1. Product and Company Identification		
Identity (as used on label & list): Product Description: Intended Use:	Baum's Novacool UEF Water Soluble Surfactants and Water Firefighting foam concentrate for use on class A fires mixed at 0.4% in water, for use on class B fires mixed at 0.5% in water.	
Manufacturer:	Baum's Castorine Co., Inc. 200 Matthew Street Rome, New York 13440 USA 800-825-8154	

2. Hazards Identification

Hazardous Classification:

Pictogram: None

Signal word: None

Under conditions of intended use this product is not considered hazardous and does not pose a risk to health.

Overview; Ingredients not listed as a carcinogen by IARC, NTP, or OSHA

DOT Hazard Class:	Not Applicable
Threshold Value Limit (TLV):	Not Determined

Signs and Symptoms of Exposure:

Eyes Skin	May cause eye irritation, No permanent damage anticipated from acute exposure. may cause skin irritation, No permanent damage anticipated from acute exposure. Prolonged contact with product may cause discomfort.
Ingestion	Not expected to be a primary route of exposure, will produce gastrointestinal discomfort, nausea, vomiting, diarrhea
Inhalation	Not expected to be a primary route of exposure, vapors or mists in unusually high concentration, in poorly ventilated areas may cause irritation of nose and throat characterized by coughing. Aspiration of liquid will cause irritation to respiratory tract.

3. Composition/ Information on Ingredients

Novacool UEF is a blend of organic surfactants being anionic, nonionic and amphoteric surfactants. Novacool UEF does not contain PFOS or PFOA.

4. First Aid Measures	
Inhalation:	Remove to fresh air. If irritation persists, seek medical attention. If breathing has stopped, assist ventilation with a mechanical device or use rescue breathing with a pocket mask.
Skin:	Wash skin with water. remove all contaminated clothes and shoes. Thoroughly clean clothes and shoes before reuse. Consult a physician if irritation develops.
Eyes:	Flush with water for 15 minutes. If eye irritation persists, seek medical attention.

Ingestion: If swallowed, get immediate medical attention or advice. If victim is conscious and able to swallow, give large amounts of water. Do not give anything by mouth to the person who is unconscious or convulsing. Do not induce vomiting unless directed by a physician.

5. Fire Fighting Measures

Flash Point	Not Applicable
Auto Ignition Temperature:	Not Applicable
Flammable Limits	Not Applicable
Classification	Not Flammable
Extinguishing Media	Not Applicable

Special Fire Fighting Procedures: NFPA Code: Health 1, Fire 0, Reactivity 0

Use water spray to cool fire-exposed surfaces to prevent over-pressure of containers and to protect personnel. Use airsupplied breathing equipment for enclosed areas.

6. Accidental Release Measures		
Containment Procedures	Stop flow of material if without risk. Dike spill with inert absorbent. Block any potential routes to water systems, sewers, streams, lakes, etc.	
Clean-Up Procedures	Wear appropriate protective equipment and clothing. Absorb with inert absorbent, shovel material into appropriate container for disposal.	
Evacuation Procedures	Keep unnecessary personnel away.	

7. Handling and Storage		
Handling Procedures	Avoid contact with skin and eyes. Observe good industrial hygiene practices and wash	
-	thoroughly after handling.	
Technical Measures	Work practices should minimize contact.	
Technical Precautions	Local exhaust is normally not required unless the process produces a mist.	
Storage Procedures	Store in tightly closed original container, in well ventilated place, away from strong acids.	
	Prevent from freezing. If frozen, move to warn area.	

Ventilation Engineering Controls:	Ventilation should effectively remove and prevent any buildup of any vapor or mist generated from the use of this product
Personal Protection Equipment (PPE)	
Respiratory Protection:	If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA rated respiratory protection must be provided.
Skin Protection:	Use Impervious gloves. Use of impervious apron and boots are recommended
Eye/Face Protection:	Wear safety glasses, chemical goggles or a full face shield.
Other Protective Clothing / Equipment:	None.

9. Physical and Chemical Properties

Physical State

Liquid

Appearance and Color	Light yellow
Freezing Point	30 ^o F, -1.1 ^o C
Boiling Point approximately	212 ^o F, 100 ^o C
Odor	FaintlyAmmoniacal
Vapor Pressure (mmHg)	equivalent to water
Vapor Density (air=1) less than	equivalent to water
Solubility in Water	Complete
Specific Gravity (H ₂ O=1) approximately	1.036
Weight/Gallon(lb.)	8.64
Burning Properties	Oxides of carbon and nitrogen may be produced after all moisture
	is boiled off.
Flammability	Not Flammable
Explosive Properties	Not Explosive
Flashpoint	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
pH range	6.75-7.8
Typical pH	7.10
Refractive index of concentrate	31.0-34.0 ^o Brix
Evaporation Rate (water=1)	<1
Viscosity@ 40 ^o C	$\approx 29 \text{ cSt.}$

10. Stability and Reactivity

Chemical Stability:	This is a chemically stable material.
Conditions to Avoid:	Heat from fire sufficient to overpressure container.
Materials to Avoid:	Strong acids and oxidizers
Hazardous Decomposition or Byproducts:	Material will not decompose in use or storage. Oxides of carbon, nitrogen may be produced after all moisture is boiled off in a fire.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Eyes	Will cause irritation and conjunctivitis depending on length of exposure, solution concentration		
	and first aid measu	res provided.	
Skin	Prolonged contact	with product may cause discomfo	ort, no adverse effects expected form absorption of
	material through s	kin	
Ingestion	Not expected to be	e a primary route of exposure. Rat	t oral LD_{50} is greater than
	U	logram of body weight	
Inhalation	Vapors or mists in	unusually high concentration, in	poorly ventilated areas may cause irritation of
	nose and throat.		
Carcinogenicity .	NTP: No	IARC Monographs: No	OSHA Regulated: No

12. Ecological Information

The product is not expected to be hazardous to the environment.		
Mobility:	This product is soluble in water and will spread in water systems	
Degradability:	Complete 30 day 51.6%. Surfactant components are inherently bio-degradable.	

Table 1 Summary of Test Results 0.4% End Use Product Bioassay Testing							
Daphnia magna - Acute	LC50	37,613 ppm	34,818 to 40,631 ppm				
Rainbow trout - Acute	LC50	9,600 ppm	6,400 to 12,800 ppm				
Green Algae - Chronic	IC50	3,517 ppm	2,838 to 4,070 ppm				
Analytical Testing							
Test	Duration	Value	% of Total Product Biodegradation				
Chemical Oxygen Demand (COD)	na	3012 mg/L	na				
Biological Oxygen Demand (BOD)	5 day	1118 mg/L	37.1 %				
Biological Oxygen Demand (BOD)	30 Day	1554	51.6 %				

13. Disposal Considerations

Waste Material Disposal of in accordance with Local, State and Provincial Environmental Regulations.

Treat container as residue.

14. Transport Information

Not Regulated

15. Regulatory Information

DOT Hazard Class: EPA Hazardous Substances: SARA 311/312 Hazards: SARA Title III:	Not regulated None Immediate (Acute) Health Hazard
SARA 1111e 111: California Proposition 65:	none This product does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
Governmental Inventory Status:	All components comply with TSCA, DSL, AICS, NZIOC, ENCS, KECI, PICCS and IECSC.

16. OTHER INFORMATION

US NFPA Codes	Health	Fire	Reactivity	
	1	0	0	
HMIS Codes	Health	Fire	Reactivity	PPE
	1	0	0	Section 8

The information on this SDS reflects the latest information that we have on hazards, properties, and handling of this product under recommended conditions of use. This company believes this information to be accurate and reliable however, the accuracy and completeness is not guaranteed.