1. IDENTIFICATION

Product identifier: INDUSTRIAL STRENGTH HI-SHEEN GLASS CLEANER

Other means of identification No data available.

SDS Number: RE1000000970

Recommended restrictions

Recommended use: Cleaner

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information Manufacturer

CRL CAT. No. 3371100

Company Name: C.R. Laurence Co., Inc.

Address: 2503 E. Vernon Avenue
Los Angeles, CA 90058
US

Telephone: 1-800-421-6144

Emergency telephone number 1-866-836-8855

2. HAZARD(S) IDENTIFICATION

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement: Extremely flammable aerosol.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122° F.

Hazard(s) not otherwise classified (HNOC): None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Ethanol, 2-butoxy-	111-76-2	1 - <5%
Butane	106-97-8	1 - <5%
Ethanol	64-17-5	1 - <5%
Propane	74-98-6	0.1-<1%

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

The exact concentration has been withheld as a trade secret.

4. FIRST-AID MEASURES

Description of necessary first-aid measures

Inhalation: Move to fresh air.

Skin Contact: Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Personal Protection for First aid Responders: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. FIRE-FIGHTING MEASURES

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical:

5. FIRE-FIGHTING MEASURES (CONT.)

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.
Accidental release measures:	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.
Methods and material for containment and cleaning up:	Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.
Environmental Precautions:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. HANDLING AND STORAGE

Handling

Technical measures (e.g. Local and general ventilation):	No data available.
Safe handling advice:	Keep away from heat, hot surfaces, sparks, open flames and other ignition. sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 1
Safe packaging materials:	No data available.
Storage Temperature:	No data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONT.)

Chemical Identity	Type	Exposure Limit Values		Source
Ethanol, 2-butoxy-	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended
	REL	5 ppm	24 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	50 ppm	240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	25 ppm	120 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Butane	REL	800 ppm	1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	800 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Ethanol	REL	1,000 ppm	1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values, as amended
Propane	REL	1,000 ppm	1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Ammonium hydroxide ((NH4)(OH))	STEL	35 ppm	27 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	35 ppm	27 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	25 ppm	18 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	35 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	25 ppm		US. ACGIH Threshold Limit Values, as amended
	PEL	50 ppm	35 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
2-Propanol, 2-methyl-	PEL	100 ppm	300 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	100 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	150 ppm	450 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	REL	100 ppm	300 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	150 ppm	450 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	100 ppm	300 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-	REL		2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	2 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA		2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	3 ppm		US. ACGIH Threshold Limit Values, as amended
	PEL		2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
2-Pentanone, 4-hydroxy-4-methyl-	REL	50 ppm	240 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	50 ppm	240 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	PEL	50 ppm	240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	50 ppm		US. ACGIH Threshold Limit Values, as amended

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONT.)

Biolorical Limit Values

Chemical Identity	Exposure Limit Values	Source
Ethanol, 2-butoxy- (Butoxyacetic acid (BAA), with hydrolysis: Sam ing time: End of shift.)	200 mg/g (Creatinine in urine)	ACGIH BEL

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: No data available.

Skin and Body Protection: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: When using do not smoke. Observe good industrial hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state: liquid

Form: Spray Aerosol

Color: No data available.

Odor: No data available.

Odor Threshold: No data available.

pH: No data available.

Freezing point: No data available.

Boiling Point: No data available.

Flash Point: Estimated -104 °C

Evaporation Rate: No data available.

Flammability (solid, gas): No data available.

Explosive limit - upper (%): Estimated 9.5 %(V)

Explosive limit - lower(%): Estimated 1.9 %(V)

Vapor pressure: 3,447 - 4,826 hPa (20 °C)

Vapor density (air=1): No data available.

Density: No data available.

9. PHYSICAL AND CHEMICAL PROPERTIES (CONT.)

Relative density:

Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Kinematic viscosity:	No data available.
Dynamic viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

10. STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product:	ATEmix: 64,285.71 mg/kg
Dermal Product:	ATEmix: 39,027.98 mg/kg
Inhalation Product:	ATEmix: 405.01 mg/l Vapour ATEmix : 110.46 mg/l Dusts, mists and fumes

11. TOXICOLOGICAL INFORMATION (CONT.)

Repeated dose toxicity Product:	No data available.
Components:	
Ethanol, 2-butoxy-	NOAEL (Rat(Female), Inhalation, 2 yr): < 31 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female), Oral, 90 d): < 82 mg/kg Oral Experimental result, Key study NOAEL (Rabbit(Female, Male), Dermal, 90 d): > 150 mg/kg Dermal Experimental result, Key study
Butane	LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
Ethanol	NOAEL (Rat(Male), Oral, 7 - 14 Weeks): 10 %(m) Oral Experimental result, Key study
Propane	NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation,>= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Skin Corrosion/Irritation Product	No data available.
Components:	
Ethanol, 2-butoxy	in vivo (Rabbit): Irritating
Ethanol	in vivo (Rabbit): Not irritant
Serious Eye Damage/Eye Irritation Product:	No data available.
Components:	
Ethanol, 2-butoxy	Rabbit, 24 - 72 hrs: Irritating
Ethanol	Rabbit, 1 - 24 hrs: Not irritating
Respiratory or Skin Sensitization Product:	No data available.
Components:	
Ethanol, 2-butoxy	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Ethanol	Skin sensitization:, in vivo (Guinea pig): Non sensitising

11. TOXICOLOGICAL INFORMATION (CONT.)

Carcinogenicity Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro Product: No data available.

In vivo Product: No data available.

Reproductive toxicity Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish Product: No data available.

Components:

Ethanol, 2-butoxy-	LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key study
Butane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Ethanol	LC 50 (Pimephales promelas, 96 h): 15.3 g/l Experimental result, Key study
Propane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

Aquatic Invertebrates Product No data available.

Components:

Ethanol, 2-butoxy-	EC 50 (Daphnia magna, 48 h): 1,550 mg/l Experimental result, Key study
Butane	LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
Ethanol	LC 50 (Ceriodaphnia dubia, 48 h): 5,012 mg/l Experimental result, Key study

12. ECOLOGICAL INFORMATION (CONT.)

Chronic hazards to the aquatic environment:

Fish Product:	No data available.
Components:	
Ethanol, 2-butoxy-	NOAEL (Dania rerio): > 100 mg/l Experimental result, Key study
Ethanol	NOAEL (Oryzias latipes): 7,900 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
Aquatic Invertebrates Product	No data available.
Components:	
Ethanol, 2-butoxy-	EC 10 (Daphnia magna): 134 mg/l Experimental result, Key study EC 50 (Daphnia magna): 297 mg/l Experimental result, Key study
Ethanol	LC 50 (Daphnia magna): 454 mg/l Experimental result, Key study NOAEL (Daphnia magna): 9.6 mg/l Experimental result, Key study
Toxicity to Aquatic Plants Product:	No data available.

Persistence and Degradability

Biodegradation Product:	No data available.
Components:	
Ethanol, 2-butoxy-	90.4 % Detected in water. Experimental result, Key study
Butane	100 % (385.5 h) Detected in water. Experimental result, Key study
Ethanol	95 % Detected in water. Experimental result, Key study
Propane	100 % (385.5 h) Detected in water. Experimental result, Key study 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study
BOD/COD Ratio Product:	No data available.

Bioaccumulative potential Bioconcentration Factor (BCF)

Product:	No data available.
Components:	
Ethanol	Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Read across from supporting substance (structural analogue or surrogate), Supporting study

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.
Mobility in soil:	No data available.
Components:	
Ethanol, 2-butoxy	No data available.
Butane	No data available.
Ethanol	No data available.
Propane	No data available.
Other adverse effects:	No data available.

13. DISPOSAL CONSIDERATIONS

Disposal instructions: Wash before disposal. Dispose to controlled facilities.

Contaminated Packaging: No data available.

14. TRANSPORT INFORMATION

DOT

UN Number: UN 1950

UN Proper Shipping Name: Aerosols, flammable

Transport Hazard Class(es)

Class: 2.1

Label(s):

Ems No.:

Packing Group:

Special precautions for user: None known.

IATA

UN Number: UN 1950

UN Proper Shipping Name: Aerosols, flammable

Transport Hazard Class(es):

Class: 2.1

Label(s):

Packing Group:

Special precautions for user: None known.

Other information

Passenger and cargo aircraft: Allowed. 203

Cargo aircraft only: Allowed. 203

IMDG

UN Number: UN 1950

UN Proper Shipping Name: Aerosols, flammable

Transport Hazard Class(es)

Class: 2.1

Label(s):

Ems No.: F-D, S-U

Packing Group:

Special precautions for user: None known.

The classification shown in this section may be eligible for use of an exception, such as "Limited Quantity", per the dangerous goods regulations. The shipper of this product should consult the applicable mode's regulation for the UN number displayed above to determine if any exceptions are available and may be utilized, at the shipper's discretion.

15. REGULATORY INFORMATION

US Federal Regulations

Restrictions on use: Not known.

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

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

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

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
GLYCOL ETHERS
UNLISTED HAZARDOUS WASTES CHARACTERISTIC OF IGNITABILITY
RCRA HAZARDOUS WASTE NO. 0001
AMMONIUM HYDROXIDE

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Flammable (gases, aerosols, liquids, or solids)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Chemical Identity	% by weight
Ethanol, 2-butoxy-	1.0%

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

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

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

Chemical Identity
Ethanol, 2-butoxy-
Butane
Ethanol

15. REGULATORY INFORMATION (CONT.)

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Ethanol, 2-butoxy-

Butane

Ethanol

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol	Not applicable
Stockholm convention	Not applicable
Rotterdam convention	Not applicable
Kyoto protocol	Not applicable

Inventory Status:

Australia AICS	On or in compliance with the inventory
Canada DSL Inventory List	On or in compliance with the inventory
EINECS, ELINCS or NLP	Not in compliance with the inventory.
Japan (ENCS) List	Not in compliance with the inventory.
China Inv. Existing Chemical Substances	On or in compliance with the inventory
Canada NDSL Inventory	Not in compliance with the inventory.
Philippines PICCS	Not in compliance with the inventory.
US TSCA Inventory	On or in compliance with the inventory
New Zealand Inventory of Chemicals	On or in compliance with the inventory
Japan ISHL Listing	Not in compliance with the inventory.
Japan Pharmacopoeia Listing	Not in compliance with the inventory.
Mexico INSQ	Not in compliance with the inventory.
Ontario Inventory	On or in compliance with the inventory
Taiwan Chemical Substance Inventory	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI	Not in compliance with the inventory.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue Date:	09/13/2021
Revision Information:	No data available.
Version#:	1.1
Further Information:	No data available.
Disclaimer:	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.