Franklin International

Material Safety Data Sheet

Titebond Roof Cement

1. Product and company identification

CAS #	:	mixture
Address	:	Franklin International 2020 Bruck Street Columbus OH 43207
Contact person	:	Franklin Technical Services
Telephone	:	(800) 877-4583
In case of emergency	:	Franklin Security (614) 445-1300
Reference number	:	00
Product code	:	3211
Date of revision	:	12/11/2012.
Print date	:	12/11/2012.
Chemtrec (24 Hour)	:	(800) 424 - 9300
Chemtrec International	:	(703) 527 - 3887
Product use	:	roof sealant
Product type	:	solvent/asphalt based

2. Hazards identification

Emergency overview

Physical state	:	Liquid. [Paste.]
Color	:	Black.
Odor	:	Solvent(s)
Signal word	:	WARNING!
Hazard statements	:	COMBUSTIBLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. POSSIBLE CANCER HAZARD - MAY CAUSE CANCER.
Precautionary measures	:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Keep away from heat and flame. Keep container tightly closed. Use personal protective equipment as required. Wash thoroughly after handling.
OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Routes of entry	:	Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Inhalation	:	Irritating to respiratory system. Inhalation of dust will produce irritation.
Ingestion	:	Harmful if swallowed.
Skin	:	Irritating to skin. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Eyes	:	Slightly irritating to the eyes. This product may irritate eyes upon contact.

Potential chronic health effects

Chronic effects	:	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	:	May cause cancer. Risk of cancer depends on duration and level of exposure.

2. Hazards identification

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Target organs : May cause damage to the following organs: upper respiratory tract, skin, eyes.
Contains material which may cause damage to the following organs: eye, lens or cornea.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Ingestion : No specific data.

Skin : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Eyes : Adverse symptoms may include the following:
irritation
watering
redness

Medical conditions aggravated by over-exposure : None known.

See toxicological information (Section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
Asphalt	8052-42-4	50 - 75
Solvent naphtha (petroleum), medium aliph.	64742-88-7	10 - 25

Canada

Name	CAS number	%
Asphalt	8052-42-4	50 - 75
Solvent naphtha (petroleum), medium aliph.	64742-88-7	10 - 25

Mexico

					Classification			
Name	**CAS number**	**UN number**	**%**	**IDLH**	**H**	**F**	**R**	**Special**
Solvent naphtha (petroleum), medium aliph.	64742-88-7	UN1993	10 - 25	-	2	2	0	-
Asphalt	8052-42-4	Not available.	50 - 75	-	0	1	0	-

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.

4. First aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Extinguishing media

Suitable : Use dry chemical, CO_2, water spray (fog) or foam.

Not suitable : Do not use water jet.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Absorb with an inert material.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
Asphalt	**NIOSH REL (United States, 6/2009).** CEIL: 5 mg/m³ 15 minute(s). Form: Fume **ACGIH TLV (United States, 1/2011).** TWA: 0.5 mg/m³, (as benzene soluble aerosol) 8 hour(s). Form: Inhalable fraction
Solvent naphtha (petroleum), medium aliph.	**OSHA PEL 1989 (United States, 3/1989).** TWA: 100 ppm 8 hour(s). TWA: 400 mg/m³ 8 hour(s). **OSHA PEL (United States, 6/2010).** TWA: 100 ppm 8 hour(s). TWA: 400 mg/m³ 8 hour(s).

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
Asphalt, as benzene soluble aerosol	US ACGIH 1/2011	-	0.5	-	-	-	-	-	-	-	[a]
Asphalt	AB 4/2009	-	5	-	-	-	-	-	-	-	[3] [b]
Asphalt, as benzene-soluble aerosol	BC 9/2011	-	0.5	-	-	-	-	-	-	-	[c][A]
Asphalt, as benzene soluble aerosol	ON 7/2010	-	0.5	-	-	-	-	-	-	-	[a][B]
Asphalt	QC 9/2011	-	5	-	-	-	-	-	-	-	[d]

[3]Skin sensitization
Form: [a]Inhalable fraction [b]Fume [c]Inhalable fume [d]fume
Notes: [A]as benzene-soluble aerosol [B]benzene soluble aerosol

Mexico

Occupational exposure limits

Ingredient	Exposure limits
Asphalt	**NOM-010-STPS (Mexico, 9/2000).** LMPE-PPT: 5 mg/m³ 8 hour(s). Form: smoke LMPE-CT: 10 mg/m³ 15 minute(s). Form: smoke

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

8. Exposure controls/personal protection

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

Physical state : Liquid. [Paste.]

Flash point : Closed cup: 40.556°C (105°F) [Tagliabue.]

Flammable limits : Lower: 0.9%
Upper: 6.7%

Color : Black.

Odor : Solvent(s)

Boiling/condensation point : >148.89°C (>300°F)

Relative density : 1.43

Volatility : 27.13% (w/w)

VOC (less water, less exempt solvents) : 300 g/l

Solubility : Insoluble in the following materials: cold water and hot water.

10. Stability and reactivity

Chemical stability : The product is stable.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

United States

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Asphalt	LD50 Oral	Rat	>5000 mg/kg	-

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

Skin : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes : This product may irritate eyes upon contact.

Respiratory : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Inhalation of dust will produce irritation.

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Asphalt	A4	3	-	+	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Canada

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Asphalt	LD50 Oral	Rat	>5000 mg/kg	-

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

Skin : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes : This product may irritate eyes upon contact.

Respiratory : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Inhalation of dust will produce irritation.

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Asphalt	A4	3	-	+	-	-

Mutagenicity

No known significant effects or critical hazards.

11. Toxicological information

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Mexico

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Asphalt	LD50 Oral	Rat	>5000 mg/kg	-

Chronic toxicity

No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

Skin : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes : This product may irritate eyes upon contact.

Respiratory : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Inhalation of dust will produce irritation.

Sensitizer

No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Asphalt	A4	3	-	+	-	-

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

United States

Aquatic ecotoxicity

No known significant effects or critical hazards.

Persistence/degradability

No known significant effects or critical hazards.

Canada

Aquatic ecotoxicity

No known significant effects or critical hazards.

Persistence/degradability

No known significant effects or critical hazards.

Mexico

Aquatic ecotoxicity

No known significant effects or critical hazards.

Persistence/degradability

No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
TDG Classification	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
Mexico Classification	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
ADR/RID Class	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
IMDG Class	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity
IATA-DGR Class	1133	ADHESIVES, containing flammable liquid	3	III		**Remarks** Limited quantity

PG* : Packing group

15. Regulatory information

United States

HCS Classification : Combustible liquid
Irritating material
Carcinogen

U.S. Federal regulations :

TSCA 8(a) IUR Exempt/Partial exemption: Not determined

15. Regulatory information

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Asphalt
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Asphalt: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	Asphalt	8052-42-4	50 - 75

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: ASPHALT FUMES

New York : None of the components are listed.

New Jersey : The following components are listed: ASPHALT; ASPHALT (TYPICAL)

Pennsylvania : The following components are listed: ASPHALT

Canada

WHMIS (Canada) : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-2A: Material causing other toxic effects (Very toxic).

Canadian lists

Canadian NPRI : The following components are listed: Solvent naphtha medium aliphatic

CEPA Toxic substances : None of the components are listed.

Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Mexico

Classification :

International regulations

15. Regulatory information

International lists : **Australia inventory (AICS)**: Not determined.
China inventory (IECSC): Not determined.
Japan inventory: Not determined.
Korea inventory: Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

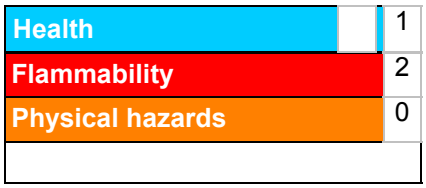
Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

16. Other information

Label requirements : COMBUSTIBLE LIQUID AND VAPOR. CAUSES RESPIRATORY TRACT AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. POSSIBLE CANCER HAZARD - MAY CAUSE CANCER.

Hazardous Material Information System (U.S.A.) :



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of printing : **12/11/2012.**

Date of issue : 12/11/2012.

Date of previous issue : 12/7/2012.

Version : 2

Indicates information that has changed from previously issued version.

Notice to reader

16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes 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 used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.