

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2012 and GHS Rev 03.

Issue date 05/22/2024 Reviewed on 05/22/2024

1 Identification

Product Identifier

Trade Name: Buckeye Platinum 3%-6% Low Temperature AR-AFFF (BFC-36LT) Relevant identified uses of the substance or mixture and uses advised against:

Fire suppression, not for human or animal drug use

Product Description: ARAFFF Concentrate, Alcohol Resistant Aqueous Film Forming Foam

Details of the Supplier of the Safety Data Sheet:

Manufacturer/Supplier:

Buckeye Fire Equipment Company 110 Kings Road

Kings Mountain, NC 28086

P: 704-739-7415

www.buckeyefire.com

bfec@buckeyef.com

Emergency telephone number:

CHEMTREC, 24 hours

Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1-703-527-3887 (collect calls accepted)

2 Hazard(s) Identification

Classification of the substance or mixture:

Eye Irritation 2B H320 Causes eye irritation.

Label elements:

Hazard pictograms: Non-Regulated Material

Signal word: Warning Hazard statements: H320 Causes eye irritation. Precautionary statements:

P264+P265 Wash thoroughly after handling. Do not touch eyes.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337+P317 If eye irritation persists: Get medical help.

Unknown acute toxicity:

This value refers to knowledge of known, established toxicological or ecotoxicological values.

0 % of the mixture consists of component(s) of unknown toxicity.

Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme NFPA ratings (scale 0 - 4)



Health = 1 Fire = 0Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 1 Fire = 0



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3 Composition/Information on Ingredients

Non-hazardous components:	
7732-18-5 Water, distilled water, deionized water	>56%

Chemical characterization: Substance

Description: Mixture of substances listed below with non-hazardous additions.

	Dangerous Components:		
Proprietary mixture of fluorosurfactants, polysaccharides, hydroca surfactants, inorganic salts, and isothiazolinone			
		♦ Eye Irritation 2A, H319	
	CAS: 57-55-6 RTECS: TY 2000000	Propylene Glycol	16%
	CAS: 107-41-5 RTECS: SA 0810000	Hexylene Glycol	9%

Additional information:

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

Buckeye Platinum 3-6% Low Temperature ARAFFF does not degrade into nor does it contain PFOS.

4 First-Aid Measures

Description of first aid measures

General information: If symptoms persist, call a physician.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Wash with plenty of soap and water. If irritation develops or persists, seek medical attention.

After eye contact:

Flush eyes at eye wash station for 15 minutes and repeat until pain-free. If irritation develops or persists or vision changes occur, seek medical attention.

After swallowing:

If victim is conscious and alert, give 2-3 glasses of water to drink. Do not leave victim unattended. Seek immediate medical attention. On the advice of medical personnel, induce vomiting.

If vomiting occurs and the victim is conscious, give additional water to further dilute the chemical. Prevent aspiration of swallowed product by laying victim on side with head lower than their waist.

Information for doctor

Most important symptoms and effects, both acute and delayed:

Skin contact may aggravate existing chronic skin conditions.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

5 Fire-Fighting Measures

Extinguishing media

Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

This product is an extinguishing agent. It is nonflammable and noncombustible.

For safety reasons unsuitable extinguishing agents: No further relevant information.

Special hazards arising from the substance or mixture:

This product may decompose in fire and release oxides of sulfur and nitrogen (Refer to Section X)

(Contd. on page 3)



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Advice for firefighters

Special protective equipment for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Not required.

Environmental precautions: Dilute with plenty of water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

PAC-1:					
Propylene Glycol	30 mg/m³				
Hexylene Glycol	2.3 ppm				
PAC-2:					
Propylene Glycol	1,300 mg/m³				
Hexylene Glycol	25 ppm				
PAC-3:					
Propylene Glycol	7,900 mg/m³				
Hexylene Glycol	150 ppm				
	Propylene Glycol Hexylene Glycol C-2: Propylene Glycol Hexylene Glycol				

7 Handling and Storage

Handling

Precautions for safe handling:

Avoid eye, respiratory, and skin exposure. Use the appropriate personal protective equipment when handling. Wash thoroughly after handling (Refer to Section VIII).

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles:

Product should be stored in its original container or extinguisher. Use in well-ventilated areas. Do not mix with other extinguishing agents.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see section 7.

Control parameters:

Components with occupational exposure limits:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

(Contd. on page 4)



OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2012 and GHS Rev 03.

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At this time, the remaining constituents have no known exposure limits.

57-55-6 Propylene Glycol				
WEEL	Long-term value: 10 mg/m³			
107-41-5 Hexylene Glycol				
REL Ceiling limit value: 125 mg/m³, 25 ppm				
TLV	Short-term value: 10** mg/m³, 50* ppm Long-term value: 25* ppm *vapor **inh. fraction, aerosol only			

Additional information:

The lists that were valid during the creation of this SDS were used as basis.

Exposure controls:

Personal protective equipment

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Wash hands before breaks and at the end of work.

Breathing equipment:

During the use of this product on fires, exhaust gases and products of incomplete combustion are the main respiratory hazards. In the manufacture of this product, employers and employees must use their collective judgment in determining the on-the-job settings where the use of a respirator is prudent. The need for respiratory protection is not likely for short-term use in well-ventilated areas. Use air-purifying respirators or powered air-purifying respirators with organic vapor and amine cartridges for acute short-term exposures. Long term exposures may require the use of positive pressure supplied air respirators or self-contained breathing apparatus.

Protection of hands:



Protective gloves

Material of gloves: Nitrile rubber, NBR

Penetration time of glove material: Not applicable.

Eye protection:



Safety goggles

Limitation and supervision of exposure into the environment: None

9 Physical and Chemical Properties

Information on basic physical and chemical properties General Information

Appearance:

Form: Viscous liquid Color: Light tan

Odor: Mild, sweet
Odor threshold: Not determined.

pH-value: Not determined.

(Contd. on page 5)



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Change in condition

Melting point/Melting range: Not determined. Boiling point/Boiling range: 97 °C (206.6 °F)

Flash point: None

Flammability (solid, gaseous): Not applicable. Auto igniting: Not applicable

> Decomposition temperature: Not determined.

Ignition temperature: Product is not self-igniting.

Product does not present an explosion hazard. Danger of explosion:

Explosion limits:

Lower: Not determined. Upper: Not determined.

Vapor pressure: Not determined.

Density @ 20 °C (68 °F): 1.02 g/cm³ (8.5119 lbs/gal) Relative density: Not determined. Vapor density: Not determined. Evaporation rate: Not determined.

Solubility in / Miscibility with:

Water: Fully miscible.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: Not determined. Kinematic: Not determined.

Other information: No further relevant information available.

0 Stability and Reactivity

Reactivity: No further relevant information available.

Chemical stability: Product is stable under normal conditions. Thermal decomposition / conditions to be avoided:

Not known, but oxides of sulfur and nitrogen may be formed. Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials:

Strong acids, bases, and oxidizers. Reactive metals. Any material reactive with water. Hazardous decomposition products: No dangerous decomposition products known.

Toxicological Information

Information on toxicological effects:

Acute toxicity:

·=·					
	LD/LC50 values that are relevant for classification:				
57-55-6	Propylene G	lycol			
Oral	LD50	20,000 mg/kg (Rat)			

(Contd. on page 6)



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Dermal	LD50	20,800 mg/kg (rabbit)
Inhalative LC50/96 hours		52,930 mg/l (Pimephales)
Intravenous 6,630 mg/kg (mouse)		6,630 mg/kg (mouse)
6,42		6,423 mg/kg (Rat)
		6,500 mg/kg (rabbit)
107-41-5 Hexylene Glycol		
Oral	LD50	3,700 mg/kg (Rat)
Dermal	LD50	8,560 mg/kg (rabbit)

Primary irritant effect:

On the skin: No irritating effect.
On the eye: Irritating effect.
Additional toxicological information:

Carcinogenic categories:

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

12 Ecological Information

Toxicity:

Aquatic toxicity:

57-55-6 Propylene Glycol

EC50 >10,000 mg/l (Daphnia)

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment:

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Waste treatment methods

Recommendation:

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

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

(Contd. on page 7)



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14 Transport Information

UN-Number:

DOT, ADR/ADN, IMDG, IATA Non-Regulated Material

UN proper shipping name:

DOT, ADR/ADN, IMDG, IATA Non-Regulated Material

Transport hazard class(es):

DOT, ADR/ADN, ADN, IMDG, IATA

Class: Non-Regulated Material

Packing group:

DOT, ADR/ADN, IMDG, IATA Non-Regulated Material

Environmental hazards:Special precautions for user:
Not applicable.
Not applicable.

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

UN "Model Regulation": Non-Regulated Material

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

No further relevant information available.

SARA (Superfund Amendments and Reauthorization):

Section	255	/ovtromoly	hazardous	substances):
Section	300	(extremely	nazaroous	Substancest:

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA	(Toxic	Substances	Control	Act)

	,	
7732-18-5	Water, distilled water, deionized water	ACTIVE
57-55-6	Propylene Glycol	ACTIVE
107-41-5	Hexylene Glycol	ACTIVE

Hazardous Air Pollutants

None of the ingredients are listed.

California Proposition 65:

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

New Jersey Right-to-Know List:

57-55-6 Propylene Glycol

107-41-5 Hexylene Glycol

(Contd. on page 8)





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New Jersey Special Hazardous Substance List:

None of the ingredients are listed.

Pennsylvania Right-to-Know List:

57-55-6 Propylene Glycol

107-41-5 Hexylene Glycol

Pennsylvania Special Hazardous Substance List:

None of the ingredients are listed.

Carcinogenic categories:

EPA (Environmental Protection Agency):

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH):

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms: Non-Regulated Material

Signal word: Warning
Hazard statements:
H320 Causes eye irritation.
Precautionary statements:

P264+P265 Wash thoroughly after handling. Do not touch eyes.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337+P317 If eye irritation persists: Get medical help.

National regulations:

The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Contact:

Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent





Safety Data Sheet (SDS)
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PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flammable Liquids 4: Flammable liquids – Category 4
Skin Irritation 2: Skin corrosion/irritation – Category 2
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
Eye Irritation 2B: Serious eye damage/eye irritation – Category 2B

* Data compared to the previous version altered.

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106