

Safety Data Sheet

Bulldog TSC Thermoplastic Surfacing Compound #96

SDS Revision Date: 05/05/2015



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity Bulldog TSC Thermoplastic Surfacing Compound #96
Alternate Names Bulldog TSC Thermoplastic Surfacing Compound #96

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Technical Data Sheet
Application Method See Technical Data Sheet

1.3. Details of the supplier of the safety data sheet

Company Name Palmer Asphalt Company
196 West 5th St., P.O. Box 58
Bayonne, NJ 07002

Emergency Telephone No.

(201) 339-0855
8:00a.m. - 5:00p.m. EST

After Hours

CHEMTREC:
(800) - 424-9300 (Domestic – No. America)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. H226
3
Muta. 1B H340
Carc. 1A H350
Repr. 1B H360

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS02



GHS08

Signal word (GHS-US)

Danger

Hazard statements (GHS-US)

H226 - Flammable liquid and vapor
H340 - May cause genetic defects
H350 - May cause cancer
H360 - May damage fertility or the unborn child

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Precautionary statements (GHS-US)

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P280 - Wear protective gloves, protective clothing, eye protection
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P308+P313 - If exposed or concerned: Get medical advice/attention
P370+P378 - In case of fire: Use carbon dioxide (CO₂), foam, dry extinguishing powder, Do not use water to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to in accordance with local, regional, and national regulations.

2.3. Other hazards

Other hazards not contributing to the classification

Skin irritation may be aggravated by exposure to sunlight/UV rays.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

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SECTION 3: Composition/information 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 | 54.4 - 57.6 | Carc. 2, H351 |
| Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135°C to 210°C (275°F to 410°F).] | (CAS No) 64742-95-6 | 25.9 - 31.9 | Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304 |
| 1,2,4-trimethylbenzene | (CAS No) 95-63-6 | <= 10.208 | Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 STOT SE 3, H335 Aquatic Chronic 2, H411 |
| pitch, coal tar, high-temp | (CAS No) 65996-93-2 | 1.444745 - 7.223725 | Muta. 1B, H340 Carc. 1B, H350 Repr. 1B, H360 |
| thickening clay | (CAS No) 12174-11-7 | 2.115 - 3.29 | Carc. 2, H351 |
| cumene | (CAS No) 98-82-8 | <= 0.3509 | Flam. Liq. 3, H226 Carc. 2, H351 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 |
| silica | (CAS No) 14808-60-7 | 0.135 - 0.21 | Carc. 1A, H350 STOT RE 1, H372 |

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). |
| First-aid measures after inhalation | Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest. |
| First-aid measures after skin contact | Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. |
| First-aid measures after eye contact | Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. |
| First-aid measures after ingestion | Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. |

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Bulldog TSC Thermoplastic Surfacing Compound #96 | |
|--|----------------|
| ACGIH | Not applicable |
| OSHA | Not applicable |

| Solvent naphtha (petroleum), light arom., Low boiling point naphtha - unspecified, [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135°C to 210°C (275°F to 410°F).] (64742-95-6) | |
|--|----------------|
| ACGIH | Not applicable |
| OSHA | Not applicable |

| cumene (98-82-8) | | |
|------------------|-------------------------------------|----------------------------------|
| ACGIH | ACGIH TWA (ppm) | 50 ppm |
| ACGIH | ACGIH STEL (ppm) | 50 ppm |
| ACGIH | Remark (ACGIH) | Eye, skin, & URT irr; CNS impair |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 245 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 50 ppm |

| 1,2,4-trimethylbenzene (95-63-6) | | |
|----------------------------------|------------------|--------|
| ACGIH | ACGIH TWA (ppm) | 25 ppm |
| ACGIH | ACGIH STEL (ppm) | 25 ppm |
| OSHA | Not applicable | |

| asphaltic bitumen, not cut back (8052-42-4) | |
|---|----------------|
| ACGIH | Not applicable |
| OSHA | Not applicable |

| silica (14808-60-7) | | |
|---------------------|--------------------------------|-------------------------|
| ACGIH | ACGIH TWA (mg/m ³) | 0.025 mg/m ³ |
| OSHA | Remark (OSHA) | (3) See Table Z-3. |

| thickening clay (12174-11-7) | |
|------------------------------|----------------|
| ACGIH | Not applicable |
| OSHA | Not applicable |

| pitch, coal tar, high-temp (65996-93-2) | | |
|---|--------------------------------|-----------------------|
| ACGIH | ACGIH TWA (mg/m ³) | 0.2 mg/m ³ |
| ACGIH | Remark (ACGIH) | Cancer |
| OSHA | Not applicable | |

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8.2. Exposure controls

Personal protective equipment

Avoid all unnecessary exposure. Gloves. Protective clothing. Safety glasses.



Hand protection

Wear protective gloves.

Eye protection

Chemical goggles or safety glasses. Do not wear contact lenses without the use of splash goggles.

Skin and body protection

Wear suitable protective clothing. Use of protective creams and sunscreen agents are recommended. Protective creams or "barrier creams" form a film that acts as both a chemical and physical "barrier" between skin and the contaminant and tends to penetration of the contaminant into the pores of the skin. In applying "barrier" creams, be sure the skin is clean and dry. Sunscreen agents filter out most of the rays from the sun.

Respiratory protection

Wear appropriate mask.

Other information

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|------------------------------------|
| Physical state | Liquid |
| Appearance | A black, thick consistency liquid. |
| Color | Black |
| Odor | Aromatic Solvent Odor. |
| Odor threshold | No data available |
| pH | No data available |
| Relative evaporation rate (butylacetate=1) | No data available |
| Melting point | No data available |
| Freezing point | No data available |
| Boiling point | No data available |
| Flash point | > 105 °F |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Flammability (solid, gas) | No data available |
| Vapor pressure | No data available |
| Relative vapor density at 20 °C | No data available |
| Relative density | No data available |
| Density | ≈ 0.96 g/cm ³ |

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Solubility

Water: Solubility in water of component(s) of the mixture :

• cumene: 0.005 g/100ml • 1,2,4-trimethylbenzene: 0.0060 g/100ml • 1,3-butadiene/styrene,polymer: insoluble • silica: insoluble • thickening clay: insoluble • benzo[a]pyrene: < 0.00001 g/100ml • benzo[e]acephenanthrylene: < 0.00001 g/100ml • naphthalene: 0.0030 g/100ml • phenanthrene: insoluble • pyrene: 0.000012 g/100ml • dibenz(a,h)anthracene: 0.0000025 g/100ml • benzo[a]anthracene: 0.00001 g/100ml • fluoranthene: 0.000026 g/100ml • dibenzo(a,i)pyrene: insoluble • chrysene: 0.0000020 g/100ml • indeno(1,2,3-cd)pyrene: < 0.00001 g/100ml • acenaphthene: insoluble

Log Pow

No data available

Log Kow

No data available

Viscosity, kinematic

No data available

Viscosity, dynamic

No data available

Explosive properties

No data available

Oxidizing properties

No data available

Explosive limits

No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Product is stable.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Not classified

| cumene (98-82-8) | |
|--|---|
| LD50 oral rat | > 2000 mg/kg (Rat; Other; Literature study; 4000 mg/kg bodyweight; Rat; Other; Inconclusive, insufficient data) |
| LD50 dermal rabbit | 10578 mg/kg (Rabbit; Literature study; Other) |
| LC50 inhalation rat (mg/l) | 40 mg/l/4h (Rat; Literature study) |
| LC50 inhalation rat (ppm) | 8000 ppm/4h (Rat; Literature study) |
| ATE US (dermal) | 10578.000 mg/kg bodyweight |
| ATE US (gases) | 8000.000 ppmv/4h |
| ATE US (vapors) | 40.000 mg/l/4h |
| ATE US (dust,mist) | 40.000 mg/l/4h |
| 1,2,4-trimethylbenzene (95-63-6) | |
| LD50 oral rat | > 5000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature; 6000 mg/kg bodyweight; Rat; Experimental value) |
| LD50 dermal rat | > 3440 mg/kg (Rat; Read-across; OECD 402: Acute Dermal Toxicity) |
| LC50 inhalation rat (mg/l) | 18 mg/l/4h (Rat) |
| ATE US (vapors) | 18.000 mg/l/4h |
| ATE US (dust,mist) | 18.000 mg/l/4h |
| pitch, coal tar, high-temp (65996-93-2) | |
| LD50 oral rat | > 15000 mg/kg bodyweight (Rat; OECD 401: Acute Oral Toxicity; Experimental value) |
| LD50 dermal rat | > 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity) |

| | |
|-----------------------------------|----------------------------|
| Skin corrosion/irritation | Not classified |
| Serious eye damage/irritation | Not classified |
| Respiratory or skin sensitization | Not classified |
| Germ cell mutagenicity | May cause genetic defects. |
| Carcinogenicity | May cause cancer. |

| cumene (98-82-8) | |
|--|--|
| IARC group | 2B - Possibly carcinogenic to humans |
| asphaltic bitumen, not cut back (8052-42-4) | |
| IARC group | 2A - Probably carcinogenic to humans, 2B - Possibly carcinogenic to humans |
| silica (14808-60-7) | |
| IARC group | 1 - Carcinogenic to humans |
| thickening clay (12174-11-7) | |
| IARC group | 2B - Possibly carcinogenic to humans, 3 - Not classifiable |
| pitch, coal tar, high-temp (65996-93-2) | |
| IARC group | 1 - Carcinogenic to humans |

| | |
|---|---|
| Reproductive toxicity | May damage fertility or the unborn child. |
| Specific target organ toxicity (single exposure) | Not classified |
| Specific target organ toxicity (repeated exposure) | Not classified |
| Aspiration hazard | Not classified |
| Potential adverse human health effects and symptoms | Based on available data, the classification criteria are not met. |

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

This product may cause adverse environmental effects if used improperly or release to the environment through a spill. Employ best management practices to prevent this material from entering storm sewer systems, waterways or otherwise impacting plant and animal species.

12.2. Persistence and degradability

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Persistence and degradability

May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

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Bioaccumulative potential

Not established.

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 considerations

13.1. Waste treatment methods

Waste disposal recommendations

Dispose in a safe manner in accordance with local/national regulations. This product, as supplied, is regulated as a hazardous waste by the U.S. Environmental Protection Agency(EPA) under Resource Conservation and Recovery Act(RCRA) regulations. If discarded in its purchased form, the product is a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or residue of the product remains classified as a hazardous waste as per 40 CFR 261, Subpart C. State or local regulations may also apply if they are different from federal regulation. RCRA Hazard Class: D001, Ignitable Hazardous Waste. Dispose of contents/container to local/national/international regulations. Avoid release to the environment.

Ecology - waste materials

SECTION 14: Transport information

In accordance with DOT

: Not Regulated for transport

Additional information

Other information

: Not Regulated when shipped in containers <119 gallons [49 CFR 173.120(b)(2)].

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

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SECTION 15: Regulatory information

15.1. US Federal regulations

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Not listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| | | |
|---------------------------|-------------------|---------|
| silica | CAS No 14808-60-7 | 0.153% |
| thickening clay | CAS No 12174-11-7 | 2.397% |
| benzo[e]acephenanthrylene | CAS No 205-99-2 | 0.0147% |
| dibenzo(a,i)pyrene | CAS No 189-55-9 | 0.0039% |

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

cumene (98-82-8)

Listed on United States SARA Section 313

| | |
|--|---------|
| RQ (Reportable quantity, section 304 of EPA's List of Lists) | 5000 lb |
|--|---------|

1,2,4-trimethylbenzene (95-63-6)

Listed on United States SARA Section 313

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

cumene (98-82-8)

Listed on IARC (International Agency for Research on Cancer)

Pitch, coal tar, high temp. (65996-93-2)

Listed on IARC (International Agency for Research on Cancer)

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15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

| cumene (98-82-8) | | | | |
|---|---|---|---|-----------------------------------|
| 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 | |

| thickening clay (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 | |

| cumene (98-82-8) |
|--|
| U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List |

| 1,2,4-trimethylbenzene (95-63-6) |
|--|
| U.S. - New Jersey - Right to Know Hazardous Substance List |

| asphaltic bitumen, not cut back (8052-42-4) |
|--|
| U.S. - New Jersey - Right to Know Hazardous Substance List |

| Pitch, coal tar, high temp. (65996-93-2) |
|--|
| U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List |

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SECTION 16: Other information

Other information : None.

Full text of H-phrases:

| | |
|----------------------------------|--|
| Acute Tox. 4 (Inhalation:vapour) | Acute toxicity (inhalation: vapor) Category 4 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Carc. 1A | Carcinogenicity, Category 1A |
| Carc. 1B | Carcinogenicity, Category 1B |
| Carc. 2 | Carcinogenicity, Category 2 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Muta. 1B | Germ cell mutagenicity, Category 1B |
| Repr. 1B | Reproductive toxicity, Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT RE 1 | Specific target organ toxicity — Repeated exposure, Category 1 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H226 | Flammable liquid and vapor |
| H304 | May be fatal if swallowed and enters airways |
| H315 | Causes skin irritation |
| H332 | Harmful if inhaled |
| H335 | May cause respiratory irritation |
| H340 | May cause genetic defects |
| H350 | May cause cancer |
| H351 | Suspected of causing cancer |
| H360 | May damage fertility or the unborn child |
| H372 | Causes damage to organs through prolonged or repeated exposure |
| H411 | Toxic to aquatic life with long lasting effects |

NFPA health hazard

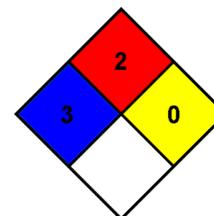
3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard

2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity

0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating
Health

3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability

2 Moderate Hazard

Physical

0 Minimal Hazard

Personal Protection

C

TBC SDS US (GHS Hazcom 2012)

The information and recommendations contained herein are to the best of PALMER ASPHALT COMPANY'S knowledge and belief, accurate and reliable as of the date issued. PALMER ASPHALT COMPANY does not warrant or guarantee their accuracy or reliability, and THE BREWER COMPANY shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. It is also the user's responsibility to make certain that it is relying upon the most recent, updated, information and recommendations available from PALMER ASPHALT COMPANY.

The Environmental Information included, as well as the Hazardous Material Identification System (HMIS) and National Fire Protection Association (NFPA) ratings have been included by PALMER ASPHALT COMPANY in order to provide additional health and hazard classification information. The ratings recommended are based upon the criteria supplied by the developers of these rating systems, together with PALMER ASPHALT COMPANY'S interpretation of the available data.