SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name TAR B-GONE CITRUS

Other means of identification

PRODUCT CODE 45500

Details of the supplier of the safety data sheet

Company Name TITAN INDUSTRIAL CHEMICALS, LLC

P.O. Box 635 Grover, Mo. 63040 636-273-9033

Emergency telephone number

Emergency Telephone INFOTRAC 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Specific Target Organ Toxicity (Single Exposure) [Central Nervous System) | Category 3 | |
|---|-------------|---|
| Specific Target Organ Toxicity (Respiratory Irritant) | Category 3 | |
| <u>Carcinogen</u> | Category 2 | |
| Skin corrosion/irritation | Category 2 | |
| Serious Eye Damage/Eye Irritation | Category 2A | |
| Skin Sensitization | Category 1 | |
| Aspiration toxicity | Category 1 | • |
| Flammable liquids | Category 3 | |

Label elements

Emergency Overview

Signal Word: Danger

Hazard statements

Causes serious eye irritation
Causes skin irritation
Suspected of causing cancer
May cause respiratory irritation
May be fatal if swallowed and enters airways
Flammable liquid and vapor
May cause drowsiness and dizziness
May cause an allergic skin reaction



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required, including gloves and eye or face protection. Wash thoroughly after handling.

Use only outdoors or in well ventilated areas.

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Do not breathe mists/vapors/spray.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools

Take precautionary measures against static discharge

Contaminated clothing must not be allowed out of workplace

Ground/bond container and receiving equipment

Avoid release to the environment

Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS)

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IIF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call poison control/physician if you feel unwell.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs, get medical attention.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

Precautionary Statements - Storage

Store locked up. Keep container tightly closed.

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container according to all local/regional/national and international regulations.

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|---|------------|----------|--------------|
| Distillates (petroleum), hydrotreated heavy | 64742-48-9 | 20-40 | * |
| D-Limonene | 5989-27-5 | 40-60 | * |
| Solvent naphtha (petroleum) light aromatic | 64742-95-6 | 10-20 | * |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret. The exact identities of other ingredients has also been withheld as Trade Secret. However, they do not contribute to the identified hazards of the product and will be divulged to proper authorities in an emergency.

4. FIRST AID MEASURES

First aid measures

General advice If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do

not get in eyes, on skin, or on clothing.

Skin Contact Consult a physician if necessary. Wash off immediately with soap and plenty of water while

removing all contaminated clothes and shoes. Immediate medical attention is not required.

If skin irritation persists, call a physician.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 10 minutes. Keep eye wide open while rinsing upper and lower

lids. If symptoms persist, call a physician.

Inhalation Remove to fresh air and keep at rest in a position comfortable for breathing. Call a

physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is not required. If symptoms persist, or victim is unconscious, call a physician immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband. Move to fresh air in case of accidental inhalation of vapors or decomposition

products.

Ingestion Get medical attention immediately. Call a poison center or physician. Do NOT induce

vomiting. Aspiration hazard. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth with water. Never give anything by mouth to an unconscious

person. Call a physician immediately.

Self-protection of the first aider

Use personal protective equipment as required. May be hazardous to give mouth-to-mouth

resuscitation.

Most important symptoms and effects, both acute and delayed

Symptoms Any additional important symptoms and effects are described in Section 11: Toxicology

Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians If ingested, presents significant aspiration hazard. Induction of emesis is not recommended.

Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal tube or by placement of the body in a Trendelenburg and left lateral

decubitus position.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use. Dry chemical. Carbon dioxide (CO2). Water spray (fog). Alcohol resistant foam.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient. Do not use.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Remove all sources of ignition. Pay attention to flashback. Take precautionary measures

against static discharges. Use personal protective equipment as required.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into

surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover

powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material. Take

precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take necessary action to avoid

static electricity discharge (which might cause ignition of organic vapors).

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children. Keep containers tightly closed in a cool, well-ventilated place. Keep away from

heat. Keep in properly labeled containers.

Incompatible materialsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Exposure guidelines noted for ingredient(s).

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------|-------------------------|-----------------------------|---------------|
| Petroleum Distillate | TWA: 212ppm 8 hrs | 500ppm, 2000 mg/m3 OSHA Z-1 | Not Available |
| CAS 64742-48-9 | | 400ppm, 1600 mg/m3 OSHA P0 | |
| Petroleum distillate | RCP-TWA 19ppm, 100mg/m3 | N/A | N/A |
| CAS 64742-95-6 | TWA: 20ppm | N/A | N/A |
| D-Limonene CAS 5989-27-5 | | | |

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protectionWear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionNo protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene When using do not eat, drink or smoke. Regular cleaning of equipment, work area and

clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Clear
Color Colorless
Odor Orange

Odor threshold No Information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Not an Aqueous Solution

Specific Gravity 0..803 Viscosity Water Thin

Melting point/freezing pointNo Information available

Flash point

No Information available

51 °C 124 °F (closed cup)

Boiling point / boiling range 171 to 204 C (340 to 399 F)

Evaporation rate

Less than butyl acetate

Flammability (solid, gas)

No Information available

Flammability Limits in Air

Upper flammability limit:7.0% by VolumeLower flammability limit:.6% by VolumeVapor pressure.8 mm Hg @ 68 F.

 $\begin{tabular}{lll} \mbox{Vapor density} & 5.3 \mbox{ (air=1)} \\ \mbox{Water solubility} & .05 \mbox{ g/L} \\ \end{tabular}$

Partition coefficient No Information available

Autoignition temperature 260 C

Decomposition temperatureNo Information available

Other Information

Density Lbs/Gal 6.68

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Oxidizers

Hazardous Decomposition Products

May produce carbon dioxide, carbon monoxide, when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Harmful by inhalation, ingestion and in contact with eyes and skin.

Inhalation Avoid breathing vapors or mists. May cause irritation of respiratory tract.

Eye contact Avoid contact with eyes. Contact with eyes may cause irritation.

Skin Contact Avoid contact with skin. Harmful in contact with skin. Prolonged or repeated contact may

dry skin and cause irritation. Wash thoroughly after handling. May cause allergic skin

reaction.

Ingestion Do not taste or swallow. May be harmful if swallowed. Aspiration hazard.

Information on toxicological effects

Symptoms No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause allergic skin reaction. **Germ cell mutagenicity** No Information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

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|-------------------------------------|---|--------------------------|--------------------------------|---------------------------|
| Chemical Name | ACGIH | IARC | NTP | OSHA |
| Petroleum Distillate 64742- 48-9 | N/A | N/A | N/A | N/A |
| Petroleum distillate 64742- 95-6 | Caused cancer in lab animals. Relevance to humans uncertain | | | |
| D-Limonene | N/A | Group 3 | N/A | N/A |

ACGIH (American Conference of Governmental Industrial Hygienists)

Not classified as a human carcinogen

IARC (International Agency for Research on Cancer)

Not classifiable as a human carcinogen

Reproductive toxicity D-limonene has been shown to cause harm to the fetus in lab animal studies. Relevance to

humans is uncertain.

STOT - single exposure Category 3 (Central Nervous System)

STOT - repeated exposure No Information available. Has been found to cause kidney damage in male rats, mild

reversible liver effects in lab animals. Not expected to occur in humans.

Chronic toxicity No known significant adverse effects.

Target organ effects See STOT above.

Aspiration hazard Yes.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity - toxic to aquatic

organisms

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------------------------|---------------------------|-----------------------------------|---------------------|
| Petroleum distillate 64742-48-9 | EL50 3.1 mg/L 72 hr. | LL50 10mg/L 96 hr. | EL50 4.5mg/L 48 hr. |
| | Selenastrum Capricornutum | Rainbow Trout | Water Flea |
| D-Limonene 5989-27-5 | N/A | LC50 Oncorhynchus mykiss 35mg/L | N/A |
| | | 96hr | |
| | | LC50 Pimephales promelas .619- | |
| | | .796 mg/L (flow through) 96 hr | |
| B | =: | | |
| Petroleum distilate 64742-95-6 | • | LL50 9.2mg/L, 96hr., Oncorhynchus | N/A |
| | magna | mykiss | |
| | | | |

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

| Chemical Name | Partition coefficient |
|----------------------|-----------------------|
| Petroleum Distillate | Log Pow 3.3-5.3 |
| 64742-48-9 | |

Other adverse effects No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations. D001, D018.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT Please see current shipping papers for most up to date shipping information, including

exemptions and special circumstances.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | SARA 313 - Threshold Values % | |
|---------------------------------|-------------------------------|--|
| Petroleum distillate 64742-48-9 | | |
| Pseudocumene 95-63-6 | <32% | |
| Xylenes 1330-20-7 | <2% | |
| Cumene 98-82-8 | <1% | |

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard Yes
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42). Classified as an oil. Spills that produce a visible sheen should be reported to EPA's National Response Center (800-424-8802).

CERCLA

Cumene CAS 98-82-8, <1%, RQ 5000 lbs.; xylenes CAS 1330-20-7, <2%, RQ 100 lbs.

US State Regulations

California Proposition 65

Contains no reported Prop. 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| Petroleum Distilate 64742-48-9 | X | No | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA Health hazards 1 Flammability 2 Instability 0 Physical and Chemical

Properties Yes

HMIS Health hazards 1 Flammability 2 Physical hazards 0 Personal protection C

Issue Date 8/21/15

Revision Date Revision Note

No Information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet