

SAFETY DATA SHEET

1. Identification

Product identifier	LPS® EM Citro		
Other means of identification Part Number	C02801 C02805 C02855		
	C02801, C02805, C02855		
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			
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		
	1-703-527-3887		
Website	www.lpslabs.com		
E-mail	lpssds@itwprobrands.com		
Supplier	ITW Permatex Canada 1-35 Brownridge Road Halton Hills, ON, L7G 0C6 Canada 1-800-241-8334		
2. Hazard(s) identification			
Physical hazards	Flammable liquids	Category 4	
Health hazards	Skin corrosion/irritation	Category 2	
	Sensitization, skin	Category 1	
	Specific target organ toxicity, single exposure		
	Aspiration hazard	Category 1	
Environmental hazards	Not classified.		
Label elements			
Signal word	Danger		
Hazard statement	Combustible liquid. Causes skin irritation. May drowsiness or dizziness. May be fatal if swallo		
Precautionary statement			
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from flames and hot surfaces-No smoking. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.		
Response	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.		
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Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Storage

Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	None known.
Supplemental information	None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates Petroleum, Hydrotreated Light			70 - 80
D-LIMONENE		5989-27-5	10 - 20
Dipropylene Glycol Monobutyl Ether		29911-28-2	1 - 3
DIOCTYL SODIUM SULFOSUCCINATE		577-11-7	< 3

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures	
Inhalation	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.
Skin contact	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. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. 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	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	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	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Combustible liquid.
6. Accidental release meas	sures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Use water spray to reduce vapors or divert vapor cloud drift. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas.	
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.	
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.	
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.	
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.	
7. Handling and storage		
Precautions for safe handling	Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.	
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).	
8. Exposure controls/personal protection		

Occupational exposure limits

ACGIH Components	Туре	Value	Form	Form
Distillates Petroleum, Hydrotreated Light	TWA	5 mg/m3	Oil mist	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Туре	Value	Form	
Distillates Petroleum, Hydrotreated Light	TWA	200 mg/m3	Non-aerosol.	
Biological limit values	No biological exposure limits noted for	r the ingredient(s).		
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. 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 measure	s, such as personal protective equipm	ent		
Eye/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.			
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.			
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.			
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 be allowed out of the workplace.			

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.

Color	Clear water-white.
Odor	Orange.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 340 °F (> 171.11 °C)
Flash point	158.0 °F (70.0 °C) Tag Closed Cup
Evaporation rate	< 1 BuAc
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	
Flammability limit - lower (%)	0.7 %
Flammability limit - upper (%)	6 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 2 mm Hg @ 20°C
Vapor density	>1
Relative density	Not available.
Solubility(ies)	
Solubility (water)	100 % Emulsifiable in water
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	420.01 °F (215.56 °C)
Decomposition temperature	Not available.
Viscosity	1 cSt @ 20°C
Other information	
Density	6.90 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Specific gravity	0.83
VOC	15 % 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	Avoid heat, sparks, open flames and other ignition sources. 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.

Information on toxicological effects			
Acute toxicity	Not expected to be acutely toxic.		
Components	Species	Test Results	
DIOCTYL SODIUM SULFOSUCCI	•		
Acute	, , , , , , , , , , , , , , , , , , ,		
Dermal			
LD50	Rabbit	> 10000 mg/kg, 24 Hours	
Oral			
LD50	Rat	> 1320 mg/kg	
Dipropylene Glycol Monobutyl Ethe	er (CAS 29911-28-2)		
Acute			
Dermal			
LD50	Rat	> 2000 mg/kg, 24 Hours	
Inhalation			
Vapor			
LC50	Rat	> 42 ppm, 4 Hours	
Oral		0000 0000 1/	
LD50	Rat	2000 - 3000 ml/kg	
Distillates Petroleum, Hydrotreated	i Light		
<u>Acute</u>			
Dermal LD50	Rabbit	> 2000 mg/kg	
	Παυριι	> 2000 mg/kg	
Inhalation Vapor			
LC50	Rat	> 4.5 mg/l, 4 Hours	
Oral			
LD50	Rat	> 5000 mg/kg	
D-LIMONENE (CAS 5989-27-5)		5.5	
Acute			
Oral			
LD50	Rat	> 2000 mg/kg	
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/eye	Direct contact with eyes may cause temporary irritat	tion.	
irritation			
Respiratory or skin sensitization			
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	May cause an allergic skin reaction.		
Germ cell mutagenicity	No 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 b	y IARC, ACGIH, NTP, or OSHA.	
	Evaluation of Carcinogenicity		
D-LIMONENE (CAS 5989		to carcinogenicity to humans.	
Reproductive toxicity	This product is not expected to cause reproductive of	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.		

Symptoms related to the physical, chemical and toxicological characteristics

Further information

None known.

12. Ecological information

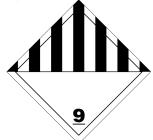
Ecotoxicity

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.

	possibility that	large or frequent spills can have a harmfu	I or damaging effect on the environment.	
Components		Species	Test Results	
DIOCTYL SODIUM SULFOSU	JCCINATE (CAS	\$ 577-11-7)		
Aquatic				
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	20 - 40 mg/l, 96 hours	
Distillates Petroleum, Hydrotre	eated Light			
Aquatic				
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours	
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	
Persistence and degradability	No data is ava	ilable on the degradability of this product.		
Bioaccumulative potential				
Partition coefficient n-octan D-LIMONENE	ol / water (log l	Kow) 4.232		
Mobility in soil	No data availa	ble.		
Other adverse effects	None known.	None known.		
13. Disposal consideration	ns			
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 acc	cordance 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.			
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.			
14. Transport information				
TDG				
UN number	UN3082			
UN proper shipping name	ENVIRONMEN POLLUTANT	NTALLY HAZARDOUS SUBSTANCE, LIQ	UID, N.O.S. (d-limonene), MARINE	
Transport hazard class(es)				
Class	9			
Subsidiary risk	-			
Packing group Environmental hazards	Yes			
		structions, SDS and emergency procedure	es before handling.	
		,	5	

UN3082
Environmentally hazardous substance, liquid, n.o.s. (d-limonene)
9
-
III
Yes
9L

Special precautions for user Other information	Read safety instructions, SDS and emergency procedures before handling.
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
IMDG	
UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-limonene), MARINE POLLUTANT
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	
the IBC Code	
IATA; IMDG; TDG	



Marine pollutant



IMDG Regulated Marine Pollutant.

15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act Not regulated. Export Control List (CEPA 1999, Schedule 3) Not listed. Greenhouse Gases Not listed. Precursor Control Regulations Not regulated. International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable. **Kyoto protocol** Not applicable. **Montreal Protocol** Not applicable. **Basel Convention** Not applicable.

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
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

16. Other information

Issue date Version #	11-22-2016 01
Disclaimer	ITW Pro Brands cannot anticipate all conditions under which this information and its product, or 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	Product and Company Identification: Product and Company Identification Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Transport Information: Material Transportation Information Regulatory Information: Risk Phrases - Labeling HazReg Data: North America GHS: Classification