



SAFETY DATA SHEET

1. Identification

Product number CL891 - 1000008429
Product identifier **ORANGE POWER HEAVY DUTY DEGREASER**
Company information
Claire Manufacturing Company
1005 S. Westgate Drive
Addison, IL 60101 United States
Company phone
Emergency telephone US 1-630-543-7600
Emergency telephone outside US 1-952-852-4646
Version # 01
Recommended use Not available.
Recommended restrictions None known.

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1
Health hazards Sensitization, skin Category 1
OSHA defined hazards Not classified.

Label elements



Signal word Danger
Hazard statement Extremely flammable aerosol. May cause an allergic skin reaction.
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. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.
Response If on skin: Wash with plenty of water. Specific treatment (see this label). If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) Not classified.
Environmental hazards Hazardous to the aquatic environment, acute hazard Category 2
Hazardous to the aquatic environment, long-term hazard Category 2
Supplemental information
Hazard statement Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Prevention Avoid release to the environment.
Response Collect spillage.

12.28% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 12.28% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Hazardous components			
Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	2.5 - 10

Hazardous components			
Chemical name	Common name and synonyms	CAS number	%
Distillates (Petroleum), Hydrotreated Light		64742-47-8	2.5 - 10
D-Limonene		5989-27-5	1 - 2.5
Propane		74-98-6	1 - 2.5
Other components below reportable levels			80 - 90

#: This substance has workplace exposure limit(s).

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments The full text for all R-phrases is displayed in Section 16 of the MSDS.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. May cause allergic skin reaction. Rash.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Take off all contaminated clothing immediately. Wash contaminated clothing before reuse. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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	Contents under pressure. Pressurized container may explode when exposed to heat or flame. 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	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

6. Accidental release measures

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. 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.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills in original containers for re-use. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not spray on a naked flame or any other incandescent material. Use only in well-ventilated areas. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not re-use empty containers. Observe good industrial hygiene practices.
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Conditions for safe storage, including any incompatibilities

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Keep away from heat, sparks and open flame. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the MSDS). Level 1 Aerosol.

8. Exposure controls/personal protection

Occupational exposure limits**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

Biological limit values

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

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

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.

9. Physical and chemical properties

Appearance

Compressed liquefied gas.

Color

white

Form

Aerosol.

Physical state

Gas.

Boiling point

208.4 °F (98 °C) estimated

Flash point

-156.00 °F (-104.44 °C) Propellant estimated

Melting point/freezing point

Not available.

Odor

fruity

pH

9.5 - 10.5 estimated

Solubility(ies)

Not available.

Vapor density

Not available.

Vapor pressure

48 - 58 psig @70F estimated

Viscosity

Not available.

Other information**Specific gravity**

0.937 estimated estimated

10. Stability and reactivity

Reactivity

Strong oxidizing agents.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.

Hazardous decomposition products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	No adverse effects due to inhalation are expected.
Skin contact	May cause an allergic skin reaction. Causes mild skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation. May cause allergic skin reaction.

Information on toxicological effects

Acute toxicity Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Product	Species	Test Results
Orange Power Heavy Duty Degreaser (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	11942.9941 ml/kg, estimated
	Rat	20679 mg/kg
<i>Inhalation</i>		
LC50	Cat	1322.6951 mg/l, If <1L: Consumer Commodity Hours, estimated
		16132.8594 mg/l, 2 Hours, estimated
	Mouse	12597.5176 mg/l, 10 Minutes, estimated
		5957.4468 mg/l, If <1L: Consumer Commodity Hours, estimated
	Rabbit	12500 mg/l, If <1L: Consumer Commodity Hours, estimated
		80831.7656 mg/l, 15 Minutes, estimated
	Rat	15610.9131 mg/l, 4 Hours, estimated
		13475.1777 mg/l, 2 Hours, estimated
		9042.5527 mg/l, If <1L: Consumer Commodity Hours, estimated
		1645.3904 mg/l, 6 Hours, estimated
		88 mg/l/4h
		8687.9434 mg/l, If <1L: Consumer Commodity Hours, estimated
LCL0	Cat	8687.9434 mg/l, If <1L: Consumer Commodity Hours, estimated
	Rabbit	2482.2695 mg/l, If <1L: Consumer Commodity Hours, estimated
	Rat	1001.2516 g/kg, estimated
<i>Oral</i>		
LD50	Rat	69.1489 g/kg, estimated
<i>Other</i>		
LD50	Mouse	5.8511 g/kg, estimated
	Rat	

Components	Species	Test Results
Butane (CAS 106-97-8)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours

Components	Species		Test Results
D-Limonene (CAS 5989-27-5)			
Acute			
Dermal			
LD50	Rat		2000 mg/kg
Oral			
LD50	Mouse		5600 - 6600 mg/kg
Other			
LD50	Mouse		1.3 g/kg
	Rat		0.11 g/kg
Propane (CAS 74-98-6)			
Acute			
Inhalation			
LC50	Rat		> 1442.847 mg/l, 15 Minutes
			658 mg/l/4h
Skin corrosion/irritation	Causes mild skin irritation.		
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.		
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 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.		
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	Not an aspiration hazard.		
12. Ecological information			
Ecotoxicity	Toxic to aquatic life with long lasting effects.		
Product	Species		Test Results
Orange Power Heavy Duty Degreaser (CAS Mixture)			
Algae	IC50	Algae	4512 mg/L, 72 Hours
Crustacea	EC50	Daphnia	14062 mg/L, 48 Hours
Fish	LC50	Fish	521 mg/L, 96 Hours
Components	Species		Test Results
Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
D-Limonene (CAS 5989-27-5)			
Fish	LC50	Fish	702 mg/L, 96 Hours
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 available on the degradability of this product.		
Bioaccumulative potential	No data available.		
Partition coefficient n-octanol / water (log Kow)			
Propane		2.36	
Butane		2.89	
D-Limonene		4.232	

Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
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.
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.

14. Transport information

DOT	
UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	2.1
Subsidiary class(es)	Not available.
Packing group	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Labels required	None
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None
This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.	

IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	2.1
Subsidiary class(es)	-
Packaging group	Not available.
Environmental hazards	Yes
Labels required	2.1
ERG Code	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions	LTD QTY

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS, MARINE POLLUTANT
Transport hazard class(es)	2.1
Subsidiary class(es)	-
Packaging group	Not available.
Environmental hazards	
Marine pollutant	Yes
Labels required	None
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions	LTD QTY

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

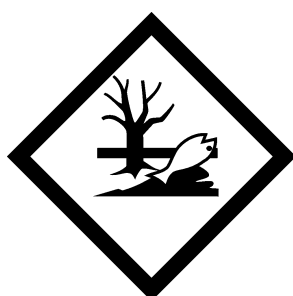
DOT



IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

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

No

SARA 311/312 Hazardous chemical

No

Other federal regulations

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

Not regulated.

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

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA)

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

Food and Drug Administration (FDA)

Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

Butane (CAS 106-97-8)

500 lbs

Propane (CAS 74-98-6)

500 lbs

US. Pennsylvania RTK - Hazardous Substances

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies 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, including date of preparation or last revision

Issue date 02-19-2014

Version # 01

Further information Not available.

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available. 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
Hazards Identification: US Hazard Categories
Composition / Information on Ingredients: Ingredients
Transport Information: Proper Shipping Name/Packing Group
Regulatory Information: United States
HazReg Data: North America
GHS: Classification