



SAFETY DATA SHEET

FILE NO.:

ICE SHIELD PLUS

MSDS DATE: 06/21/2016

SYNONYMS: ICE SHIELD PLUS

*** * * Section 1 – PRODUCT AND COMPANY IDENTIFICATION * * ***

PRODUCT NAME:	ICE SHIELD PLUS	EMERGENCY PHONE:	(800) 451-8346
		AFTER HOURS:	(800) 451-8346
PRODUCER:	SMR Technologies, Inc.	CHEMTREC PHONE:	(800) 424-9300
ADDRESS:	93 Nettie Fenwick Road Fenwick, WV 26202-4000		

*** * * Section 2 – HAZARDS IDENTIFICATION * * ***

GHS Classification:

H227: Flammable Liquids- Category 4

H361: Toxic To Reproduction- Category 2

Ingredients of unknown toxicity: Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 75%

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

Warning

Hazard Statements

H305: May be fatal if swallowed and enters airways.

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

Precautionary Statements

Prevention

- P202: Do not handle until all safety precautions have been read and understood.
- P264: Wash thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

- P301: If SWALLOWED: Immediately call a poison center or doctor / physician. Do not induce vomiting.
- P302: If on SKIN (or hair): Wash with plenty of soap and water. Remove / Take off all contaminated clothing immediately. Rinse skin with water/shower.
- P304: If INHALED: Remove victim to fresh air and keep comfortable for breathing. Call a poison center/doctor if the victim feels unwell.
- P308: If exposed or concerned: Get medical advice/attention.
- P370: In case of fire: Use water spray, fog, dry chemical, carbon dioxide or fire-fighting foam.

Storage

- P403+235: Store in a well-ventilated place. Keep cool.
- P405: Store locked up.

Disposal

- P501: Dispose of contents/containers in accordance with local/regional/national/international regulations.

*** Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS ***

CAS #	Component	Weight Percent
TRADE SECRET	Silicone Fluid	100.

*** Section 4 – FIRST AID MEASURES ***

First Aid: Eyes

Flush eyes with clean running water for at least fifteen (15) minutes. Following flushing, seek medical attention if irritation persists.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops. Wash contaminated clothing before reuse.

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

First Aid: Ingestion (swallowing)

DO NOT INDUCE VOMITING. Dilute slowly with 1 – 2 glasses of water or milk and seek medical attention. Do not give anything by mouth to an unconscious person. If spontaneous vomiting occurs, lean the victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation (breathing)

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 – FIRE FIGHTING MEASURES * * *



NFPA 704 Hazard Class

Health: 1 Flammability: 2 Instability: 0 (0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Severe)

General Fire Hazards

See Section 9 for Flammability Properties.
Moderate flammability.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide, silicon dioxide, nitrogen oxides, methanol, formaldehyde and non-combusted hydrocarbons (smoke).

Extinguishing Media

SMALL FIRES: All standard firefighting media: Use water spray, fog, dry chemical, carbon dioxide or fire-fighting foam.

LARGE FIRES: All standard firefighting media: Use water spray, fog, dry chemical, carbon dioxide or fire-fighting foam.

Unsuitable Extinguishing Media

None

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

Fire Fighting Equipment / Instructions

Small fires in the beginning stage may typically be extinguished using handheld portable fire extinguishers and other firefighting equipment. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied firefighting foam.

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full face piece and full protective clothing.

*** * * Section 6 – ACCIDENTAL RELEASE MEASURES * * ***

Recovery and Neutralization

Contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken.

Emergency Measures

Evacuate nonessential personnel and secure all ignition sources. No road flares, smoking or flames in hazard area. Consider wind direction. Stay upwind and uphill, if possible.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see

Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. If spill occurs on water notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802).

Prevention of Secondary Hazards

None

* * * Section 7 – HANDLING AND STORAGE * * *

Handling Procedures

Wear protective gloves / clothing and eye / face protection. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Storage Procedures

Store only in approved containers. Keep away from flame, sparks, excessive temperatures and open flames. Keep containers closed and clearly labeled.

Store in a well-ventilated area.

Incompatibilities

Keep away from strong oxidizers, ignition sources and heat.

* * * Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION * * *

Component Exposure Limits

CAS #	Component	Exposure Limits
Trade Secret	Silicone Fluid	ACGIH: No data

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use explosion-proof equipment and lighting in classified / controlled areas.

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

Personal Protective Equipment: Respiratory

Use a NIOSH-approved positive-pressure, supplied air respirator with escape bottle or self-contained breathing apparatus (SCBA) for gas concentrations above occupational exposure limits, for potential for uncontrolled release, if exposure levels are not known, or in an oxygen-deficient atmosphere (oxygen content less than 19.5 percent). A respiratory program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant the use of a respirator.

Personal Protective Equipment: Hands

Gloves constructed of nitrile or neoprene are recommended.

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying. Eye protection that meets or exceeds ANSI Z.87.1 is recommended. Depending on conditions of use, a face shield may be necessary.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

Hygiene Measures

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use gasoline or solvents (naphtha, kerosene, etc.) for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Consider the need to discard contaminated leather shoes and gloves.

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

*** Section 9 – PHYSICAL AND CHEMICAL PROPERTIES ***

Appearance:	Clear liquid	Odor:	Amine
Physical State:	Liquid	pH:	ND
Vapor Pressure:	< 5 mm Hg	Vapor Density (air = 1):	> 1
Boiling Point:	> 350°F (> 175°C)	Melting Point:	ND
Solubility (H2O):	Soluble	Specific Gravity:	0.974
Evaporation Rate:	< 1 (Water = 1)	VOC:	< 1.5%
Octanol / H2O Coeff.:	ND	Flash Point:	175°F 74°C
		Flash Point Method:	Pensky Martens Closed Cup (PMCC)
Lower Explosive Limit: (LFL)	Unknown	Upper Explosive Limit: (UFL)	Unknown
Auto Ignition:	Unknown	Burning Rate:	ND

*** Section 10 – CHEMICAL STABILITY & REACTIVITY INFORMATION ***

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Keep away from ignition sources and high temperatures.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

* * * Section 11 – TOXICOLOGICAL INFORMATION * * *

Acute Toxicity

A: General Product Information

May be harmful if
swallowed.

B. Component Analysis – LD50/LC50

CAS #	Component	Toxicology
Trade Secret	Silicone Fluid	Oral LD50 rat > 5,000 mg/kg Inhalation LC50 rat > 535 mg/l

Potential Health Effects: Skin Corrosion Property / Stimulativeness

May cause skin irritation with prolonged or repeated contact.

Potential Health Effects: Eye Critical Damage / Stimulativeness

Contact with eyes may cause moderate irritation.

Potential Health Effects: Ingestion (swallowing)

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation (breathing)

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract.

Respiratory Organs Sensitization / Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

Not known to cause cell mutagenicity.

Carcinogenicity

A: General Product Information

This product is not listed as a carcinogen by NTP, IARC, or OSHA.

B: Component Carcinogenicity

None of this product's ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC, or OSHA.

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ general toxicity exposure effects through prolonged or repeated exposure.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

***** Section 12 – ECOLOGICAL INFORMATION *****

Ecotoxicity

A: General Product Information

Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable under Federal and State regulations.

B: Component Analysis – Ecotoxicity – Aquatic Toxicity

No information available.

Persistence / Degradability

No information available

Bioaccumulation

No information available

Mobility in Soil

No information available

***** Section 13 – DISPOSAL CONSIDERATIONS *****

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment Recommendations.

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

Disposal of Contaminated Containers or Packaging

Recover or recycle if possible. It is the responsibility of the generator to determine the toxicity and physical properties of the material generated so as to properly classify the waste and ensure disposal methods comply with applicable regulations.

This material, if discarded should be fully characterized for ignitability (D001) and reactivity (D003) prior to disposal (40 CFR261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material. Do not dispose of by draining onto the ground. This will result in soil and groundwater contamination. Waste arising from spillage or tank cleaning should be disposed of in accordance with applicable regulations.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a qualified drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

*** * * Section 14 – TRANSPORTATION INFORMATION * * ***

DOT Information

Shipping Name: Not regulated as a dangerous good

UN #: Not Regulated **Hazard Class:** Not Regulated

*** * * Section 15 – REGULATORY INFORMATION * * ***

Regulatory Information

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA Section 311/312 – Hazard Classes

No SARA Hazards.

SARA Section 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA SECTION 313 – SUPPLIER NOTIFICATION

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

State Regulations

Component Analysis – State

The following components appear on one or more of the following state hazardous substances lists

Component	CAS	PA	OH	WV	VA	KY	TX
Silicone Fluid	Trade Secret	Yes	No	No	No	No	No

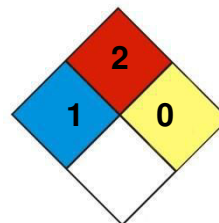
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

*** Section 16 – OTHER INFORMATION ***

NFPA® Hazard Rating

Health
Fire
Reactivity



HMIS® Hazard Rating

Health 1 = Slight
Fire 2 = Moderate
Physical 0 = Minimal
 * Chronic

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NJTSR = New Jersey Trade Secret Registry.

Literature References

None

SAFETY DATA SHEET

Material Name: ICE SHIELD PLUS

US GHS

Other Information

The information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

Date of Preparation: June 21, 2016

Date of Last Revision: April 25, 2019

End of Sheet