fire
&
EARTH

FIRE & EARTH

Who We Are & What We Do?

Fire & Earth Ltd established 2002. Since then we have been in the life-saving business and have forever kept the importance of safety first. Now operating with offices in more then 10 countries.

We strive for the safety of the poeple.

We have been saving lives for more then 10 years, continiously bringing the newest products to aid every day life. Since becomming proud distributors of FireFreeze Worldwide, we have started to expand our reach by providing governments and poeple with products that will forever secure your safety.

As much as we aim to succeed business wise, we aim twice as much towards saving your homes, possesions and lives. Poeple are increasingly confronted by fire on daily basis, therefore the importance of taking precautionairy measures is invaluable.

COLD FIRE

What is ColdFire?

Cold Fire® is a new environmentally friendly, fire suppressing agent, leading the way in fire suppressing technology and revolutionizing the way firefighters combat fires.

Cold Fire® gets its name from its extraordinary ability to remove extreme heat from any object (metal, wood, rubber, etc.) with which it comes in contact. The suppressants in Cold Fire® are encapsulators that use water as a catalyst to remove heat and fuel from a fire more rapidly. Cold Fire® extinguishes on contact, prevents re-ignition when properly applied, and absorbs hydrocarbon smoke. The unique encapsulation characteristic also helps to minimize possible ignition of flammable liquids.

Cold Fire's unique plant based formulation is considered to be 10 times more penetrable than water alone. This extraordinary characteristic enables Cold Fire® to penetrate a heated surface and/or fuel source 10 times faster than water. Once the product has penetrated the surface, Cold Fire® works to encapsulate the heat and fuel source. By encapsulating the fuel source, Cold Fire® simultaneously encapsulates the fuels vapors preventing reignition. As Cold Fire® penetrates the surface it safely cools the area under its flashpoint without steam conversion.

Cold Fire® is most commonly used in bulk applications, however, Cold Fire® can also be used in its aerosol or pump spray application to pre-spray an area or surface prior to using a torch to help prevent the possibility of a hidden fire. When Cold Fire is sprayed onto a surface, it deeply penetrates and safeguards that surface from fire. When heat is applied, the product works to encapsulate the heat source, thereby helping to prevent heat damage and possible fire.

COLD FIRE

Cold Fire® FEATURES

- Biodegradable.
- Non-Toxic.
- Offers extraordinary fire fighting and life-saving capabilities.
- UL listed Wetting Agent for Class A and B fires. UL-2N75 Listing #.
- EPA-SNAP (Significantly New Alternative Policy) Program listed.
- Non-Corrosive. Can be dumped into a booster tank without threat of corrosion. You do not need to flush out your lines after using Cold Fire® as you do with most foam.
- 100% soluble in water. It will not separate in a booster tank. Shelf life is indefinite as long as it is stored in a closed container.
- Reduces the density of hydrocarbon smoke, increasing visibility and enabling easier breathing.
- Rapid Cooling Effect, preventing re-ignition when property applied.
- Unique thermal insulation quality helps protect fire fighters and help prevent again heat exhaustion. Keeps you cooler!
- Considered an acceptable substitute for toxic foams and halon.
- Will extinguish Class A, B and/or D fires.
- Enhances the penetration capability of water, extinguishing the fire faster using less water, and thereby reducing water damage.
- Possesses cleaning properties; thereby reducing the amount of damage caused by hydrocarbon smoke.
- Non-slip.

Cooling Effectiveness of COLD FIRE®
How Does it Work?

Cold Fire® is mixed with water to fight fires. Mixed at given percentages depending on the type of combustibles involved, Cold Fire® becomes 6 times thinner than water (see official UL testing results).

This unique characteristic enables Cold Fire® to fully penetrate the fuel source and attack the heat on contact, cooling down the surface almost immediately. Cold Fire® also acts like a magnet to pull the heat out from the fuel source. Water alone cannot penetrate the fuel source as effectively, so as a result when water hits the fuel source it actually bounces back and turns to steam.

Similarly, Cold Fire® also acts like a magnet when it comes to reducing hydrocarbons in the smoke. Cold Fire® actually attracts and draws in the smoke; thereby encapsulating it and breaking down the hydrocarbon molecules,resulting in better visibility.

COLD FIRE BULK APPLICATIONS

In professional applications, Cold Fire® is added to pumper apparatus, reservoirs or inducted into fire hose lines in order to attack larger conflagrations. Cold Fire® is added at given percentages depending on the nature of the combustible materials involved.

Percentages

Class A: 1% to 3%
Class B: 3% to 6%
Class D: 6% to 10%

Cold Fire® is extremely effective on gasoline fires and vehicle fires. When extinguishing a car fire, for example, the vehicle turns cool to the touch moments after it is extinguished. Use Cold Fire® to extinguish Class A fires of all types, including brush and grass fires.

Cold Fire® can be used in 2 ½ gallon water extinguishing units for first response, in which you add 1 quart of Cold Fire® to 9 quarts water to equal a 10% solution. Cold Fire® is added last to the mixture.
Pressurize the unit to 100 - 125 pounds of pressure.

Cold Fire® can also be used in enclosed loop systems, sprinkler systems, and on-board systems for aviation, rail, boating and automobile industries.

Cold Fire® concentrate is sold in **19** Litre Buckets, **209** Litre Barrels and **1041** Litre Totes.

COLD FIRE

Cold Fire Rapid Cooldown Spray

Cold Fire, the amazing fire extinguishing spray, is an innovative safety tool designed to extinguish small fires and instantly cool down hot surfaces.

It's perfect for putting out small fires in the kitchen and the shop, with quick and easy clean-up. It is an excellent tool for all trade applications that use open flames, like welders and plumbers.

Using the same Cold Fire formula in use by fire and police departments all over the world, these handy 13.5 ounce canisters are the perfect size for home use as well. Keep a can in your car or truck, in your kitchen and in your garage. Fits in most truck glove compartments.

Cold Fire will extinguish class A, B, D & K fires, which means everything from grass to fabrics to gasoline to magnesium to a kitchen grease fire. Cold Fire Spray has a custom nozzle that puts the exact amount of product to the fire to extinguish it rapidly and safely, with enough force and distance so you don't have to get too close to the fire.

COLD FIRE

Your officers on patrol are most likely to be the first responders to a vehicle accident, arriving precious moments before the Fire Department. Do they have the tools they need to combat a vehicle fire?

ColdFire™ is an environmentally friendly fire extinguishing agent that puts out ANY fire faster, safer, with less water, less damage to property and less risk to personnel. ColdFire™ cools 21 times faster than water, and works to remove heat and fuel sources from the fire tetrahedron, therefore preventing re-ignition

ColdFire™ was designed to save lives. It's cooling properties work to remove heat and fuel sources. This allows officers to immediately touch the burnt surface, whether a car door or a piece of equipment.

Further, ColdFire™'s non-toxic properties benefit both the environment, officers and fire victims. Because the product does not contain any harmful or corrosive chemicals, Cold Fire™ can be sprayed directly onto a fire victim and its cooling properties will allow a fast, potentially live-saving medical response.

Look in your trunk...
Your first responders have the same chemical fire extinguishers found in this 1968 patrol car. **That doesn't make sense.**

It isn't 1969 anymore…

Isn't it time to give your officers the best opportunity to reduce injuries and possibly save lives the next time they're at the scene of a vehicle fire?

Obsolete, 40 year old technology…. It's time to give your first responders 21st century technology in fighting fires!

ColdFire™ is the next generation in fire fighting.

Provide your fleet with the tools that save lives!

ColdFire™ can be especially useful to police officers and other first responders to car crashes because of its unique ability tonot only snuff out fuel fires, but to actually encapsulate the fuel, rendering it inert and preventing ignition.

COLD FIRE

COLD FIRE
Fire Suppressing Agent

Cold Fire is an environmentally friendly fire suppressing agent, specially designed to extinguish Class A, B, and D fires. Cold Fire has a rapid cooling effect, which provides rapid extinguishment, prevention of re-ignition, and the encapsulation of hydrocarbons. The product is safe to store, handle and use is environmentally friendly, non-toxic, non-corrosive, and biodegradable.

Capabilities	
Fire Suppressing Power:	Quickly snuffs out fires. "Cools" burning fuel on contact. Prevents re-ignition by encapsulating fuel source. Retards smoke generation. Cools rapidly.
Applications:	Class A, B and D fires of all types.
Cleanup:	Leaves slightly oily residue, rinse with water. Product biodegrades rapidly. Oil molecules do not form a tight emulsion with the suppressing solution.
Dispersant Capability:	Low. Treated oils are not dispersed in water.

Characteristics	
pH:	pH is 7.5 – 8.5
Flash Point:	Negligible.
Boiling Point:	212 ºF.
Odor:	Neutral odor. Does not contain d-limoneses. Cloudy in appearance
Water Solubility:	Complete.
Shelf Life:	Indefinite when stored in closed containers between -50 ºF and 120 ºF.
Dilution Strength:	Use at full strength, do not dilute.
Residue:	Leaves slightly oily residue

Environmental and Safety Considerations	
Biodegradability:	100% in 21 days under ideal conditions.
Hazardous Components:	No components are listed in the NIOSH Recommendations for Occupational Health Standards, 1988, or are defined as hazardous by SARA, CERLA, or RCRA. No OSHA PEL's are established for other ingredients.
Handling:	Suppressor is slightly alkaline. It may irritate the eyes if sprayed directly into them. When handling bulk concentrate, eye protection, gloves, and impervious clothing should be worn when there is danger of splashing, prolonged exposure to vapor, or prolonged skin contact, as with all chemicals.
Disposal:	Suppressant itself may be disposed through municipal systems.

MATERIAL SAFETY DATA SHEET
COLD FIRE

COLD FIRE

SECTION I - IDENTIFICATION

Manufacturer:	FIREFREEZE Worldwide, Incorporated		
Address:	272 Route 46, Rockaway, N.J. 07866		
Phone:	(973) 627-0722	**Fax:**	(973) 627-2982
Date Prepared:	JANUARY 4, 2014	**Formulation #:**	**JG302AS**
Trade Name:	**Cold Fire 302 All Season Blend**		
Product:	Class A:B:D fire suppressing agent		

SECTION II - INGREDIENTS AND HAZARD CLASSIFICATION

Components are classified trade secret. No components are believed to be hazardous, or listed in the NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed as hazardous by SARA, CERCLA, or RCRA. No OSHA PEL's are established for any of the other ingredients.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	212°F.	**Vapor Pressure (mm Hg):**	Same as water.
Solubility in water:	100%	**Specific Gravity:**	1.02 @ 60°F.
pH:	8 Slightly Alkaline	**Appearance and Odor:**	Cloudy, neutral smell.

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point: Not applicable **Flammable Limits:** Non-flammable.
LEL: Not applicable. **UEL:** Not applicable.
Extinguishing Media: Not applicable.
Special Fire Fighting Procedures: None. **Unusual Fire and Explosion Hazards:** None.

SECTION V - REACTIVITY DATA

Stability: Stable. **Incompatibility:** None.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.
Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Exposure Limits
OSHA PEL: Not established. **ACGIII TLV:** Not established.
Routes of Entry
Inhalation: Yes **Skin:** Yes **Ingestion:** Yes

Signs and Symptoms of Exposure
Skin: Negligible hazard. Not a primary skin irritant. pH is slightly Alkaline 8.0
Eyes: Not considered to be a primary ocular irritant.
Inhalation: Negligible.
Ingestion: Not considered to be orally toxic.

First Aid
Eyes: Immediately flush eyes with water.
Skin: Rinse with water.
Inhalation: Negligible. Remove to fresh air.
Ingestion: Drink water.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Spill or Leak Procedures
Rinse affected area with water.
Waste Disposal Method
Dispose as non-hazardous waste in accordance with local regulations.
Storage and Handling Precautions
Store in temperatures from -50 ℉ to 120 ℉ in closed containers to prevent evaporation and deterioration.
Other Precautions
Avoid prolonged skin contact.

SECTION VIII - CONTROL MEASURES

Respiratory Protection
Not required.
Ventilation
Under ordinary conditions of use for its intended purpose, no special ventilation is required.
Protective Gloves
Wear if there is prolonged skin contact.
Eye Protection
Wear if needed to prevent reasonable probability of eye contact.

SECTION IX - HAZARD CLASSIFICATION

IMO Hazard Class and Number: Non-hazardous. **UN Number**: Not applicable.
US DOT Hazard Class: Not regulated by DOT **US DOT Identification Number**: Not applicable.

SECTION X - REGULATORY INFORMATION

EPA SNAP: Significantly New Alternative Policy Program Listed.
Cold Fire↓ is listed by the EPA as a substitute for Halon 1211.

HMIS Rating: Health: 0 Flammability: 0 Reactivity: 0

SECTION XI- ENVIRONMENTAL DATA

Biodegradability: Product is 100% biodegradable in an active environment within 21 days.
Toxicity: In accordance with U.S. EPA Office of Pollution Prevention and Toxics criteria for ranking the acute toxicity of chemicals in the aquatic environment, ColdFire 302AS is considered to be of low concern.

The information presented in this MSDS is believed to be factual. However, nothing contained in this information is to be taken as a warranty of any kind by Fire & Earth Ltd. The user should review any recommendations, in the specific context of the intended use, to determine whether they are appropriate.

MotorMAX™ has been used for more than a decade on race tracks around the world to help race cars improve performance by reducing engine temperatures. Now available for your gas and diesel cars and trucks!

Not only does it help protect your engine, it also improves gas mileage by reducing stress on your engine - and also makes your air conditioner put out warmer air in winter, colder air in summer!

Just one Litre in your radiator will help provide year-round performance and protection in ALL weather conditions.

MotorMAX is a "liquid heat sink" that works to enhance your engine's performance at both ends (hot and cold) of the temperature spectrum. Warms up faster, lowers temps during operation.

- Prevents overheating
- Maximizes air conditioning output
- Prolongs life of engine by transferring more heat away from critical engine components
- Enhances engine performance by eliminating horsepower-robbing 'hot spots'
- Reduces cold temperature engine wear by bringing temperatures to the ideal operating range 40% faster than standard coolant mixes
- Non-toxic biodegradable plant-based mixture is environmentally friendly. A scientific breakthrough in cooling technology
- Safe, non-corrosive formula is compatible with all internal engine parts, seals, hoses and accessory components

Frequently Asked Questions

Q: Why should I use MotorMAX?
A: Because overheating is the most common cause of engine failure. Treating your engine's cooling system with MotorMAX will:

- Reduce engine temperatures up to 30°
- Reduce engine wear and tear
- Improve fuel efficiency 3-5%
- Reduce emissions and toxic greenhouse gases like CO2 and NOX up to 11%
- Your air conditioning output will be colder in summer, warmer in winter

Q: Will MotorMAX mix with my existing water/antifreeze mixture?
A: Yes, MotorMAX will mix with any water/antifreeze combination.

Q: How long does MotorMAX work?
A: MotorMAX is good for up to 100,000 miles, or until the next time your radiator gets flushed.

Q: How often do I have to add MotorMAX?
A: MotorMAX works until you flush out your radiator system. Just follow your car's recommended maintenance schedules.

Q: Is MotorMAX safe to use in both gas and diesel engines?
A: Yes.

Q: What is the shelf life of MotorMAX?
A: If kept in its sealed container, its shelf life is indefinite. It will also survive multiple freeze/thaw cycles.

Q: What should I expect to see after using MotorMAX?
A: First, you will notice that your vehicles air conditioning system will work better, winter or summer. Next, your engine will get up to operating temperature quicker, and your overall temperature will stay 10° - 30° cooler. Then, you will see an improvement is fuel efficiency.

Mixing Ratios

MotorMax radiator additive is effective in all water cooled engines and equipment. Simply add One Litre of MotorMax radiator additive for standard automotive engine applications, or add MotorMax in a 1:10 ratio for severe duty, commercial trucking/fleet or racing engines.

MotorMax radiator additive is a one time treatment, and works continuously until your engine cooling system is flushed according to your manufacturer's suggested routine maintenance schedule. MotorMax is compatible with all mixtures and is equally effective when mixed with water alone where antifreeze is not required.

Handling & Storage

Store at room temperature. Avoid prolonged storage below 28°F or above 120°F. If frozen, return product to room temperature and allow to thaw before use. Product is freeze/thaw stable. Product is neutral. Rinse hands with soap and water after handling product.
As with all chemicals avoid direct eye contact.

Reduced oil temperature: MotorMAX, by absorbing heat from internal engine parts, will also help to reduce engine oil temperatures. Reduced oil temperature results in less chance of oil breakdown, decreasing damage caused by poor lubrication. Minimizes hot spots in engines: All engines have some variance in engine temperature from front to back or side-to-side. With its ability to absorb heat and transfer it, MotorMAX reduces engine hot spots and virtually eliminates steam pockets. The ability to reduce hot spots is vital in the search for enhanced engine performance.
More comfortable passenger compartment temperatures: Now that your engine and many of its components are running cooler, the reduced temperature translates to cooler engine bay temperatures. This results in a more comfortable cab interior, with substantially increased air conditioning output in hot weather.

Motor MAX
Radiator Cooling Additive

GENERAL DESCRIPTION/USE

Motor MAX works to reduce water and oil temperature, the temperature of internal engine components, it minimizes hot spots in engines, and in turn the passenger compartment and engine bay temperatures are reduced.

Motor MAX is non-toxic and biodegradable. It is non-corrosive and compatible with all internal engine parts, seals, hoses and accessory components.

RECOMMENDED MIXTURES

For use in racing, heavy equipment, towing, or high stressed applications where more cooling is needed run 1 quart **Motor MAX** to 10 quarts of water.

For normal street driven use in cars, motor homes, street rods, etc. use 1 quart **Motor MAX** to 16 quarts of water.

Motor MAX can be safely mixed with antifreeze. Do not mix **Motor MAX** with any other type of water wetters or radiator additives.

CHARACTERISTICS

pH:	pH is neutral 7.0
Flash Point:	Negligible
Boiling Point:	212°F
Odor:	Mild, fresh scent. Does not contain d-limonenes.
Appearance:	Opaque in color.
Water Solubility:	Complete
Shelf Life:	Indefinite when stored in closed containers between 28°F-120°F.
Residue:	Product dissipates rapidly. Product leaves virtually no residue.

SHIPPING CONTAINERS

1 Quart (32 oz.)	2.3 lbs./quart
1 case of 6 quarts	14 lbs./case

HANDLING & STORAGE

Store at room temperature. Avoid prolonged storage below 28°F or above 120°F. If frozen, return product to room temperature and allow to thaw before use. Product is freeze/thaw stable. Product is neutral. Rinse hands with soap and water after handling product. As with all chemicals avoid direct eye contact.

MATERIAL SAFETY DATA SHEET
Motor MAX

SECTION I – IDENTIFICATION

Manufacturer: Firefreeze Worldwide, Inc.
Address: 272 Route 46 East, Rockaway, NJ 07866
Phone: 973-627-0722; Fax: 973-627-2982
Formulation#: JG302-DF (Formula 500)
Trade Name: Motor MAX
Product: Radiator Cooling Additive

SECTION II – INGREDIENTS AND HAZARD CLASSIFICATION

Components are classified trade secret. No components are believed to be hazardous or listed in NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed as hazardous by SARA, CERCLA, or RCRA.

SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

Vapor Pressure (mm Hg): same as water

Solubility in water:	100%	**Specific Gravity:**	1.02-1.04
pH:	7.0 (neutral)	**Appearance/Odor:**	Opaque, fresh scent

SECTION IV – FIRE & EXPLOSION DATA

Flash Point:	Not applicable.	**Flammable Limits:**	Not applicable.
LEL:	Not applicable.	**UEL:**	Not applicable.

Extinguishing Media: Not applicable.
Special fire fighting procedures: none
Unusual fire & explosion hazards: none

SECTION V – HEALTH HAZARD DATA

Route of Entry:
Inhalation: Yes **Skin**: Yes **Ingestion**: No

Signs and symptoms of exposure:
Skin: Negligible hazard. Not a primary skin irritant.
Eyes: Not considered a primary ocular irritant
Inhalation: Negligible
Ingestion: Do not ingest.

First Aid:
Eyes: Flush eyes thoroughly with water.
Skin: Rinse skin with soap and water after handling.
Inhalation: Negligible. Remove to fresh air if there is irritation.
Ingestion: If accidentally swallowed drink water and consult a physician if any irritation occurs.

SECTION VI – SAFE HANDLING & USE

Respiratory Protection:	None required.
Ventilation:	Under ordinary conditions of use for its intended purpose, no special ventilation is required.
Eye Protection:	Wear eye goggles or safety glasses if needed to prevent reasonable probability of eye contact.
Protective Gloves:	Wear general work gloves if there is a probability of prolonged skin contact to minimize any possible irritation.
Spill or lead procedures:	Recoup as much of the product as possible. Rinse affected area with water.
Waste Disposal Method:	Dispose of a non-hazardous waste in accordance with local, state and federal regulations.
Storage & Handling:	Store at room temperature. Do not store for prolonged period in temperatures below 28 ºF or above 120 ºF. Keep product in closed containers to avoid evaporation and/or possible contamination.
Other Precautions:	Do not mix with any other type of water wetters or radiator additives.

SECTION VII - HAZARD CLASSIFICATION

IMO Hazard Class:	Non-hazardous	**UN Number:**	Not applicable.
US DOT Hazard Class:	Not regulated	**HMIS Rating**:	H-0 – R-0 – F-0

SECTION VIII – REGULATORY INFORMATION

NJ TSRN's (New Jersey Trade Secret Registration Numbers): JG200-JG800.

California Proposition 65:
Components present containing listed substances which the State of California has found to cause cancer, birth defects or other reproductive harm which would require a warning under the statue are: **NONE.**

Canada WHMIS (Workplace Hazardous Materials Identification System):
Components present in this product that are listed on the WHMIS hazardous ingredients disclosure list: **NONE**.

CERCLA (Comprehensive Environmental Response, Compensation an Liability Act of 1980:
Requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities in 40 CFR 302.4.
Components present in this product at a level, which could require reporting under the statute, are: **NONE.**

SARA (Superfund Amendments and Reauthorization Act of 1986) Title III:
Requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDS's that are copied and distributed for this material.
Components present in this product at a level, which could require reporting under the statute, are: **NONE.**

What is Odor Seal®

An environmentally friendly, odor eliminator that gets rid of the toughest odors quickly, safely, and effectively, without the use of masking agents or perfumes.

Oder Seal® destorys odors naturally by encapsulating the odor producing hydrocarbons, eliminating odor almost immediately.

Odor Seal® is: environmentally friendly, non-corrosive, non-flammable, and biodegradable. Odor Seal® is listed on the SNAP (Significantly New Alternative Policy) Program Vender List. It's USDA-Class C recognized, safe and easy to use and does not stain.

How is Odor Seal® Applied ?

Odor Seal® can be applied using a pump spray bottle, portable spray unit, power washer, or can be induced into a misting system. Odor Seal® can also be added to wash water when cleaning floors, restrooms fixtures, food processing equipment and counter tops to eliminate odor and degrease the area.

How often do I Reapply Odor Seal® ?

Oder Seal® does not dissipate or lose its effectiveness once it is applied. Odor Seal® continuously works to break down and eliminate the odor emanating from the odor producing source. Odor Seal® should be reapplied when a new odor source is introduced, i.e. garbage. Neither rain nor extreme heat will diminish Odor Seal®'s effectiveness.

Where can Odor Seal® be Used?

Odor Seal® can be used in all areas/situations that produce an odor(s). Home, office, automobile, or boat. Use to eliminate tough pet, cooking, smoke, vomit, decay and musty/mildew odors. Can be used in HV/AC systems.

Odor Seal® is also an effective degreasing agent. Excellent for use in restaurant grease traps. Odor Seal has also proven to be highly effective at removing hydrogen sulfide from mill and processing plants efficiently and at a cost effective rate.

COMMON PROBLEM AREA	RECOMMENDED DILUTION (Odor Seal® to Water)	APPLICATION
Containers/Compactors	1 to 5	Spray Unit.
	1 to 25	Power Washer.
Compost Facilities	1 to 3	Farm Style Sprayer.
Transfer Stations	1 to 10	Misting System.
Yard Waste Trucks	1 to 3	Mounted Spray Unit.
Medical Waste/Autoclave Units	Concentrate	1 55 gal. drum with pump and 3/4 inch hose is recommended. 1 to 1.5 quarts per cycle. Product is sprayed onto infectious waste bags.
Sewage Treatment Facilities	Concentrate	Spray/mist directly onto source. Breaks down oils & grease which benefits treatment process.
Restaurant Grease Traps	Concentrate	Use in grease traps to break down grease and elminiate odor. Use on floors where grease can cause slipping hazard.
Boat Bilges	1 qt. Odor Seal® per 10 ft. vessel	Dump directly into bilge.
Holding Tanks	1 to 5	Dump directly into tank.
Garbage Chutes	1 to 5	Spray directly into chute.
Portable Toilets	1 qt Odor Seal®	Dump directly into tank.
HV/AC Systems	1 to 5	Spray directly into unit.
Maggots	1 to 5	Spray Unit. (works to dehydrate Maggots)
Fisheries/Seafood	1 to 3/Concentrate	Hand Held Spray Unit/Power Washer.
Rendering Plants	1 to 3/Concentrate	Hand Held Spray Unit/Power Washer.
Zoos/Kennels	1 to 4	Spray onto odor producing source.
Automobile Detailing	1 to 5	Spray onto odor producing source.
Public Restrooms	1 to 2	Spray onto odor producing source.

How is Odor Seal® Sold?

It is available in **19** , **209** and **1041** gallon drums for bulk applications.

ODOR SEAL
Biodegradable Industrial Odor Eliminator

ODOR SEAL↓ is a industrial odor eliminator and cleaner specifically formulated for eliminating odors by encapsulating and destroying the odor producing source and its vapor. ODOR SEAL↓ has also been recognized as an effective all purpose cleaner. ODOR SEAL↓ is water soluble and rapidly biodegradable. The concentrate can be used in power washing equipment, high pressure washers, and steam cleaners to wash, clean and eliminate all odor producing sources and areas.

Capabilities	
Cleaning Power:	Eliminates odor. Effectively cleans odor producing area. Particularly good when used with machine scrubbing, pressure washing, and steam cleaning equipment. **Hot water enhances odor eliminating and cleaning power.**
Applications:	Use in sewage treatment, landfills, restrooms, portable toilets, garbage dumpsters and trucks, on boats, in stables, on farms, in locker rooms, spas, use to eliminate smoke and pet odors; spray directly onto the odor producing source and/or spray into air to destroy any airborne odors..
Oil Emulsification:	Slight. Oil molecules do not form a tight emulsion with the cleaning solution.
Dispersant Capability:	Low.
Residue:	No residue after rinsing.

Characteristics	
pH:	8.6 – 8.9 in concentrate form.
Flash Point:	Negligible.
Boiling Point:	Greater than 212 °F.
Odor:	Mild fresh scent. Does not contain d-limonenes.
Water Solubility:	Complete.
Shelf Life:	Indefinite when stored in closed containers between 32 °F and 120 °F.

Environmental and Safety Considerations	
Biodegradability:	100%.
Hazardous Components:	No components are listed in the NIOSH Recommendations for Occupational Health Standards, 1988, or are defined as hazardous by SARA, CERLA, or RCRA. No OSHA PEL's are established for ingredients.
Handling:	Prolonged contact with product may cause slight dryness of the skin.
Disposal:	Cleaner itself may be disposed through municipal systems. Oil cleaned from surfaces must be disposed following local regulations.

MATERIAL SAFETY DATA SHEET

ODOR SEAL

SECTION I - IDENTIFICATION

Manufacturer:	JG Industries, Inc.		
Address:	272 Route 46, Rockaway, N.J. 07866		
Phone:	(973) 627-0722	**Fax:**	(973) 627-2982
Date Prepared:	January 4, 2014	**Formulation #:**	JG200
Trade Name:	**ODOR SEAL↓**		
Product:	Industrial odor eliminator and degreaser.		

SECTION II - INGREDIENTS AND HAZARD CLASSIFICATION

Ingredients (CAS)	Percent	OSHA PEL/TLV

Components are classified trade secret. No components are believed to be hazardous, or listed in the NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed as hazardous by SARA, CERCLA, or RCRA. No OSHA PEL's are established for any of the ingredients.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	212°F.	**Vapor Pressure (mm Hg):**	1.0 @ 20°C
Solubility in water:	100%	**Specific Gravity:**	1.02 @ 60°F
pH:	7.5 (concentrate)	**Appearance and Odor:**	Clear in color. Fresh scent. (Note: No d-limonenes.)

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point:	Not applicable.	**Flammable Limits:**	Not applicable.
LEL:	Not applicable.	**UEL:**	Not applicable.

Extinguishing Media: Not applicable.
Special Fire Fighting Procedures: Not applicable.
Unusual Fire and Explosion Hazards: None.

SECTION V - REACTIVITY DATA

Stability: Stable. **Incompatibility:** None.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.
Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Exposure Limits

OSHA PEL:	Not established.	**ACGIII TEL:**	Not established.

Routes of Entry

Inhalation:	Yes	**Skin:**	Yes	**Ingestion:**	Yes

Signs and Symptoms of Exposure

Eyes:	Odor Seal is not considered an ocular irritant.
Skin:	Odor Seal is not considered to be a dermal irritant.
Inhalation:	Negligible.
Ingestion:	Odor Seal is not considered to be orally toxic.

First Aid

Eyes:	Flush eyes with water for 1 minute.
Skin:	Rinse affected area with water.
Inhalation:	Negligible.
Ingestion:	Drink water.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Spill or Leak Procedures
Rinse affected area with water.
Waste Disposal Method
Dispose as non-hazardous waste in accordance with local regulations.
Storage and Handling Precautions
Store between 32 °F and 120 °F in closed container to prevent evaporation. Freezing will not damage material as long as container remains intact.
Other Precautions
Product is a strong and effective cleaner and encapsulator of hydrocarbons. Although components have no hazard levels, the product has a strong base and will remove oils from the skin. Avoid prolonged skin contact.

SECTION VIII - CONTROL MEASURES

Respiratory Protection
In confined spaces, use respirator appropriate to odor being eliminated or odor producing source being sprayed; otherwise none.
Ventilation
Under ordinary conditions of use for its intended purpose, no special ventilation is required.
Protective Gloves
Wear when working with bulk applications and there is prolonged probability of skin contact, otherwise none.
Eye Protection
Wear if needed to prevent reasonable probability of eye contact.
Work/Hygienic Practices
Do not ingest, do not splash into eyes, and do not inhale for prolonged periods as with any chemical compound.

SECTION IX - HAZARD CLASSIFICATION

IMO Hazard Class and Number: Non-hazardous. **UN Number**: Not applicable.
US DOT Hazard Class: Not regulated by DOT **US DOT Identification Number**: Not applicable.

SECTION X - REGULATORY INFORMATION

EPA SNAP: Significantly New Alternative Policy Program Listed.

HMIS Rating: Health: 0 Flammability: 0 Reactivity: 0

SECTION XI - ENVIRONMENTAL DATA

Biodegradability: Product is 100% biodegradable in an active environment within 21 days.
Toxicity: Testing is a 96 hour static non-renewal test, using mysidopisis babia, showed less than 5% mortality at a concentration of 338 ppm. Estimated LC50 > 2,500 ppm.

Fire BLOCK

What is FIRE BLOCK?

Fire Block is an environmentally friendly NON-toxic fire retardant, which forms a thermal insulation barrier that prevents the spreading of flames and inhibits the development of the toxic hydrocarbon smoke.

It has been NFPA and ASTM tested to be class Class A rated for flame spread and smoke development. It is also tested to be compliant to NFPA701 for textile fabrics.

Spray or dip this easy to apply agent directly to items such as clothing, drapes, furniture, carpeting, boxes, wood ect. It will not stain, has no odors, NON-corrosive and is biodegradable, making it a safe application for practically any use from personal to professional.

Fire Block is specially formulated to contain NO polybrominated diphenyl ethers, also known as PBDEs, volatile organic compounds (VOCs) or neurotoxins that cause long–term damage to both humans and the environment, making it safe to be applied while people are present.

It will remain effective until it is washed out and can even be mixed with latex paint to prevent flame spread. Whether it is for personal use or professional this is an excellent choice for protection against fire.

FIRE BLOCK
FIRE RETARDANT

The FIRE BLOCK Fire Retardant is a fire retarding agent specially formulated to effectively and safely retard all Class A materials. Developed from the extraordinary life saving and fire fighting Cold Fire, rapid cooling fire extinguishing agent, the FIRE BLOCK Fire Retardant is a unique and revolutionary product, which retards fires by stopping dangerous flames from spreading. The FIRE BLOCK Fire Retardant works to actually form its own insulation barrier to prevent dangerous flames from spreading. The FIRE BLOCK Fire Retardant also inhibits the development of hydrocarbon smoke. The FIRE BLOCK Fire Retardant is non-flammable, safe to store, handle and use, leaves no residue; and is environmentally safe.

Capabilities	
Retarding Power:	After treatment of retardant on all Class A type surfaces there is zero flame spread.
Applications:	Spray on Class A surfaces of all types (wood, paper, cotton, furnishing, all non-polymer surfaces).
Cleanup:	None needed. Leaves no residue.

Characteristics	
pH:	pH of concentrate is 7.0
Flash Point:	Negligible.
Boiling Point:	212 ℉.
Odor:	Mild smell. Does not contain d-limonenes. Light straw color.
Water Solubility:	Complete.
Shelf Life:	Indefinite when stored in closed containers between 32 ℉ and 120 ℉.
Dilution Strength:	Do not dilute. Use in concentrated form.
Residue:	Product leaves little to no residue.

Environmental and Safety Considerations	
Biodegradability:	100% in 21 days under ideal conditions.
Hazardous Components:	No components are listed in the NIOSH Recommendations for Occupational Health Standards, 1988, or are defined as hazardous by SARA, CERLA, or RCRA. No OSHA PEL's are established for other ingredients.
Handling:	Retardant is neutral. It will remove oil from the skin and will irritate the eyes if sprayed directly into them. When handling bulk concentrate, eye protection, gloves, and impervious clothing should be worn when there is danger of splashing, prolonged exposure to vapor, or prolonged skin contact, as with all chemicals. Do not ingest, splash into eyes, or inhale for prolonged periods.
Disposal:	Retardant itself may be disposed through municipal systems.

Fire BLOCK

Fire BLOCK

MATERIAL SAFETY DATA SHEET

FIRE BLOCK FIRE RETARDANT

SECTION I - IDENTIFICATION

Manufacturer: FIREFREEZE Worldwide, Incorporated
Address: 272 Route 46, Rockaway, N.J. 07866
Phone: (973) 627-0722 **Fax:** (973) 627-2982
Date Prepared: January 4, 2014 **Formulation #:** **JG302R**
Trade Name: **FIRE BLOCK**
Product: Class A Fire Retardant

SECTION II - INGREDIENTS AND HAZARD CLASSIFICATION

No components are believed to be hazardous, or listed in the NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed as hazardous by SARA, CERCLA, or RCRA. No OSHA PEL's are established for any of the other ingredients.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 212 ºF. **Vapor Pressure (mm Hg):** Same as water.
Solubility in water: 100% **Specific Gravity:** 1.09 @ 60 ºF.
pH: 7.0 **Appearance and Odor:** Straw colored liquid, mild smell. (Note: contains no d-limonenes.)

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point: Not applicable **Flammable Limits:** Non-flammable.
LEL: Not applicable. **UEL:** Not applicable.
Extinguishing Media: Not applicable.
Special Fire Fighting Procedures: None. **Unusual Fire and Explosion Hazards:** None.

SECTION V - REACTIVITY DATA

Stability: Stable. **Incompatibility:** None.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.
Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Exposure Limits
OSHA PEL: Not established. **ACGIII TLV:** Not established.
Routes of Entry
Inhalation: Yes **Skin:** Yes **Ingestion:** Yes

Signs and Symptoms of Exposure
Skin: Negligible hazard. Not a primary skin irritant.
Eyes: Not a primary ocular irritant.
Inhalation: Negligible.
Ingestion: Hazard is extremely low. Material is considered non-toxic.

First Aid
Eyes: Immediately flush eyes with water for at least 15 minutes, as per OSHA standards. Seek medical aid if irritation persists.
Skin: Flush affected area and wash with water.
Inhalation: Negligible.
Ingestion: Drink water. Obtain medical attention if necessary.

FireBLOCK

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Spill or Leak Procedures
Rinse affected area with water. Will not harm the environment.
Waste Disposal Method
Dispose as non-hazardous waste in accordance with local regulations.
Storage and Handling Precautions
Store in temperatures from 32 °F to 120 °F in closed containers to prevent evaporation and deterioration. Freezing will not damage material as long as container remains intact.
Other Precautions
Although components have low hazard levels, the product will remove oils from the skin like the common soap. Avoid prolonged skin contact.

SECTION VIII - CONTROL MEASURES

Respiratory Protection
Not required.
Ventilation
No special ventilation is required.
Protective Gloves
Wear if there is prolonged skin contact with product.
Eye Protection
Wear if needed to prevent reasonable probability of eye contact.
Work/Hygienic Practices
Do not ingest, splash into eyes, and do not inhale for prolonged periods.

SECTION IX - HAZARD CLASSIFICATION

IMO Hazard Class and Number: Non-hazardous. **UN Number**: Not applicable.
US DOT Hazard Class: Not regulated by DOT **US DOT Identification Number**: Not applicable.

SECTION X - ENVIRONMENTAL DATA

Biodegradability: Product is 100% biodegradable in an active environment within 21 days.
Toxicity: In accordance with U.S. EPA Office of Pollution Prevention and Toxins criteria for ranking the acute toxicity of chemicals, ColdFire, Fire Retardant is considered to be of low concern.

For further information feel free to contact our main office.
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