SDS

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: AE 231 Orange Thunder

Product Number: 23

Recommended Use: CITRUS DEGREASER MULTI PURPOSE Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier:

ALAN ENVIRONMENTAL PRODUCTS INC. 46 WORTHINGTON ACESS DR. SUITE B

ST. LOUIS, MO 63043 TELEPHONE: 800-991-3765

24 Hour Emergency Phone Numbers:

Infotrac : 800-535-5053 (North

352-323-3500 (International)

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity - Inhalation (Dusts/Mists) Category 4
Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Eye Irritation: Category 1
Skin Sensitization: Category 1
Flammable Liquids Category 3

GHS Label Elements

Signal Word: Danger

Symbols:



Hazard Statements: Harmful if inhaled.

Causes skin irritation.

Causes serious eye damage May cause an allergic skin reaction

Precautionary Statements:

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area.

Wash hands and any exposed skin thoroughly after handling.

Wear eye / face protection Wear protective gloves

Contaminated work clothing should not be allowed out of the workplace Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground container and receiving equipment. Use explosion-proof electrical equipment.

Use only non-sparking tools

Take precautionary measures against static discharge

Response:

-Specific Treatment:

-Inhalation:

-Eyes 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

PHYSICIAN.

-Skin IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

or shower. If skin irritation or rash occurs: Get medical attention. Wash contaminated

clothing before reuse.

-Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

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

See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

Fire: In case of fire: Use Water spray, fog or regular foam for extinction

Storage: Store in a well-ventilated place. Keep cool

Disposal: Dispose of contents and container in accordance with local, state and federal regulations.

Do not dispose of this product by pouring on the ground, into storm sewers, waterways or other surface waters. Consult with local, federal and state authorities prior to disposal of

any d-limonene containing product into the sanitary sewer system.

Hazards Not Otherwise Classified: Not Applicable

Other Information: • Harmful if swallowed

· Keep out of reach of children.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
d-limonene	5989-27-5	40-60
Coconut Diethanolamine	68603-42-9	15-30

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

-Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin

-Skin Contact: Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.

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

poison control center or physician if you feel unwell.

-Ingestion: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious

person. Get medical attention if you feel unwell.

Note to Physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Specific Hazards Arising from the

Chemical:

Water spray, fog or regular foam, Dry chemical

Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and

flash back.

Hazardous Combustion Products: May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.

Protective Equipment and Precautions for Firefighters: Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full

protective gear. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). **Personal Precautions:**

Use personal protective equipment as required.

Environmental Precautions: Do not rinse spill onto the ground, into storm sewers or bodies of water. Do not dispose of

this product by pouring on the ground, into storm sewers, waterways or other surface waters. Consult with local, federal and state authorities prior to disposal of any d-limonene

containing product into the sanitary sewer system.

Prevent further leakage or spillage if safe to do so. Contain and collect spillage with Methods for Clean-Up:

non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

7. HANDLING AND STORAGE

Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly

after handling.

Storage Conditions: Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric

motors and static electricity).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Not calculated as a whole Occupational Exposure Limits:

Engineering Controls: Provide good general ventilation.

> If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other

engineering controls should be considered.

Personal Protective Equipment

Eye/Face Protection:

Wear splash goggles.

Wear rubber or other chemical-resistant gloves. Skin and Body Protection:

Not required with expected use. **Respiratory Protection:**

If occupational exposure limits are exceeded or respiratory irritation occurs, use of a

NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section

3 should be considered.

General Hygiene Considerations: Wash hands and any exposed skin thoroughly after handling.

See 29 CFR 1910.132-138 for further guidance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State:	Liquid	
Color:	Orange	
Odor:	Orange	
pH:	9.5-10	
Melting Point / Freezing Point:	No information available.	
Boiling Point / Boiling Range:	> 100 °C / 212 °F	
Flash Point:	51 °C / 124 °F ASTM D56	
Evaporation Rate:	< 1	
Flammability (solid, gas)	No information available.	
Upper Flammability Limit:	No information available.	
Lower Flammability Limit:	No information available.	
Vapor Pressure:	No information available.	
Vapor Density:	No information available.	
Specific Gravity:	0.96	
Solubility(ies):	Miscible in water	
Partition Coefficient:	No information available.	
Autoignition Temperature:	No information available.	
Decomposition Temperature:	No information available.	
Viscosity:	No information available.	

10. STABILITY AND REACTIVITY

Reactivity: This material is considered to be non-reactive under normal conditions of use.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Not expected to occur with normal handling and storage.

Conditions to Avoid: Extremes of temperature and direct sunlight. **Incompatible Materials:** Strong oxidizing agents. Strong acids.

Hazardous Decomposition May include carbon m

Products:

May include carbon monoxide, carbon dioxide (CO2) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation.

Symptoms of Exposure:

-Eye Contact: Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause

permanent damage.

-Skin Contact: Pain, redness and cracking of the skin.
-Inhalation: Nasal discomfort and coughing.
-Ingestion: Pain, nausea, vomiting and diarrhea.

Immediate, Delayed, Chronic Effects

Product Information: Data not available or insufficient for classification.

Target Organ Effects: Central nervous system. -Eyes. Respiratory System. -Skin.

Numerical Measures of Toxicity

The following acute toxicity estimates (ATE) are calculated based on the GHS document.

Component Acute Toxicity Information

Chemical Name	Oral LD50	Dermal LD50
d-limonene	= 4400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)
Diethanola mine	710 mg/kg Rat	12,200 mg/kg Rabbit

Carcinogenicity: Diethanolamine: IARC: Group 2B: Possibly carcinogenic to humans (Diethanolamine)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
d-limonene 5989-27-5	Not Available	0.619 - 0.796: 96 h Pimephales promelas mg/L LC50 flow-through 35: 96 h Oncorhynchus mykiss mg/L LC50		Not Available

Diethanolamine: LC50 Fathead minnow: 1,460 mg/l 96 hours (Diethanolamine)

Persistence and Degradability:
Bioaccumulation:

Other Adverse Effects:

No information available.

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes:Dispose of in accordance with federal, state and local regulations.
Contaminated Packaging:
Dispose of in accordance with federal, state and local regulations.

US EPA Waste Number: D001

14. TRANSPORT INFORMATION

DOT:

UN/ID No: UN1993

Proper Shipping Name: Flammable liquids, n.o.s., (contains d-limonene)

Hazard Class: 3
Packing Group: III
Special Provisions: D

Special Provisions: DOT DOMESTIC SHIPMENTS <119 GALLONS VIA GROUND Special Provisions

§173.150(f) exception

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)

All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313

This product does not contain listed substances above the "de minimus" level

SARA 311/312 Hazard Categories D-limonene

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

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
diethanolamine - 111-42-2	Carcinogen

WARNING: This product contains a chemical known to the State of California to cause cancer.

16. OTHER INFORMATION

NFPA Health Hazards: 2 Flammability: 2 Instability: 0 Special: N/A

HMIS SDS date: Health Hazards: 2 Flammability: 2 Physical Hazards: 0

May 25, 2015

Revision Date: New Reasons for Revision: NA

Disclaimer:

The information provided in this Material 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