LPS

SAFETY DATA SHEET

1. Identification

Product identifier LPS® EM Citro (Aerosol)

Other means of identification

Part Number 02820

Recommended use A degreaser designed to remove grease, grime, oil and other oil-based contaminants from a

variety of substrates.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer Manufacturer

Company name ITW Pro Brands

Address 4647 Hugh Howell Rd.

Tucker, GA 30084

Country (U.S.A.)

Tel: +1 770-243-8800

In Case of Emergency 1-800-424-9300 (inside U.S.)

+001 703-527-3887 (outside U.S.)

Website www.lpslabs.com

E-mail lpssds@itwprobrands.com

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 2

Gases under pressure Liquefied gas
Skin corrosion/irritation Category 2

Sensitization, skin Category 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

Aspiration hazard Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Health hazards



Signal word Danger

Hazard statement Flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation.

May cause an allergic skin reaction. May cause drowsiness or dizziness. May be fatal if swallowed

and enters airways.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open

flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.

Response If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash

with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep

comfortable for breathing. Call a poison center/doctor if you feel unwell.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from

sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Material name: LPS® EM Citro (Aerosol)
02820 Version #: 01 Issue date: 11-30-2016

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

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Hazard(s) not otherwise classified (HNOC)

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None known.

Supplemental information

None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates Petroleum, Hydr Light	otreated		20 - 30
Petroleum Gases, Liquefie Sweetened	d,	68476-86-8	5 - 10
Dimethyl adipate		627-93-0	1 - 5
Dimethyl glutarate		1119-40-0	1 - 5
Dipropylene Glycol Monobutyl Ether		29911-28-2	1 - 5
d-limonene		5989-27-5	1 - 5
Sorbitan monooleate		1338-43-8	1 - 5
Sodium benzoate		532-32-1	< 1

4. First-aid measures

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

CENTER or doctor/physician if you feel unwell.

Remove contaminated clothing immediately and wash skin with soap and water. In case of Skin contact

eczema or other skin disorders: Seek medical attention and take along these instructions. Wash

contaminated clothing before reuse.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Not likely, due to the form of the product. Call a physician or poison control center immediately. Ingestion

Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content

doesn't get into the lungs.

Most important symptoms/effects, acute and

delayed

Indication of immediate

medical attention and special treatment needed

General information

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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

Suitable extinguishing media Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting

Specific methods

equipment/instructions

Water spray. Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. ALWAYS stay away from tanks engulfed in flame. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.

General fire hazards Flammable aerosol. Contents under pressure. Pressurized container may explode when exposed

to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Use water spray to reduce vapors or divert vapor cloud drift. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Scoop up used absorbent into drums or other appropriate container. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Keep away from heat, sparks and open flame. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

U.S OSHA				
Components	Туре	Value	Form	
Distillates Petroleum, Hydrotreated Light	PEL	5 mg/m3	Oil mist	
ACGIH				
Components	Туре	Value	Form	
Distillates Petroleum, Hydrotreated Light	TWA	5 mg/m3	Oil mist	

Biological limit values

Appropriate engineering controls

No biological exposure limits noted for the ingredient(s).

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. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eve/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Other Wear appropriate chemical resistant clothing.

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

When using do not smoke. 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

Appearance

Physical state Gas. **Form** Aerosol. White. Color Odor Mild. Orange. Odor threshold Not available. 5.5 - 6.5

Not established Melting point/freezing point Initial boiling point and boiling Not established

range

Flash point 195.1 °F (90.6 °C) Tag Closed Cup

Evaporation rate 1 BuAc

Flammable gas. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

Not established

(%)

Flammability limit - upper

Not established

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

> 100 mm Hg @ 20°C Vapor pressure

Vapor density > 1

Relative density Not available.

Solubility(ies)

100 % Solubility (water) **Partition coefficient** < 1

(n-octanol/water)

Not established **Auto-ignition temperature Decomposition temperature** Not available.

10 - 100 cP @ 20°C **Viscosity**

Other information

Explosive properties Not explosive. < 20 kJ/gHeat of combustion Not oxidizing. Oxidizing properties Specific gravity 0.9 - 0.95 @ 20°C

VOC 9.9 % per US State & Federal Consumer Product Regulations

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions. Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid

Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be

harmful.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious

chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Skin irritation. May cause redness and pain. May cause an allergic

skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components Species Test Results

Dimethyl adipate (CAS 627-93-0)

Acute

Dermal

LD50 Rabbit > 1000 mg/kg, 24 Hours

Oral

LD50 Rat > 2000 mg/kg

Dimethyl glutarate (CAS 1119-40-0)

Acute Dermal

LD50 Rat

> 2000 mg/kg, 24 Hours

> 2000 mg/kg

Oral

LD50 Rat

Dipropylene Glycol Monobutyl Ether (CAS 29911-28-2)

Acute

Dermal

LD50 Rat > 2000 mg/kg, 24 Hours

Inhalation

Vapor

LC50 Rat > 42 ppm, 4 Hours

Oral

LD50 Rat 2000 - 3000 ml/kg

Distillates Petroleum, Hydrotreated Light

<u>Acute</u>

Dermal

LD50 Rabbit > 2000 mg/kg

Inhalation

Vapor

LC50 Rat > 4.5 mg/l, 4 Hours

Oral

LD50 Rat > 5000 mg/kg

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SDS US

Components Species Test Results

d-limonene (CAS 5989-27-5)

Acute Oral

LD50 Rat > 2000 mg/kg

Sodium benzoate (CAS 532-32-1)

Acute Dermal

LD50 Rabbit > 2000 mg/kg, 24 Hours

Oral

LD50 Rat 3450 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

d-limonene (CAS 5989-27-5)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful.

Further information None known.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

Distillates Petroleum, Hydrotreated Light

Aquatic

Fish LC50 Rainbow trout, donaldson trout 2.9 mg/l, 96 hours

(Oncorhynchus mykiss)

d-limonene (CAS 5989-27-5)

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) 69.6 mg/l, 48 hours

Fish LC50 Fathead minnow (Pimephales promelas) 0.619 - 0.796 mg/l, 96 hours

Sodium benzoate (CAS 532-32-1)

Aquatic

Fish LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

LPS® EM Citro (Aerosol) < 1
Dimethyl adipate 1.03
d-limonene 4.232

Mobility in soilNo data available.Other adverse effectsNone known.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. 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.

D003: Waste Reactive material

Waste from residues / unused

products

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 Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

14. Transport information

DOT

UN number UN1950

UN proper shipping name Transport hazard class(es) Aerosols, flammable (d-limonene), MARINE POLLUTANT

Class

Subsidiary risk - Label(s) 2.1

Packing group Not applicable.

2.1

Environmental hazards

Marine pollutant Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging exceptions 306
Packaging non bulk None
Packaging bulk None

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not applicable.

Environmental hazards Yes ERG Code 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1950

UN proper shipping name AEROSOLS, flammable (d-limonene), MARINE POLLUTANT

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not applicable.

Environmental hazards

Marine pollutant Yes

Not available. **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

DOT



IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant. Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material

is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Toxic Substances Control Act (TSCA) Inventory

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

11-30-2016 Issue date

Version # 01

United States & Puerto Rico

ITW Pro Brands cannot anticipate all conditions under which this information and its product, or Disclaimer

> the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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.

Revision information This document has undergone significant changes and should be reviewed in its entirety. Yes

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).