Tuff Stuff® Bug and Tar Remover

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tuff Stuff® Bug and Tar Remover

Manufactured for:
The Armor All / STP Products Company
1221 Broadway
Oakland, CA 94612
Telephone: (510)271-7000

Product Type
Hydrocarbon Solvent

Stock
AS917, AS980

Formula
11541-75, RM3293

Emergency Phone Numbers
For Medical Emergencies Call: 1-800-446-1014
For Transportation Emergencies Call: 1-800-424-9300 (Chemtrec)

COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Materials

<table>
<thead>
<tr>
<th>Material</th>
<th>%</th>
<th>CAS #</th>
<th>Exposure Limit</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic Petroleum</td>
<td>100</td>
<td>8052-41-3</td>
<td>100 ppm TWA</td>
<td>(2)</td>
</tr>
<tr>
<td>Distillate</td>
<td></td>
<td>64742-88-7</td>
<td>500 ppm TWA</td>
<td>(1)</td>
</tr>
</tbody>
</table>

None of the ingredients is listed as a carcinogen or potential carcinogen by IARC, NTP or OSHA.

The Permissible Exposure Limits (PEL) reported above are the pre-1989 limits that were reinstated by OSHA following a decision by the 11th Circuit Court of Appeals. These PELs are being enforced by Federal OSHA. Be aware that more restrictive limits may be enforced by some states. The Armor All / STP Products Company recommends that the lower exposure limits be observed as reasonable worker protection.

The source for exposure limits listed above are:
1. OSHA Permissible Exposure Limit (PEL)
2. ACGIH Threshold Limit Value (TLV)
3. Both the OSHA PEL and ACGIH TLV
4. Recommended by the Manufacturer
HAZARDS IDENTIFICATION

Principal Hazards

Warning

- Accidental ingestion of a small amount of this material may cause gastrointestinal disturbances including irritation, nausea, vomiting and diarrhea. A very large ingestion could result in headache, dizziness, drowsiness, loss of coordination and fatigue.
- This material is an aspiration hazard; product can enter the lungs during swallowing or vomiting and cause lung damage.
- Irritating to the eyes, skin and respiratory tract.
- Breathing vapors may cause harmful central nervous system effects including headache, dizziness weakness, fatigue, nausea, loss of consciousness and death.
- Combustible liquid. Product may present a moderate fire and explosion hazard.
- May cause chronic health effects.

See Section 11 for complete health hazard information

KEEP OUT OF REACH OF CHILDREN

FIRST AID

Swallowing

Do not induce vomiting because product may enter lungs and cause severe lung damage. If vomiting occurs spontaneously keep head below hips to prevent aspiration into the lungs. Seek medical attention.

Skin

Remove contaminated clothing. Immediately wash all affected and exposed areas with mild soap and copious amounts of water. If irritation or redness develops or persists, seek medical attention. Launder contaminated clothing before re-use.

Inhalation

If symptoms of exposure develop, remove to fresh air. If irritation persists, seek medical attention. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped, and seek medical attention.

Eyes

Although no irritation is expected, as a precaution, exposed eyes should be immediately flushed with copious amounts of clean water using a steady stream for a minimum of 15 minutes. If irritation, pain, swelling or tearing persist, seek medical attention.
4. FIRST AID (continued)

Notes To Physician
There is no specific antidote. The hydrocarbon solvent in this material is unlikely to produce systemic symptoms following accidental ingestion. The most serious toxic effect following ingestion is aspiration pneumonitis, which may lead to non-cardiogenic pulmonary edema. Treatment should be directed at the control of symptoms and clinical conditions.

5. FIRE FIGHTING MEASURES

Flash Point (Method) 124 °F (51 °C) (TOC) 106 °F (41 °C) (PMCC)
Upper Flammable Limit 7%
Lower Flammable Limit 1%
Extinguishing Media Water fog, foam, carbon dioxide, dry chemical
Special Firefighting Procedures Use positive pressure self contained breathing apparatus when entering a confined space. Water spray may be used to minimize vapors and cool containers. Direct stream of water may allow product to float and re-ignite on water surfaces.

Unusual Fire and Explosion Hazards Combustible liquid. Product may form combustible mixtures at temperatures at or above the flashpoint. Vapors are heavier than air and may travel along surfaces to a remote ignition source and flash back.

Combustion Decomposition Carbon dioxide and carbon monoxide.
Auto-ignition Temperature Not determined
Explosion Data Vapors may form explosive mixtures with air. Runoff to sewer may cause fire or explosion hazard.

6. ACCIDENTAL RELEASE MEASURES

Spill Wear appropriate personal protective equipment and remove all sources of ignition. Stop the source of discharge if possible to do so safely. Contain and collect material for disposal in a container suitable for flammable waste.
Tuff Stuff® Bug and Tar Remover

7 HANDLING AND STORAGE

Handling Procedures

• Harmful or Fatal if Swallowed or Inhaled. Contains mineral spirits.
• Avoid contact with eyes.
• Avoid contact with the skin and clothing.
• Avoid breathing vapors.
• Keep away from heat sources, sparks and flame.
• Wash exposed skin with soap and water after use.
• Use only with adequate ventilation.
• Keep containers closed when not in use.
• Empty containers may retain hazardous residues.
• Do not cut or weld on or near empty or full drums.

Storage Procedures

Do not store near potential sources of ignition. Store in a cool, dry well ventilated area away from heat, oxidizers and all sources of ignition.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation Procedures

General ventilation should be adequate for normal use. For operations where the TLV may be exceeded, mechanical ventilation such as local exhaust may be needed to maintain exposure levels below applicable limits.

Gloves Protection

Chemical resistant gloves such as nitrile rubber are recommended where needed to prevent prolonged / repeated skin contact.

Eye Protection

Splash-proof goggles are recommended if needed to prevent eye contact.

Respiratory Protection

None needed under normal use conditions. For operations where the TLV may be exceeded, a NIOSH/MSHA approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on containment type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Clothing

Recommendation

Protective clothing if needed to avoid prolonged / repeated skin contact. Suitable washing and eye flushing facilities should be available in the work area. Contaminated clothing should be removed and laundered before re-use.

9 PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure

2 mmHg

pH

Not applicable
Tuff Stuff® Bug and Tar Remover

9 PHYSICAL AND CHEMICAL PROPERTIES (continued)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>6.5 lbs/gal @ 65°F</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Negligible</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>100%</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Greater than 1</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>0.1 (Butyl Acetate =1)</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic solvent odor</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear or green liquid</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>316°F</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

10 STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Incompatibility</td>
<td>Strong oxidizing agents</td>
</tr>
<tr>
<td>Polymerization</td>
<td>Will not occur</td>
</tr>
<tr>
<td>Hazardous</td>
<td>Burning can produce carbon dioxide and carbon monoxide.</td>
</tr>
<tr>
<td>Decomposition</td>
<td></td>
</tr>
</tbody>
</table>

11 TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Toxicity</td>
<td>Accidental ingestion of this material is expected to have little acute toxicity. Nausea, vomiting, diarrhea, abdominal pain and belching may occur. Ingestion of excessive quantities may cause signs of nervous system depression such as drowsiness, dizziness, loss of coordination and fatigue. This material is an aspiration hazard: product can enter the lungs during swallowing and vomiting and cause lung inflammation and damage.</td>
</tr>
<tr>
<td>Eye Irritation</td>
<td>This product is not expected to cause eye irritation and was found to be non-irritating to the eye in animals studied.</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td>This material may cause severe skin irritation., Prolonged or repeated exposures to this material may cause redness, burning and drying and cracking of the skin.</td>
</tr>
<tr>
<td>Dermal Toxicity</td>
<td>No evidence of adverse effects from available information.</td>
</tr>
</tbody>
</table>
11 TOXICOLOGICAL INFORMATION (continued)

Inhalation Toxicity
Excessive inhalation of vapor or mist can cause irritation of the nose, throat and respiratory tract. May cause harmful central nervous system effects such as dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and asphyxiation.

Acute Toxicity Values
Aliphatic Petroleum Distillates: LD50 Oral rat: >8 ml/kg
LC50 Inhalation rat: >2300/ppm/4 hr
LD50 Dermal rabbit: >4 ml/kg

Sensitization
Based on data from the components, this product is not expected to cause skin or respiratory sensitization.

Chronic Toxicity
Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the product may be harmful or fatal.

Medical Conditions Aggravated by Exposure
Because of the irritating and defatting properties, this product may aggravate any existing dermatitis. Respiratory symptoms associated with pre-existing lung disorders such as asthma may be aggravated by exposure to this material.

Carcinogenicity
This product contains mineral spirits. Petroleum hydrocarbons of similar composition and boiling ranges have been known to product kidney damage and tumors in male rats following prolonged inhalation exposures.

12 ECOLOGICAL INFORMATION

Aquatic/Terrestrial Toxicity
No data is available at this time.

Environmental Fate

13 DISPOSAL CONSIDERATIONS

Waste Disposal
Waste material is a RCRA hazardous waste due to ignitibility. Incinerate in accordance with federal, state and local regulations.

14 TRANSPORT INFORMATION
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U.S. DOT Non-Bulk Shipping Description

None - Excepted from Hazmat Regulations.

ID Number None
Hazard Class None
Packing Group None
Label None
Markings None

IMDG Code Shipping Description
DANGEROUS GOODS IN LIMITED QUANTITIES OF CLASS 3.3, III, FP 41° C.

Technical
ID Number UN1268
Hazard Class 3.3
Packing Group III
Markings NONE
Label NONE
Placards NONE, LIMITED QUANTITIES ON TRAILER
IMDG PG 0147 - 0149 GEN. INTRO.

Air - IATA Shipping Description
Petroleum Distillates, n.o.s., 3, UN1268, III (sizes not exceeding 500 mL may be re-classed as Consumer Commodity, 9, ID8000 if they meet the packaging specifications in 910 and weight restrictions)

Technical Name None
ID Number UN1268
Hazard Class 3
Packing Group III
Markings Petroleum Distillates, n.o.s. UN1268
Label Flammable Liquid

REGULATORY INFORMATION

U.S. TSCA Inventory/other TSCA Regulations.
All of the components of this product are listed on the TSCA inventory. This product is subject to export notification.

None.

SARA Section 313
This product contains the following toxic chemicals 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 (SARA 313 - Toxic Chemical Release Reporting)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product does not contain chemicals regulated by the State of California under proposition 65.

EEC EINECS: All of the ingredients are listed on the EINECS inventory.

Australia: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

Canada: All of the ingredients of this product are listed on the Canadian Domestic Substances List (DSL).

**16 OTHER INFORMATION**

NFPA Code: Health: 2  Fire: 2  Reactivity: 0

HMIS Code: Health: 2  Fire: 2  Reactivity: 0

Precautionary Labels: Observe all requirements of plant, company or government regulations. "Empty" containers retain product residue and can be hazardous. Do not re-use empty containers without proper cleaning. Keep out of the reach of children. Do not take internally.

Revision Indicators: Supersedes: November 13, 1998  Revised Sections: Sections 1, 16 (New Company Name)

General: This MSDS is directed to professional users and bulk handlers of the product or its ingredients. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations and in some instances might differ from the information provided herein.