

# Grease Lightning

## Safety Data Sheet

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : **Grease Lightning**  
Product code : 5769

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

Use of the substance/mixture : Natural-Based Cleaner

#### 1.3. Details of the supplier of the safety data sheet

Val-U-Chem Inc.  
PO Box 82310  
Phoenix, AZ 85071 - USA  
T 602-957-2808 - F 602-957-2980

#### 1.4. Emergency telephone number

Emergency number : 800-255-3924

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Flam. Liq. 3 H226  
Skin Irrit. 2 H315  
Eye Dam. 1 H318  
Skin Sens. 1 H317  
Asp. Tox. 1 H304

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms :



Signal word : Danger

Hazard statements : Flammable liquid and vapor.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.

Precautionary statements : Keep away from heat, hot surfaces, open flames, sparks. - No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical, lighting, ventilating equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Avoid breathing vapors.  
Wash hands and forearms thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear eye protection, neoprene gloves, protective clothing.  
If swallowed: Immediately call a doctor, a POISON CENTER.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
Wash with plenty of soap and water.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.

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Do NOT induce vomiting.  
If skin irritation or rash occurs: Get medical advice/attention.  
Take off contaminated clothing and wash before reuse.  
In case of fire: Use alcohol resistant foam, BC-powder, carbon dioxide (CO<sub>2</sub>), dry chemical, sand to extinguish.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container in accordance with Local, State, and Federal regulations.

### 2.3. Hazard not otherwise classified (HNOC)

No additional information available

### 2.4. Unknown acute toxicity (GHS-US)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

(NOTE: If component displays the \* (asterisk) symbol, the following statement applies.)

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

### 3.2. Mixture

| Name                         | Product identifier  | %       | Classification (GHS-US)  |
|------------------------------|---------------------|---------|--|
| (+)-limonene                 | (CAS No) 5989-27-5  | 75 - 80 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Skin Sens. 1, H317<br>Asp. Tox. 1, H304<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| alcohols, C9-11, ethoxylated | (CAS No) 68439-46-3 | 5 - 10  | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318   |

(NOTE: If component displays the \* (asterisk) symbol, the following statement applies.)

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

## 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 you feel unwell, seek medical advice (show the label where possible).   |
| First-aid measures after inhalation   | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.  |
| First-aid measures after skin contact | : If skin irritation or rash occurs: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation persists, get medical attention. |
| First-aid measures after eye contact  | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  |
| 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. If you feel unwell, seek medical advice.   |
| Symptoms/injuries after skin contact | : Causes skin irritation. May cause an allergic skin reaction.  |
| Symptoms/injuries after eye contact  | : Causes serious eye damage.  |
| Symptoms/injuries after ingestion    | : May be fatal if swallowed and enters airways. FOLLOWING SYMPTOMS MAY APPEAR LATER: Gastrointestinal complaints. Irritation of the gastric/intestinal mucosa. Irritation of the oral mucous membranes. |

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |   |
|--------------------------------|---|
| Suitable extinguishing media   | : Alcohol-resistant foam. BC powder. Carbon dioxide. Dry chemical powder. Sand/earth. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.  |

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### 5.2. Special hazards arising from the substance or mixture

|                  |   |
|------------------|---|
| Fire hazard      | : Flammable liquid and vapor.                           |
| Explosion hazard | : May form flammable/explosive vapor-air mixture.       |
| Reactivity       | : Reacts with (strong) oxidizers and with (some) acids. |

### 5.3. Advice for firefighters

|                                |   |
|--------------------------------|---|
| Firefighting 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.   |
| Other information              | : No additional information available.  |

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

|                  |   |
|------------------|---|
| General measures | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Isolate from fire, if possible, without unnecessary risk. Use special care to avoid static electric charges. |
|------------------|---|

#### 6.1.1. For non-emergency personnel

|                      |  |
|----------------------|--|
| Protective equipment | : Protective goggles.<br>Protective clothing.<br>respiratory protection.<br>Neoprene 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

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

|                         |  |
|-------------------------|--|
| For containment         | : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Dilute combustible/toxic gases/vapors with water spray.  |
| Methods for cleaning up | : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Wash down leftovers with plenty of water. Wash clothing and equipment after handling. |

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

|                                   |  |
|-----------------------------------|--|
| Additional hazards when processed | : Handle empty containers with care because residual vapors are flammable.   |
| Precautions for safe handling     | : Do not get in eyes, on skin, or on clothing. Do not breathe vapors. Ensure good ventilation of the work station. Flammable vapors may accumulate in the container. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Observe normal hygiene standards. Provide good ventilation in process area to prevent formation of vapor. Take precautions against electrostatic charges. Use only outdoors or in a well-ventilated area. Use personal protective equipment as required. |
| Hygiene measures                  | : Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and forearms thoroughly after handling. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.   |

### 7.2. Conditions for safe storage, including any incompatibilities

|                       |  |
|-----------------------|--|
| Technical measures    | : Provide local exhaust or general room ventilation. Take precautionary measures against static discharge. Comply with applicable regulations. |
| Incompatible products | : Strong acids. Oxidizing agent.   |
| Storage area          | : Store in a cool, dry well-ventilated area. Keep container tightly closed when not in use.  |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No data available

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### 8.2. Exposure controls

|                                  |  |
|----------------------------------|--|
| Personal protective equipment    | : Avoid all unnecessary exposure.  |
| Hand protection                  | : Wear neoprene gloves.  |
| Eye protection                   | : Chemical goggles or safety glasses.  |
| Skin and body protection         | : Wear suitable protective clothing.   |
| Respiratory protection           | : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. In case of insufficient ventilation, wear suitable respiratory equipment. |
| Other information                | : When using, do not eat, drink or smoke.  |
| Appropriate engineering controls | : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.   |

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                     |
|---|---------------------|
| Physical state                              | : Liquid            |
| Color                                       | : Clear yellow      |
| Odor  | : Citrus            |
| Odor threshold                              | : No data available |
| pH  | : No data available |
| Melting point                               | : No data available |
| Freezing point                              | : No data available |
| Boiling point                               | : No data available |
| Flash point                                 | : > 110 °F          |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas)                   | : No data available |
| Explosive limits                            | : No data available |
| Vapor pressure                              | : No data available |
| Vapor density                               | : No data available |
| Specific Gravity @ 77° F                    | : 0.858 - 0.878     |
| Solubility                                  | : No data available |
| Partition Coefficient n-Octanol-Water       | : No data available |
| Auto-ignition temperature                   | : No data available |
| Decomposition temperature                   | : No data available |
| Viscosity                                   | : < 5 cP            |

### 9.2. Other information

|             |                      |
|-------------|----------------------|
| VOC content | : < 700 g/l CARB VOC |
|-------------|----------------------|

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts with (strong) oxidizers and with (some) acids.

### 10.2. Chemical stability

Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Extremely high or low temperatures. Open flame. Heat. Sparks.

### 10.5. Incompatible materials

Strong acids. Oxidizers. Halogens.

### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. May release flammable gases.

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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| alcohols, C9-11, ethoxylated (68439-46-3) |                            |
|---|----------------------------|
| LD50 oral rat                             | 1378 mg/kg (Rat)           |
| LD50 dermal rabbit                        | > 2000 mg/kg (Rabbit)      |
| ATE US (oral)                             | 1378.000 mg/kg body weight |

| (+)-limonene (5989-27-5) |   |
|--------------------------|---|
| LD50 oral rat            | 4400 mg/kg body weight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Literature study; > 2000 mg/kg bodyweight; Rat; Read-across) |
| LD50 dermal rabbit       | > 5000 mg/kg body weight (Rabbit; Weight of evidence; Equivalent or similar to OECD 402)  |
| ATE US (oral)            | 4400.000 mg/kg body weight  |

Skin corrosion/irritation : Causes skin irritation.  
 Serious eye damage/irritation : Causes serious eye damage.  
 Respiratory or skin sensitization : May cause an allergic skin reaction.  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified

| (+)-limonene (5989-27-5) |                      |
|--------------------------|----------------------|
| IARC group               | 3 - Not Classifiable |

Reproductive toxicity : Not classified  
 Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.  
 Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met  
 Symptoms/injuries after skin contact : Causes skin irritation. May cause an allergic skin reaction.  
 Symptoms/injuries after eye contact : Causes serious eye damage.  
 Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. FOLLOWING SYMPTOMS MAY APPEAR LATER: Gastrointestinal complaints. Irritation of the gastric/intestinal mucosa. Irritation of the oral mucous membranes.

### SECTION 12: Ecological information

#### 12.1. Toxicity

| alcohols, C9-11, ethoxylated (68439-46-3) |                          |
|---|--------------------------|
| LC50 fish 1                               | 5.7 mg/l (Rainbow trout) |
| EC50 Daphnia 1                            | 2.5 mg/l                 |

| (+)-limonene (5989-27-5) |   |
|--------------------------|---|
| LC50 fish 1              | 720 µg/l (96 h; Pimephales promelas; Lethal)  |
| EC50 Daphnia 1           | 0.36 mg/l (48 h; Daphnia magna; GLP)          |
| LC50 fish 2              | 702 µg/l (96 h; Pimephales promelas)          |
| Threshold limit algae 1  | 150 mg/l (72 h; Desmodesmus subspicatus; GLP) |
| Threshold limit algae 2  | 2.62 mg/l (72 h; Desmodesmus subspicatus)     |

#### 12.2. Persistence and degradability

| alcohols, C9-11, ethoxylated (68439-46-3) |                                 |
|---|---------------------------------|
| Persistence and degradability             | Readily biodegradable in water. |

| (+)-limonene (5989-27-5)      |  |
|-------------------------------|--|
| Persistence and degradability | Readily biodegradable in water. Forming sediments in water. Adsorbs into the soil. |
| ThOD                          | 3.29 g O <sub>2</sub> /g substance   |

#### 12.3. Bioaccumulative potential

| alcohols, C9-11, ethoxylated (68439-46-3) |                                    |
|---|------------------------------------|
| Bioaccumulative potential                 | No bioaccumulation data available. |

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| <b>(+)-limonene (5989-27-5)</b> |  |
|---------------------------------|--|
| BCF fish 1                      | 864.8 - 1022 (Pisces; Fresh weight)  |
| Log Pow                         | 4.38 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 37 °C) |
| Bioaccumulative potential       | Potential for bioaccumulation ( $4 \geq \text{Log Kow} \leq 5$ ).                                |

### 12.4. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with Local, State, and Federal regulations.  
Additional information : Handle empty containers with care because residual vapors are flammable.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### 14.1. UN Number

UN-No.(DOT) : 1993  
Other information : Under 49 CFR 173.150(f)(1): This product may be reclassified as a combustible liquid. DOT requirements for packaging, labeling, and shipping do not apply to combustible liquids in NON-BULK packaging unless the combustible liquid is a hazardous substance, a hazardous waste, or a marine pollutant. This provision does not apply to transportation by vessel or aircraft, except where other means of transportation is impracticable.

### 14.2. UN proper shipping name

DOT Proper Shipping Name : UN1993, Flammable Liquids, N.O.S. (D-Limonene), 3, PGIII  
Hazard labels (DOT) : 3 - Flammable liquid



## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory

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.

| <b>alcohols, C9-11, ethoxylated (68439-46-3)</b>                          |   |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |   |
| SARA Section 311/312 Hazard Classes                                       | Immediate (acute) health hazard   |
| <b>(+)-limonene (5989-27-5)</b>   |   |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |   |
| SARA Section 311/312 Hazard Classes                                       | Fire hazard<br>Immediate (acute) health hazard<br>Delayed (chronic) health hazard |

### 15.2. International regulations

#### CANADA

#### EU-Regulations

No additional information available

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

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

### 15.2.2. National regulations

### 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

Prop 65 Comments

:4-o-tolylazo-o-toluidine (CAS#97-56-3): < 4 ppm

## SECTION 16: Other information

Abbreviations Legend:

|                     |  |
|---------------------|--|
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4                                 |
| Aquatic Acute 1     | Hazardous to the aquatic environment - Acute Hazard Category 1   |
| Aquatic Chronic 1   | Hazardous to the aquatic environment - Chronic Hazard Category 1 |
| Asp. Tox. 1         | Aspiration hazard Category 1                                     |
| Eye Dam. 1          | Serious eye damage/eye irritation Category 1                     |
| Flam. Liq. 3        | Flammable liquids Category 3                                     |
| Skin Irrit. 2       | Skin corrosion/irritation Category 2                             |
| Skin Sens. 1        | Skin sensitization Category 1                                    |
| H226                | Flammable liquid and vapor                                       |
| H302                | Harmful if swallowed   |
| H304                | May be fatal if swallowed and enters airways                     |
| H315                | Causes skin irritation   |
| H317                | May cause an allergic skin reaction                              |
| H318                | Causes serious eye damage  |
| H400                | Very toxic to aquatic life                                       |
| H410                | Very toxic to aquatic life with long lasting effects             |

Disclaimer

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*

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