

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 05/26/2015 Version: 1.0

	bstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	
Product name	: Tropical - #216 Modified Bitumen Adhesive
Product code	: TRO-216
Formula	: 700-TRO-216
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against
Use of the substance/mixture	: Roofing/Waterproofing
1.3. Details of the supplier of the safety	/ data sheet
TROPICAL ROOFING PRODUCTS 1904 S.W. 31ST Ave. HALLANDALE, FL 33009 - UNITED STATES T 954-983-3434	
technical@tropicalroofingproducts.com - www.t	ropicalroofingproducts.com
1.4. Emergency telephone number	
Emergency number	: 800-424-9300
	Chemtrec
SECTION 2: Hazards identification	
2.1. Classification of the substance or	mixture
GHS-US classification	
Flam. Liq. 2 Muta. 1B	H225 H340
Carc. 1B	H340 H350
STOT RE 1	H372
Full text of H-phrases: see section 16	
2.2. Label elements	
GHS-US labelling 0	
Hazard pictograms (GHS-US)	
	GHS02 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	<ul> <li>H225 - Highly flammable liquid and vapour</li> <li>H340 - May cause genetic defects (Dermal, Inhalation)</li> <li>H350 - May cause cancer (Inhalation, Dermal)</li> <li>H372 - Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation)</li> </ul>
Precautionary statements (GHS-US)	<ul> <li>P201 - Obtain special instructions before use</li> <li>P202 - Do not handle until all safety precautions have been read and understood</li> <li>P210 - Keep away from open flames No smoking</li> <li>P233 - Keep container tightly closed</li> <li>P240 - Ground/bond container and receiving equipment</li> <li>P241 - Use explosion-proof electrical/ventilating/lighting/ equipment</li> <li>P242 - Use only non-sparking tools</li> <li>P243 - Take precautionary measures against static discharge</li> <li>P260 - Do not breathe fume, gas, vapours</li> <li>P264 - Wash hands thoroughly after handling</li> <li>P270 - Do not eat, drink or smoke when using this product</li> <li>P280 - Wear protective gloves, protective clothing</li> <li>P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower</li> </ul>
	P308+P313 - If exposed or concerned: Get medical advice/attention
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	P314 - Get medical advice/attention if P370+P378 - In case of fire: Use carb extinguish P403+P235 - Store in a well-ventilated P405 - Store locked up P501 - Dispose of contents/container collection site except for empty clean waste	on dioxide (CO2), for d place. Keep cool to a licensed hazardo	bus-waste disposal contractor or
2.3. Other hazards			
Other hazards not contributing to the classification	: None under normal conditions.		
2.4. Unknown acute toxicity (GHS-US Not applicable	)		
SECTION 3: Composition/informa	tion on ingredients		
3.1. Substance			
Not applicable			
3.2. Mixture			
Name	Product identifier	%	GHS-US classification
asphaltic bitumen, not cut back	(CAS No) 8052-42-4	60 - 80	Not classified
kaolin	(CAS No) 1332-58-7	15 - 30	Not classified
Stoddard solvent	(CAS No) 8052-41-3	20 - 25	Muta. 1B, H340 Carc. 1B, H350 STOT RE 1, H372 Asp. Tox. 1, H304
attapulgite	(CAS No) 12174-11-7	5 - 10	Carc. 2, H351
cellulose	(CAS No) 9004-34-6	3 - 7	Not classified
SBR-latex	(CAS No) 9003-55-8		Not classified
<b>4.1. Description of first aid measures</b> First-aid measures general	: Never give anything by mouth to an use advice (show the label where possible	e).	f you feel unwell, seek medical
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow		
First-aid measures after skin contact	: Remove affected clothing and wash a by warm water rinse.		
First-aid measures after eye contact	<ul> <li>Rinse immediately with plenty of wate persist.</li> </ul>		
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting	g. Obtain emergency	medical attention.
I.2. Most important symptoms and ef	ffects, both acute and delayed		
Symptoms/injuries	: There are potential chronic health effe	ects to consider.	
Symptoms/injuries after inhalation	: May cause allergy or asthma symptor respiratory irritation. May cause an all	ns or breathing difficu ergic skin reaction.	ulties if inhaled. May cause
Symptoms/injuries after skin contact	: May cause an allergic skin reaction. N	lay cause moderate i	rritation.
Symptoms/injuries after eye contact	: Eye irritation.		
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPO	OSURE/CONTACT:	
Indication of any immediate med Freat symptomatically.	ical attention and special treatment neede	d	
SECTION 5: Firefighting measures	3		
i.1. Extinguishing media			
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. W	ater spray Sand	
Insuitable extinguishing media	: Do not use a heavy water stream.	ator spray. Sanu.	
0 0	-		
5.2. Special hazards arising from the			
Fire hazard	: Combustible liquid.	and containers	ading fire and increasing sinks of
Explosion hazard	: Heat may build pressure, rupturing clo burns and injuries. May form flammab		

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eactivity	: Upon combustion: CO and CO2 are formed.
.3. Advice for firefighters	
irefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
ECTION 6: Accidental release	e measures
6.1. Personal precautions, prote	ctive equipment and emergency procedures
General measures	: Absorb spillage to prevent material damage. Isolate from fire, if possible, without unnecessary risk. No flames, no sparks. Eliminate all sources of ignition. Remove ignition sources.
6.1.1. For non-emergency personr	nel
Protective equipment	: Protective clothing. Gloves.
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
	rs. Notify authorities if liquid enters sewers or public waters.
6.3. Methods and material for co	
For containment	: Collect spillage.
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collec
	spillage. Store away from other materials.
	spillage. Store away norm other materials.
6.4. Reference to other sections	spillage. Slote away from other materials.
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	personal protection.
See Heading 8. Exposure controls and p SECTION 7: Handling and stor	personal protection.
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No additional information available

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<b>SECTION 8: Exposure c</b>	ontrols/personal protection
8.1. Control parameters	
Tropical - #216 Modified Bitu	Imen Adhesive
ACGIH	Not applicable
OSHA	Not applicable
asphaltic bitumen, not cut ba	ack (8052-42-4)
OSHA	Not applicable
attapulgite (12174-11-7)	
ACGIH	Not applicable
OSHA	Not applicable
cellulose (9004-34-6)	Nationalia
OSHA	Not applicable
kaolin (1332-58-7)	
OSHA	Not applicable
SBR-latex (9003-55-8)	
ACGIH	Not applicable
OSHA	Not applicable
8.2. Exposure controls	
8.2. Exposure controls Personal protective equipment	: Avoid all unnecessary exposure.
Personal protective equipment	. Avoid all diffecessary exposure.
Materials for protective clothing	: PICM010.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.
<b>SECTION 9: Physical an</b>	d chemical properties
9.1. Information on basic	physical and chemical properties
Physical state	: Liquid
Appearance	: BLACK FIBERED MASTIC.
Colour	: Black
Odour	: Petroleum-like odour
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butyla	
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 300 (≤ 450) °F
Flash point	: 106 °F
Auto-ignition temperature	: No data available

Decomposition temperature: No data availableFlammability (solid, gas): No data available

Vapour pressure : 0.293 kPa at 20 C

Relative vapour density at 20 °C: No data availableRelative density: 1.02 - 1.12

: 8-9

: >75 %

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Solubility	: Water: 0 % Acetone: ≈ g/100ml Organic solvent:≈ 100 %
Log Pow	: No data available
Log Kow	: No data available
-	: No data available
Viscosity, kinematic	
Viscosity, dynamic	: No data available
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available
9.2. Other information	
VOC content	: < 250 (≤ 250) g/l
SECTION 10: Stability and rea	ctivity
10.1. Reactivity	
Upon combustion: CO and CO2 are form	ned.
10.2. Chemical stability	
Not established.	
10.3. Possibility of hazardous rea	ctions
Not established.	
10.4. Conditions to avoid	
	ces of ignition. Direct sunlight. Extremely high or low temperatures.
40.5 In a superstitution protonial of	
10.5. Incompatible materials	
10.5.         Incompatible materials           Strong acids.         Strong bases.	
	roducts
Strong acids. Strong bases.	
Strong acids. Strong bases. <b>10.6. Hazardous decomposition p</b> fume. Carbon monoxide. Carbon dioxide	<u>).</u>
Strong acids. Strong bases. <b>10.6.</b> Hazardous decomposition p fume. Carbon monoxide. Carbon dioxide SECTION 11: Toxicological inf	e. formation
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Strong acids. Strong bases. <b>10.6.</b> Hazardous decomposition p fume. Carbon monoxide. Carbon dioxide <b>SECTION 11: Toxicological inf</b> <b>11.1.</b> Information on toxicological Acute toxicity <b>asphaltic bitumen, not cut back (805</b> )	e. formation l effects : Not classified (Lack of data) 52-42-4)
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Strong acids. Strong bases. <b>10.6.</b> Hazardous decomposition p fume. Carbon monoxide. Carbon dioxide <b>SECTION 11: Toxicological int</b> <b>11.1.</b> Information on toxicological Acute toxicity <b>asphaltic bitumen, not cut back (805</b> LD50 oral rat LD50 dermal rabbit <b>cellulose (9004-34-6)</b> LD50 dermal rabbit LD50 dermal rabbit LC50 inhalation rat (mg/l) Skin corrosion/irritation	e. formation  feffects  i Not classified (Lack of data)  52-42-4)  > 2000 mg/kg (Rat) > 2000 mg/kg (Rat)  > 2000 mg/kg (Rabbit)
Strong acids. Strong bases. <b>10.6.</b> Hazardous decomposition p fume. Carbon monoxide. Carbon dioxide <b>SECTION 11: Toxicological inf</b> <b>11.1.</b> Information on toxicological Acute toxicity <b>asphaltic bitumen, not cut back (805</b> LD50 oral rat LD50 dermal rabbit <b>cellulose (9004-34-6)</b> LD50 dermal rabbit LC50 inhalation rat (mg/l) Skin corrosion/irritation Serious eye damage/irritation	e. formation  reffects  : Not classified (Lack of data)  52-42-4)  > 2000 mg/kg (Rat) > 2000 mg/kg (Rat)  > 2000 mg/kg (Rabbit)
Strong acids. Strong bases. <b>10.6.</b> Hazardous decomposition p fume. Carbon monoxide. Carbon dioxide <b>SECTION 11: Toxicological inf</b> <b>11.1.</b> Information on toxicological Acute toxicity <b>asphaltic bitumen, not cut back (805</b> LD50 oral rat LD50 dermal rabbit <b>cellulose (9004-34-6)</b> LD50 dermal rabbit LC50 inhalation rat (mg/l) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation	e. formation  effects  : Not classified (Lack of data)  52-42-4)  > 2000 mg/kg (Rat) > 2000 mg/kg (Rat)  > 2000 mg/kg (Rabbit)
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Strong acids. Strong bases.  10.6. Hazardous decomposition p fume. Carbon monoxide. Carbon dioxide SECTION 11: Toxicological inf 11.1. Information on toxicological Acute toxicity  asphaltic bitumen, not cut back (805 LD50 oral rat LD50 dermal rabbit cellulose (9004-34-6) LD50 dermal rabbit LC50 inhalation rat (mg/l) Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity asphaltic bitumen, not cut back (805 IARC group attapulgite (12174-11-7)	s. formation  effects  : Not classified (Lack of data)  52-42-4)  > 2000 mg/kg (Rat) > 2000 mg/kg (Rat) > 2000 mg/kg (Rabbit)

SECTION 12: Ecological information

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Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation).
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.
Symptoms/injuries after skin contact	: May cause an allergic skin reaction. May cause moderate irritation.
Symptoms/injuries after eye contact	: Eye irritation.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

12.1. Toxicity	
asphaltic bitumen, not cut back (8052-42-4)	
LC50 fish 1	> 1000 mg/l (96 h; Pisces)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
cellulose (9004-34-6)	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)
Threshold limit algae 1	> 100 mg/l (Algae)

12.2. Persistence and degradability	
Tropical - #216 Modified Bitumen Adhesive	
Persistence and degradability	Not established.
asphaltic bitumen, not cut back (8052-42-4)	
Persistence and degradability	Not readily biodegradable in water.
attapulgite (12174-11-7)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
cellulose (9004-34-6)	
Persistence and degradability	Biodegradable in water.
kaolin (1332-58-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
SBR-latex (9003-55-8)	
Persistence and degradability	Biodegradability in water: no data available.
12.3. Bioaccumulative potential	
Tropical - #216 Modified Bitumen Adhesive	
Bioaccumulative potential	Not established.

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asphaltic bitumen, not cut back (8052-42-4)	
Log Pow	> 6 (Calculated)
Bioaccumulative potential	Not bioaccumulative.
attapulgite (12174-11-7)	
Bioaccumulative potential	No bioaccumulation data available.
cellulose (9004-34-6)	
Bioaccumulative potential	Bioaccumulation: not applicable.
kaolin (1332-58-7)	
Bioaccumulative potential	No bioaccumulation data available.
Stoddard solvent (8052-41-3)	
Log Pow	3.16-7.06
SBR-latex (9003-55-8)	
Bioaccumulative potential	No bioaccumulation data available.
12.4. Mobility in soil	

### No additional information available

 12.5.
 Other adverse effects

 Effect on ozone layer
 :

 Effect on the global warming
 : No known ecological damage caused by this product.

Other information	: Avoid release to the environment.
SECTION 13: Disposal consideration	ons
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Waste disposal recommendations	<ul> <li>Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Remove waste in accordance with local and/or national regulations.</li> </ul>
Additional information	: Industrial waste.
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport informatio	n

In accordance with DOI		
Transport document description	: Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated, III	
UN-No.(DOT)	: Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated	
Packing group (DOT)	: III - Minor Danger	
Additional information		
Other information	: No supplementary information available.	

#### ADR

No additional information available

### Transport by sea

No additional information available

#### Air transport

No additional information available

SECTION 15: Regulatory information	
15.1. US Federal regulations	
Tropical - #216 Modified Bitumen Adhesive	
Not listed on the United States SARA Section 313	
asphaltic bitumen, not cut back (8052-42-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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attapulgite (12174-11-7)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory
cellulose (9004-34-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
kaolin (1332-58-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Stoddard solvent (8052-41-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

CANADA

No additional information available

EU-Regulations No additional information available

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

15.3. US State regulations			
Tropical - #216 Modified Bitumen Adhesive()			
U.S California - Proposition 65 - Carcinogens List	Yes		
U.S California - Proposition 65 - Developmental Toxicity	No		
U.S California - Proposition 65 - Reproductive Toxicity - Female	No		
U.S California - Proposition 65 - Reproductive Toxicity - Male	No		

attapulgite (12174-11-7)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

asphaltic bitumen, not cut back (8052-42-4)
U.S New Jersey - Right to Know Hazardous Substance List
cellulose (9004-34-6)
U.S New Jersey - Right to Know Hazardous Substance List
kaolin (1332-58-7)
U.S New Jersey - Right to Know Hazardous Substance List
Stoddard solvent (8052-41-3)
U.S New Jersey - Right to Know Hazardous Substance List
SECTION 16: Other information

SECTION 16: Other information	
Other information	: None.

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text of H-phrases:	
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Muta. 1B	Germ cell mutagenicity, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure

HMIS III Rating

Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 2 Moderate Hazard
Physical	: 0 Minimal Hazard
Personal Protection	: p

ZLF-PMS 364 CUSTOM TEMPLATE

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.