

SAFETY DATA SHEET

1. Identification

Product identifier: GRILL & OVEN CLEANER - INO-AES300

Other means of identification

SDS number: RE1000010923

Recommended restrictions

Recommended use: Cleaner

Restrictions on use: Not known.

Manufacturer Information

Manufacturer

Company Name: INO SOLUTIONS
Address: 9900 BOULEVARD DU GOLF
VILLE D 'ANJOU, QUEBEC H1J 2Y7
Telephone: 888-466-7658

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Health Hazards

Skin Corrosion/Irritation Category 1A

Serious Eye Damage/Eye Irritation Category 1

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Extremely flammable aerosol.
Causes severe skin burns and eye damage.

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. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. Specific treatment (see on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Ethanol, 2-(2-butoxyethoxy)-		112-34-5	5 - 10%
Sodium hydroxide (Na(OH))		1310-73-2	3 - 7%
Propane		74-98-6	1 - 5%
Butane		106-97-8	1 - 5%

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

4. First-aid measures

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center.

Inhalation: Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.

Skin Contact: Symptoms may be delayed. Important to remove the substance from the skin immediately. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Call a physician or poison control center immediately. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Destroy or thoroughly clean contaminated shoes.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

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: No data available.

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: Vapors may travel considerable distance to a source of ignition and flash back.

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. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Do not get in eyes. Wash hands thoroughly after handling. 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. Do not pierce or burn, even after use. Do not get in eyes, on skin, on clothing.

Conditions for safe storage, including any incompatibilities: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store locked up. Aerosol Level 3

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Ethanol, 2-(2-butoxyethoxy)- - Inhalable fraction and vapor.	TWA	10 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2013)
Ethanol, 2-(2-butoxyethoxy)- - Inhalable fraction and vapor.	TWA	10 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Ethanol, 2-(2-butoxyethoxy)- - Inhalable fraction and vapor.	TWA	10 ppm	US. ACGIH Threshold Limit Values, as amended (03 2013)
Sodium hydroxide (Na(OH))	CEILING	2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Sodium hydroxide (Na(OH))	CEILING	2 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (10 2006)
Sodium hydroxide (Na(OH))	CEV	2 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007)
Sodium hydroxide (Na(OH))	Ceiling	2 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
Sodium hydroxide (Na(OH))	CEILING	2 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
Sodium hydroxide (Na(OH))	CEILING	2 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017)
Sodium hydroxide (Na(OH))	Ceiling	2 mg/m3	US. ACGIH Threshold Limit Values, as amended (2008)
Propane	TWA	1,000 ppm	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
Propane	8 HR ACL	1,000 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
Propane	TWA	1,000 ppm 1,800 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (12 2008)
Propane	TWA	1,000 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	15 MIN ACL	1,250 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
Butane	STEL	1,000 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (08 2017)
Butane	STEL	750 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2017)
	TWA	600 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2017)
Butane	TWA	800 ppm 1,900 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (12 2008)
Butane	TWA	1,000 ppm	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
Butane	8 HR ACL	1,000 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
Butane	STEL	1,000 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2018)
	15 MIN ACL	1,250 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
Butane	STEL	1,000 ppm	US. ACGIH Threshold Limit Values, as amended (03 2018)
Ethanol, 2-butoxy-	TWA	20 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Ethanol, 2-butoxy-	TWA	20 ppm 97 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (10 2006)

Ethanol, 2-butoxy-	15 MIN ACL	30 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
Ethanol, 2-butoxy-	TWA	20 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
Ethanol, 2-butoxy-	TWA	20 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	8 HR ACL	20 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
Ethanol, 2-butoxy-	TWA	20 ppm	97 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017)
Ethanol, 2-butoxy-	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended (2008)

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. 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/face protection: Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection

Hand Protection: No data available.

Other: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

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

Hygiene measures: Do not get in eyes. Observe good industrial hygiene practices. When using do not smoke. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product.

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.

Melting point/freezing point: No data available.

Initial boiling point and boiling range: No data available.

Flash Point: -104.44 °C

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.

Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	4,826 - 6,205 hPa (20 °C)
Vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	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: 18,944.72 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- LD 50 (Rabbit): 2,764 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- LC 50 (Various): > 20 mg/l

Propane LC 50: > 100 mg/l
LC 50: > 100 mg/l

Butane LC 50: > 100 mg/l
LC 50: > 100 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- NOAEL (Rat(Female, Male), Inhalation, 90 - 120 d): 14 ppm(m) Inhalation Experimental result, Key study

NOAEL (Rat(Female, Male), Oral, 90 d): 250 mg/kg Oral Experimental result, Key study

NOAEL (Rat(Female, Male), Dermal, 13 Weeks): > 2,000 mg/kg Dermal 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

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

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- in vivo (Rabbit): Not irritant Experimental result, Supporting study

Sodium hydroxide (Na(OH)) estimated Corrosive , 1 min
in vivo (Rabbit): Irritating Experimental result, Weight of Evidence study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- Rabbit, 24 - 72 hrs: Highly irritating

Sodium hydroxide (Na(OH)) Corrosive Rabbit, 2 d: 10% Sodium Hydroxide- Category 1; 0.5% Sodium Hydroxide- Slightly irritating to eyes

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- Skin sensitization:, in vivo (Guinea pig): Non sensitising

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

ACGIH Carcinogen List:

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.

Specified substance(s):

Ethanol, 2-(2-butoxyethoxy)- LC 50 (Pimephales promelas, 96 h): 2,400 mg/l Experimental result, Supporting study

Sodium hydroxide (Na(OH)) LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 125 mg/l Mortality
LC 50 (Gambusia affinis, 96 h): < 180 mg/l Experimental result, Supporting study

Propane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

Butane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):	
Ethanol, 2-(2-butoxyethoxy)-	LC 50 (Daphnia magna, 48 h): +/- 1,743 mg/l QSAR QSAR, Supporting study
Butane	LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

Specified substance(s):	
Ethanol, 2-(2-butoxyethoxy)-	85 % (28 d) 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
Butane	100 % (385.5 h) Detected in water. Experimental result, Key study

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Ethanol, 2-(2-butoxyethoxy)-	No data available.
Sodium hydroxide (Na(OH))	No data available.
Propane	No data available.
Butane	No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

TDG

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, corrosive packing group II or III
Transport Hazard Class(es)	
Class:	2.1
Label(s):	–
EmS No.:	
Packing Group:	–
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.

IMDG

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, corrosive packing group II or III
Transport Hazard Class(es)	
Class:	2
Label(s):	–
EmS No.:	
Packing Group:	–
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.

IATA

UN Number:	UN 1950
Proper Shipping Name:	Aerosols, corrosive packing group II or III
Transport Hazard Class(es):	
Class:	2.1
Label(s):	–
Packing Group:	–
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.
Cargo aircraft only:	Allowed.

15. Regulatory information

Canada Federal Regulations

List of Toxic Substances (CEPA, Schedule 1)

Chemical Identity

Ethanol, 2-butoxy-

Export Control List (CEPA 1999, Schedule 3)

Not Regulated

National Pollutant Release Inventory (NPRI)

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements

NPRI PT5	Propane
	Butane
	Ethanol, 2-butoxy-

Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI	Not Regulated
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Greenhouse Gases

Not Regulated

Controlled Drugs and Substances Act

CA CDSI Not Regulated

CA CDSII Not Regulated

CA CDSIII Not Regulated

CA CDSIV Not Regulated

CA CDSV Not Regulated

CA CDSVII Not Regulated

CA CDSVIII Not Regulated

Precursor Control Regulations

Not Regulated

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

Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory

Canada NDSL Inventory: Not in compliance with the inventory.

Philippines PICCS: On or in compliance with the inventory

US TSCA Inventory: Not 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: On or in compliance with the inventory

Ontario Inventory: Not in compliance with the inventory.

Taiwan Chemical Substance Inventory: On or in compliance with the inventory

16. Other information, including date of preparation or last revision
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Issue Date: 10/27/2020

Revision Date: No data available.

Version #: 1.0

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.