



# SAFETY DATA SHEET

## 1. Identification

**Product Identifier** **Big Orange**  
**Other means of identification**  
**Product code** CU-6240  
**Recommended use** Solvent degreaser and cleaner.  
**Recommended restrictions** Professional use only.  
**Manufacturer information**  
**Company name** **Chemical Universe, Inc.**  
**Address** 1133 Saline St.  
North Kansas City, MO 64116  
**Telephone** (816) 471-3602  
**FAX** (816) 474-3302  
**Emergency phone number** PERS 24-hour Emergency (800) 633-8253

## 2. Hazard(s) Identification

**Physical hazards** Flammable Liquids Category 4  
**Health hazards** Acute toxicity, oral Category 5  
Eye irritation Category 2A  
**Environmental hazards** Not classified.  
**OSHA defined hazards** None  
**Label elements**



**Signal word** **WARNING**  
**Hazard statement** Combustible liquid.  
May be harmful if swallowed.  
Causes serious eye irritation.

**Precautionary statement**  
**Prevention** Keep away from flames and hot surfaces. No smoking. Wear protective gloves/eye protection/face protection. Wash hands and exposed skin thoroughly after handling.  
**Response** In case of fire: Use water fog, foam or carbon dioxide (CO<sub>2</sub>) to extinguish. Call a POISON CENTER/doctor/medical professional if you feel unwell.  
**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 advice/attention.  
**IF SWALLOWED:** Immediately call a POISON CENTER/doctor/medical professional. Do NOT induce vomiting.  
**Storage** Store in a well-ventilated place. Keep cool. Store locked up.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Hazard(s) not otherwise classified (HNOC)** None.  
**Supplemental information** None

## 3. Composition/information on ingredients

Mixture Component(s)		
Chemical name	CAS number	%



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C9-C15 Cycloalkanes	Mixture	40-55
D-limonene	5989-27-5	30-40
C9-C15 Alkanes	Mixture	5-30
Other components below reportable levels		1-10

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
<b>Eye contact</b>	Rinse with water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur. Only induce vomiting at the instruction of medical personnel.
<b>Most important symptoms/effects, acute and delayed</b>	Dermatitis. Rash. May cause an allergic skin reaction.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general support measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to the hospital. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Alcohol-resistant foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, sand, or earth may be used for small fires only.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source or ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protecting clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Flammable liquid and vapor.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Remove all sources of ignition. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources. Use only non-sparking tools. Take precautionary measures against static discharge. Keep combustibles away from spilled material.  Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry



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sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small spills: Absorb with earth, sand, or other non-combustible material and transfer to container for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original container for re-use. For waste disposal, see section 13 of the SDS.

## Environmental precautions

Avoid release to the environment. Avoid discharge into areas not consistent with package labeling.

## 7. Handling and storage

### Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Do not smoke. Use explosion proof equipment and non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Ground/bond container and equipment. Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US OSHA Table Z-2 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
d-Limonene	TWA	165.5 mg/m <sup>3</sup> 30 ppm
2-butoxyethanol	PEL	50 ppm (skin)

#### US ACGIH Threshold Limit Values

Components	Type	Value
Orange Citrus (CAS 5989-27-5)	TWA	165.5 mg/m <sup>3</sup> (30 ppm)
2-butoxyethanol	TWA (Skin)	20 ppm (8-hour)

### Biological limit values

No information.

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

#### Skin protection

##### Hand protection

The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Suggested protective materials: Nitrile and PVC rubber.

#### Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.



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<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable NIOSH-approved respiratory protection.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	When using do not smoke or use chewing tobacco. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

### 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical State</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	Citrus
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	300-410°F (148.9-210°C) estimated.
<b>Flash point</b>	146°F (63.3°C) Estimated.
<b>Evaporation rate</b>	Not available.
<b>Flammability</b>	Not available.
<b>Flammability Limits</b>	
<b>Upper</b>	6% estimated.
<b>Lower</b>	0.8% estimated.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Specific gravity (water=1)</b>	0.81
<b>Solubility in water</b>	Insoluble.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

### 10. Stability and reactivity

<b>Reactivity</b>	This product is stable and non-reactive under normal conditions of use.
<b>Chemical stability</b>	Material is stable under normal conditions. Store in a cool dark place.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Oxidizing agents, strong acids.
<b>Hazardous decomposition products</b>	Carbon dioxide, carbon monoxide.

### 11. Toxicological information

<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	Expected to be a moderate ingestion hazard.
<b>Inhalation</b>	Prolonged inhalation of vapors or mists may be harmful.
<b>Skin contact</b>	May cause skin irritation and contact dermatitis.



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**Eye contact** Causes serious eye irritation. Wear eye/face protection.

**Symptoms related to the physical, chemical and toxicological characteristics** Dermatitis. Rash. Pain, swelling excessive tearing and redness of the eye.

**Acute toxicity** May be harmful if swallowed.

Product Big Orange (CAS mixture)		
Exposure Classification	Route and Species	LD <sub>50</sub>
Acute	Oral, rat	>2,100 mg/kg (estimated)
Acute	Dermal, rabbit	>3,400 mg/kg (estimated)
*Estimates for product may be based on additional component data not shown		

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/ irritation** Causes serious eye irritation.

**Respiratory sensitization** Not available.

**Skin sensitization** Not available.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)** Not Listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity – single exposure** Not classified.

**Specific target organ toxicity – repeated exposure** Not classified.

**Aspiration hazard** May be harmful if product enters airways.

## 12. Ecological information

Ecotoxicity		
Aquatic Receptor	Species	Test Results
Crustacea	Daphnia magna	EC <sub>50</sub> = >46 mg/L (estimated) 48-hour
Fish	Fathead minnow <i>Pimephales promelas</i>	LD <sub>50</sub> = >16 mg/L (estimated) 96-hour
*Estimates for product may be based on additional component data not shown		

**Persistence and degradability** No data available.

**Bioaccumulative potential** Potential to bioaccumulation is expected to be low.

**Mobility in soil** Chemicals of these classes are highly water soluble and will partition readily to water and weakly to particles in low-clay soil matrices. They are expected to exhibit moderate to high mobility in saturated and semi-saturated soils

**Other adverse effects** May cause long lasting harmful effects to aquatic life.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company. As packaged, this product is not believed to meet criteria defining RCRA hazardous wastes when disposed. (40 CFR Part 261, Subpart C). Before



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selecting disposal method, ensure that the waste materials have been properly assessed and, as necessary, tested to confirm regulatory status

**Waste from residues/unused product**

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. (see: Disposal instructions).

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may contain product residue, follow label warnings even after container is emptied.

## 14. Transport information

USDOT Not regulated as dangerous goods

## 15. Regulatory information

**US federal regulations**

**SARA 302 Extremely hazardous substance** Not listed.

**SARA 304 Emergency release notification** Not listed.

**SARA 311/312 Hazard Categories**

Immediate Hazard - Yes

Delayed Hazard – No

Fire Hazard – Yes

Pressure Hazard – No

Reactivity Hazard – No

**SARA 313 (TRI reporting)** Not listed.

**TSCA** – All chemical components used to manufacture this product comply with the Toxic Substances Control Act (TSCA) registry requirements and are either listed within, or exempted from, the current TSCA 8(b) inventory.

**California Proposition 65**

**Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986**

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to threshold determination and Safe Harbor notification (1/2020)

## 16. Other information, including date of preparation or last revision

Issue date	2/13/2015
Revision date	6/17/2020
Version #	2
HMIS® ratings	Health: 2 Flammability: 3 Physical hazard: 0

HEALTH	2
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	

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### NFPA ratings

Health: 2  
Flammability: 3  
Instability: 0



### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, and have been obtained from resources believed to be reliable. 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 related 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 by the text.

### Revision information

General format update; Refine composition table, amend physical data; Update toxicology thresholds and environmental fate information; Text clarification amendments Sections 5,6,8,9 and 12. PPE recommendation updated; California Proposition 65 notice; HMIS and NFPA classifications amended (definitions) and pictograms added. Add TSCA statement; Logo update. Delete target organ logo (no classification inferred from literature)