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SAFETY DATA SHEET

1. Identification

Product identifier: ATI GLASS CLEANER

Other means of identification

SDS number: RE1000036935

Recommended restrictions
Product Use: Cleaner

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: AMERICAN TECHNOLOGIES, INC

Address: 3360 E. LA PALMA AVE

ANAHEIM, CA 92806

Telephone: 800-400-9353

Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification Physical Hazards

Gases under pressure Compressed gas

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: Contains gas under pressure; may explode if heated.

Precautionary Statements

Storage: Protect from sunlight. Store in a well-ventilated place.

Hazard(s) not otherwise classified (HNOC):

None.

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3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Ethanol	64-17-5	1 - <5%
Ethanol, 2-butoxy-	111-76-2	1 - <5%
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 POISON CENTER/doctor if you feel unwell. Rinse mouth.

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.

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:

Pressurized container may explode when exposed to heat or flame.

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.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

No data available.

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

Precautions for safe handling: Provide adequate ventilation. Wear appropriate personal protective

equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any

incompatibilities:

Protect from sunlight. Store in a cool place. Aerosol Level 1

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Туре	Expo	sure Limit Values	Source
Ethanol	REL	1,000 ppm	1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29
				CFR 1910.1000) (02 2006)
	TWA	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values (2009)
Ethanol, 2-butoxy-	TWA	20 ppm		US. ACGIH Threshold Limit Values (2008)
	REL	5 ppm	24 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	50 ppm	240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	25 ppm	120 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Propane	REL	1,000 ppm	1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	1,000 ppm	1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Butane	REL	800 ppm	1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	1,000 ppm	, 3	US. ACGIH Threshold Limit Values (03 2018)
	TWA	800 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Morpholine	REL	20 ppm	70 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
•	STEL	30 ppm	105 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	20 ppm	<u> </u>	US. ACGIH Threshold Limit Values (2008)
	TWA	20 ppm	70 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	30 ppm	105 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	PEL	20 ppm	70 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
2-Propanol, 2-methyl-	STEL	150 ppm	450 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
•	TWA	100 ppm	300 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	PEL	100 ppm	300 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29
			9	CFR 1910.1000) (02 2006)
	TWA	100 ppm		US. ACGIH Threshold Limit Values (2008)
	STEL	150 ppm	450 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	100 ppm	300 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Silica	REL		6 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA		20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA		6 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA		0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
2,6-Octadienal, 3,7- dimethyl Inhalable fraction and vapor.	TWA	5 ppm	J	US. ACGIH Threshold Limit Values (01 2010)

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Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Ethanol, 2-butoxy- (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.)	200 mg/g (Creatinine in urine)	ACGIH BEL (03 2013)

Appropriate Engineering

Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required. Personal protection

equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: No data available.

Other: No data available.

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

local supervisor.

Hygiene measures: 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: 8.7 - 9.7

Melting point/freezing point:No data available.Initial boiling point and boiling range:No data available.Flash Point:Not applicableEvaporation rate:No data available.Flammability (solid, gas):Non-flammable Aerosol

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

No data available.

Explosive limit - upper (%):

No data available.

Explosive limit - lower (%):

No data available.

Vapor pressure: 5,515 - 6,894 hPa (20 °C)

Vapor density:No data available.Density:No data available.Relative density:No data available.

Solubility(ies)

Solubility in water:
Solubility (other):
No data available.
Viscosity:
No data available.

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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: 36,844.23 mg/kg

Dermal

Product: ATEmix: 32,120.9 mg/kg

Inhalation

Product: ATEmix: 690.87 mg/l ATEmix : 172.72 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):

Ethanol NOAEL (Rat(Male), Oral, 7 - 14 Weeks): 10 %(m) Oral Experimental result,

Key study

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

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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 in vivo (Rabbit): Not irritant Experimental result, Key study

Ethanol, 2-butoxy- in vivo (Rabbit): Irritating Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Ethanol Rabbit, 1 - 24 hrs: Not irritating

Ethanol, 2-butoxy- Rabbit, 24 - 72 hrs: Irritating

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

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

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

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.

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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 LC 50 (Pimephales promelas, 96 h): 15.3 g/l Experimental result, Key study

Ethanol, 2-butoxy- LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key

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 LC 50 (Ceriodaphnia dubia, 48 h): 5,012 mg/l Experimental result, Key study

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

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Ethanol NOAEL (Oryzias latipes): 7,900 mg/l Read-across from supporting

substance (structural analogue or surrogate), Supporting study

Ethanol, 2-butoxy- NOAEL (Danio rerio): > 100 mg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Ethanol LC 50 (Daphnia magna): 454 mg/l Experimental result, Key study

NOAEL (Daphnia magna): 9.6 mg/l Experimental result, Key study

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

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

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Specified substance(s):

Ethanol 95 % Detected in water. Experimental result, Key study

Ethanol, 2-butoxy- 90.4 % 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.

Specified substance(s):

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.

Known or predicted distribution to environmental compartments

Ethanol No data available. Ethanol, 2-butoxy-No data available. Propane No data available. Butane 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, non-flammable

Transport Hazard Class(es)

Class: 2.2
Label(s): Packing Group: II
Marine Pollutant: No

Environmental Hazards: No Marine Pollutant No

Special precautions for user: Not regulated.

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IMDG

UN Number: UN 1950

UN Proper Shipping Name: Aerosols, non-flammable

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, non-flammable

Transport Hazard Class(es):

Class: 2.2
Label(s): Packing Group: -

Environmental Hazards: No Marine Pollutant No

Special precautions for user: Not regulated. Cargo aircraft only: Allowed.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
Ethanol	lbs. 100
Propane	lbs. 100
Butane	lbs. 100
Morpholine	lbs. 100
Nitrous acid, sodium salt (1:1)	lbs. 100
2-Propanol, 2-methyl-	lbs. 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Not listed.

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

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SARA 304 Emergency Release Notification

Chemical Identity	Reportable quantity
Ethanol	lbs. 100
Ethanol, 2-butoxy-	
Propane	lbs. 100
Butane	lbs. 100
Morpholine	lbs. 100
Nitrous acid, sodium salt (1:1)	lbs. 100
2-Propanol, 2-methyl-	lbs. 100

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Ethanol	10000 lbs
Ethanol, 2-butoxy-	10000 lbs
Propane	10000 lbs
Butane	10000 lbs
Morpholine	10000 lbs
Nitrous acid, sodium salt (1:1)	10000 lbs
2-Propanol, 2-methyl-	10000 lbs
Silica	10000 lbs
2,6-Octadienal, 3,7-dimethyl-	10000 lbs

SARA 313 (TRI Reporting)

	Reporting threshold	Reporting threshold for
Chemical Identity	for other users	manufacturing and processing
Ethanol, 2-butoxy-	N230 lbs	N230 lbs.

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

Ethanol, 2-butoxy-

Propane

Butane

US. Massachusetts RTK - Substance List

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

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Ethanol

Ethanol, 2-butoxy-

Propane

Butane

US. Rhode Island RTK

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

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

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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

Canada NDSL Inventory: Not in compliance with the inventory.

Ontario Inventory: On or in compliance with the inventory

China Inv. Existing Chemical Substances: On or in compliance with the inventory

Japan (ENCS) List: 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.

Korea Existing Chemicals Inv. (KECI): Not in compliance with the inventory.

Mexico INSQ: Not in compliance with the inventory.

New Zealand Inventory of Chemicals: Not in compliance with the inventory.

Philippines PICCS: Not in compliance with the inventory.

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

US TSCA Inventory:

On or in compliance with the inventory

EINECS, ELINCS or NLP: Not in compliance with the inventory.

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

Issue Date: 07/17/2020

Revision Information: No data available.

Version #: 2.1

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.