane (109-66-0)

Listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)

Glass, oxide, chemicals (65997-17-3)

Listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)

FlintBoard® H ISO HD

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Carbonic acid, calcium salt (1:1) (471-34-1)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia AICS	Turkey CICR	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EU NLP	Mexico INSQ
Polyisocyanurate foam (Not available)	No	No	No	No	No	No	No	No
n-Pentane (109-66-0)	Yes	No	Yes	Yes	No	No	No	Yes
Glass, oxide, chemicals (65997-17-3)	Yes	No	Yes	Yes	No	No	No	Yes
Carbonic acid, calcium salt (1:1) (471-34-1)	Yes	No	Yes	Yes	No	No	No	Yes

Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Polyisocyanurate foam (Not available)	No	No	No	No	No	No	No	No
n-Pentane (109-66-0)	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Glass, oxide, chemicals (65997-17-3)	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Carbonic acid, calcium salt (1:1) (471-34-1)	Yes	Yes	Yes	No	No	Yes	Yes	Yes

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 06/03/2021

Revision Summary

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Liq. 1	Flammable liquids Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H224	Extremely flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H336	May cause drowsiness or dizziness
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Abbreviations and Acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

AIHA: American Industrial Hygiene Association

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NIOSH - National Institute for Occupational Safety and Health

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

OEL: Occupational Exposure Limits

PEL: Permissible Exposure Limits

STEL: Short Term Exposure Limit

TLV: Threshold Limit Value

TSCA: United States Toxic Substances Control Act

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.