



Safety Data Sheet
GEORGIA STEEL Anti Fog
Solution (Product Code: AF235,
AF235-G)

SDS Revision
Date: 12/05/2019

1. Identification

1.1. Product identifier

Product Identity GEORGIA STEEL Lens cleaner and anti-fog solution (Product Code: AF235, AF235-G)

Alternate Names Product Code: AF235, AF235-G

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use Industrial SCBA lens cleaner and safety eyewear cleaner.

1.3. Details of the supplier of the safety data sheet

Company Name Georgia Steel & Chemical Co., Inc.
9515 Gerwig Lane, Suite 111
Columbia, MD 21046

Emergency 800-296-0351
National Poison Center: 800-222-1222

Customer Service: Georgia Steel & Chemical Co., Inc. +1(301) 317-5502

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Irrit. 3;H316 Causes mild skin irritation. (Note: this GHS classification was not adopted by US OSHA).

2.2. Label elements

Warning

H316 Causes mild skin irritation.

[Prevention]:

No GHS prevention statements

[Response]:

P332+313 IF SKIN IRRITATION OCCURS: Get medical advice or attention.

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements



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3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
2-Butoxy-ethanol CAS Number: 0000111-76-2	5 - 10	Acute Tox. 4;H332 Acute Tox. 4;H312 Acute Tox. 4;H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315	[1][2]
Isopropyl Alcohol CAS Number: 0000067-63-0	1 - 5	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. Check section 2.2 (GHS Label Elements) for further details.
Skin	Causes mild skin irritation.



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Section 5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media: Not applicable. Product is not a fire hazard.

Unsuitable Extinguishing Media: High pressure water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

Fire fighters should wear appropriate protective equipment, including self-contained breathing apparatus and impervious clothing.

ERG Guide No. ---

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Small spills may be wiped up and rinsed with water. For larger spills, contain spill with inert material (sand, clay). Transfer material to labeled containers for recovery or proper disposal. After removal, flush area with water. Follow good industrial hygiene practices.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Read label before use. Avoid contact with skin or eyes. Wash hands, face and any skin contact thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, eye protection, face protection. Use only according to label directions. If unsure about safe use, contact your supervisor.

7.2. Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Do not contaminate water, food or feed by storage and disposal. Store in tightly closed, original container in a cool (10° - 30°C), dry area.

Incompatible materials: Oxidizers



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7.3. Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

8.1. Control parameters

CAS No.	Ingredient	Exposure	
		Source	Value
0000067-63-0	Isopropyl Alcohol	OSHA	TWA 400 ppm (980 mg/m ³) STEL 500 ppm
		ACGIH	TWA: 200 ppm STEL: 400 ppm
		NIOSH	TWA 400 ppm (980 mg/m ³) ST 500 ppm (1225 mg/m ³)
0000111-76-2	2-Butoxy-ethanol	OSHA	TWA 50 ppm (240 mg/m ³) [skin]
		ACGIH	TWA: 20 ppm
		NIOSH	TWA 5 ppm (24 mg/m ³) [skin]

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Protective safety glasses recommended
Skin	Protective gloves recommended.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Section 9. Physical and chemical properties

Appearance	Fl. Green Liquid
Odor	Mild
Odor threshold	Not determined
pH	(Neat) - 7.5 (RTU) – 7-8
Melting point / freezing point	Freezing Point : 32°F
Initial boiling point and boiling range	212°F
Flash Point	> 200°F (ASTM D3278)
Evaporation rate (Ether = 1)	Similar to Water
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured



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Vapor pressure (Pa)	Upper Explosive Limit: Not Measured
Vapor Density	Not Measured
Relative Density	2.07
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Complete
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Water thin
VOC Content	0 (Excluding exempt material)
Relative Density	1.000 %
9.2. Other information	
No other relevant information.	

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Temperatures above 50°C or below 10°C.

10.5. Incompatible materials

Oxidizers

10.6. Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

2-butoxyethanol and its acetate are readily absorbed through the skin and will cause harmful effects on the blood.



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Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
2-Butoxy-ethanol - (111-76-2)	1,414.00, Guinea Pig - Category: 4	1,200.00, Guinea Pig - Category: 4	No data available	No data available	No data available
Isopropyl Alcohol - (67-63-0)	5,840.00, Rat - Category: NA	12,800.00, Rabbit - Category: NA	72.60, Rat - Category: NA	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000067-63-0	Isopropyl Alcohol	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	A4
0000111-76-2	2-Butoxy-ethanol	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	A3

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	3	Causes mild skin irritation. (Note: this GHS classification was not adopted by US OSHA).
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Section 12. Ecological information

12.1. Toxicity



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No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
2-Butoxy-ethanol - (111-76-2)	1,474.00, Oncorhynchus mykiss	1,550.00, Daphnia magna	1,840.00 (72 hr), Pseudokirchneriella subcapitata
Isopropyl Alcohol - (67-63-0)	10,000.00, Pimephales promelas	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No;		
14.6. Special precautions for user	Not Applicable		



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Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

US EPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

2-Butoxy-ethanol
Isopropyl Alcohol

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

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The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness and dizziness.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

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