



SAFETY DATA SHEET

ARMOR Shield® MPI Foam Emitter

1. IDENTIFICATION

Product identifier

Product Name ARMOR SHIELD MPI Foam Emitter Pads & Shields

Other means of identification

SDS # APPAC-001-CA

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Corrosion inhibiting device

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Armor Protective Packaging
862 Arvin Ave.
Stoney Creek, Ontario Canada L8E 5P2
Phone: 905-643-9839
Fax: 905-643-3688

Emergency telephone number

Initial supplier phone number Please enter Initial Suppliers Phone Number here
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Foam-like article

Physical state Solid

Odour Ammoniacal

Classification

Acute toxicity - Inhalation (Dusts/Mists)

Category 4

Signal word

Warning

Hazard statements

Harmful if inhaled



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Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapours/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTRE or doctor if you feel unwell

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical nature

Polymer binder with Volatile Corrosion Inhibitor Additives.

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Sodium benzoate	532-32-1	1-5	-	-
Glycerol	56-81-5	0.5-1.5	-	-

4. FIRST AID MEASURES

Description of first aid measures

Eye contact

Do not rub eyes. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Skin contact

Wash with plenty of water and soap. If skin irritation persists, call a doctor.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE/doctor/physician if you feel unwell.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms

May irritate eyes by rubbing eyes while handling material. Irritation and allergic dermatitis



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are possible. Harmful if inhaled. Can cause irritation to mouth, esophagus and stomach.

Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media Water spray or fog. Foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media Not determined.

Specific hazards arising from the chemical Not determined.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required.

Environmental precautions

Environmental precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Keep in suitable, closed containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with



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skin, eyes or clothing. Use personal protection recommended in Section 8. Do not breathe dust. Use only outdoors or in a well-ventilated area. Wash face, hands and any exposed skin thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Avoid temperatures over 250°F. Store away from incompatible materials. Material should be kept clear from high risk fire areas and stored in enclosed packaging.

Incompatible materials

Strong oxidising agents Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	Canada - Alberta - Occupational Exposure Limits - Ceilings	Canada - British Columbia - Occupational Exposure Limits - Ceilings	Canada - Ontario - Occupational Exposure Limits - Ceilings	Quebec
Glycerol 56-81-5	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 3 mg/m ³		TWA: 10 mg/m ³

Appropriate engineering controls

Engineering controls

Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/face protection

Use safety glasses or chemical splash goggles.

Skin and body protection

Wear suitable protective clothing. Wear suitable gloves. (butyl, nitrile, PVA are all suitable glove materials).

Respiratory protection

Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Solid plastic-like article
Colour	Not determined
Odour	Ammoniacal
Odour Threshold	Not determined



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<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting point / freezing point	Not determined	
Boiling point / boiling range	Not determined	
Flash point	157 °C / 315 °F	
Evaporation Rate	Negligible	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	Not determined	
Lower flammability or explosive limits	Not determined	
Vapour Pressure	Negligible	
Vapour Density	Not determined	
Relative Density	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive properties	Not determined.	
Oxidising properties	Not determined.	
<u>Other information</u>		
Softening Point	Not determined	
Molecular weight	Not determined	
VOC Content (%)	Not determined	
Liquid Density	Not determined	
Bulk density	Not determined	

10. STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous Polymerisation	Hazardous polymerisation does not occur.
Conditions to Avoid	Incompatible Materials.
Incompatible materials	Strong oxidising agents. Acids.
Hazardous decomposition products	None known based on information supplied.



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11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye contact	Avoid contact with eyes.
Skin contact	Avoid contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	Do not ingest.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	29,704.00
ATEmix (inhalation-dust/mist)	1.96

Unknown acute toxicity No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium benzoate 532-32-1	= 4070 mg/kg (Rat)	-	-
Glycerol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1 h
Benzotriazole 95-14-7	= 560 mg/kg (Rat)	> 1 g/kg (Rat) > 10000 mg/kg (Rabbit)	= 1910 mg/m ³ (Rat) 3 h
Sodium tolyltriazole 64665-57-2	= 1980 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Group 3 IARC components are "not classifiable as human carcinogens".

Chemical name	ACGIH	IARC	NTP	OSHA
Polyurethane 9009-54-5	-	Group 3	-	-

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"



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12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium benzoate 532-32-1	-	100: 96 h Pimephales promelas mg/L LC50 static 420 - 558: 96 h Pimephales promelas mg/L LC50 flow-through	-	650: 48 h Daphnia magna mg/L EC50
Glycerol 56-81-5	-	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	-	500: 24 h Daphnia magna mg/L EC50
Benzotriazole 95-14-7	15.4: 96 h freshwater algae mg/L EC50	39: 96 h Oncorhynchus mykiss mg/L LC50	-	141.6: 48 h water flea mg/L EC50

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility

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Chemical name	Partition coefficient
Sodium benzoate 532-32-1	-2.13
Glycerol 56-81-5	-1.76

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods**Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances

DOT

Not regulated



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<u>TDG</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

15. REGULATORY INFORMATION

REGULATORY INFORMATION

International Regulations

Ozone-depleting substances (ODS) Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Sodium benzoate	X	X	X	X	X	X	X	X
Glycerol	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances



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16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA

Health Hazards Not determined

Flammability Not determined

Instability Not determined

Special Hazards Not determined

HMIS

Health Hazards Not determined

Flammability Not determined

Physical hazards Not determined

Personal Protection Not determined

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA

TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling

Maximum limit value

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Skin designation

Issue Date:

24-Oct-2014

Revision Date:

11-Oct-2018

Revision Note:

New format.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet