



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 1 of 11

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **BOREM 100-HMP**

Product Code(s) : Not available.

Recommended use of the chemical and restrictions on use

: Dispersing Agent, Superplasticizer, Water reducer for cement
Use pattern: Professional Use Only
Recommended restrictions: None known.

Chemical family : Mixture

**Name, address, and telephone number
of the supplier:**

Borden & Remington Corp

63 Water St.
PO Box 2573
Fall River, MA, USA
02722

Supplier's Telephone # : 508-675-0096

24 Hr. Emergency Tel # : Chemtrec: 1-800-424-9300 (Within Continental U.S.); 703-527-3887.

**Name, address, and telephone number of
the manufacturer:**

Refer to supplier

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Tan Powder. Bland odor.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:

Combustible Dust

Label elements

Signal Word

WARNING!

Hazard statement(s)

May form combustible dust concentrations in air.

Precautionary statement(s)

None required.

Other hazards

Other hazards which do not result in classification:

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be mildly irritating to skin, eyes and respiratory system. Burning produces obnoxious and toxic fumes.



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 2 of 11

SAFETY DATA SHEET

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration</u>
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	Blancol	9084-06-4	78.0 - 98.0
Sodium sulfate	Sulfuric acid, sodium salt	7757-82-6	5.0 - 12.0
Water	H2O	7732-18-5	2.0 - 10.0
The following ingredient may be released from the product only when heated above 150°C:			
Formaldehyde	Methanal Methyl Aldehyde Methylene oxide	50-00-0	Trace

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

- Ingestion* : Do NOT induce vomiting. Have victim rinse mouth with water, then give one to two glasses of water to drink. Never give anything by mouth to an unconscious person. Call a physician.
- Inhalation* : If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Obtain medical attention if symptoms develop and persist.
- Skin contact* : Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. If irritation or symptoms develop, seek medical attention.
- Eye contact* : Immediately flush eyes with running water for at least 5 to 10 minutes. If irritation persists, seek prompt medical attention.

Most important symptoms and effects, both acute and delayed

- : May cause mild eye irritation. Symptoms may include stinging and tearing. May cause mild skin irritation. Symptoms may include mild redness and swelling. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Indication of any immediate medical attention and special treatment needed

- : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable extinguishing media* : Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.
- Unsuitable extinguishing media* : Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

- : Burning may produce irritating, toxic and obnoxious fumes. Dust may form explosive mixture in air.

Flammability classification (OSHA 29 CFR 1910.106)

- : Combustible Dust

Hazardous combustion products

- : Carbon oxides ;formaldehyde

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 3 of 11

SAFETY DATA SHEET

- : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
- Special fire-fighting procedures*
- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Wear suitable protective equipment. Refer to protective measures listed in sections 7 and 8. Restrict access to area until completion of clean-up.

Environmental precautions : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

Methods and material for containment and cleaning up

- : Ventilate area of release. Stop spill or leak at source if safely possible. Dike for water control. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

Special spill response procedures

- : In case of a transportation accident, contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887.
 US CERCLA Reportable quantity (RQ): None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

- : Use only in well-ventilated areas. Wear suitable protective equipment during handling. Avoid breathing dust and fume. Avoid contact with eyes, skin and clothing. Keep away from extreme heat and flame. Keep away from incompatibles. Keep containers tightly closed when not in use. Wash thoroughly after handling. Avoid dust formation.

Conditions for safe storage : Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.

Incompatible materials : Oxidizing agents; Acids.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	N/Av	N/Av	N/Av	N/Av
Sodium sulfate	N/Av	N/Av	N/Av	N/Av
Water	N/Av	N/Av	N/Av	N/Av
Formaldehyde	0.3 ppm (Ceiling)	N/Av	0.75 ppm	2 ppm

Exposure controls



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 4 of 11

SAFETY DATA SHEET

Ventilation and engineering measures

: Use in a well-ventilated area. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection

: If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Advice should be sought from respiratory protection specialists. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02.

Skin protection

: Gloves impervious to the material are recommended. Advice should be sought from glove suppliers.

Eye / face protection

: Chemical goggles must be worn to prevent dusts from entering the eyes.

Other protective equipment

: Wear sufficient clothing to prevent skin contact. Depending on conditions of use, an impervious apron should be worn. An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

: Avoid breathing dust and fume. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Tan Powder.
Odour : Bland odor.
Odour threshold : N/Av
pH : 7-10.5 (1% solution)
Melting/Freezing point : Not available.

Initial boiling point and boiling range

: Not available

Flash point : Not flammable.

Flashpoint (Method) : Not applicable.

Evaporation rate (BuAe = 1) : N/Av

Flammability (solid, gas) : Not applicable.

Lower flammable limit (% by vol.) : Not applicable.

Upper flammable limit (% by vol.) : Not applicable.

Oxidizing properties : None known.

Explosive properties : Dust may form explosive mixture in air.

Vapour pressure : N/Av

Vapour density : N/Av

Relative density / Specific gravity : Not available.

Solubility in water : Soluble

Other solubility(ies) : Not available.

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: N/Av

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available.

Viscosity : Not available.

Volatiles (% by weight) : Not available.



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 5 of 11

SAFETY DATA SHEET

Volatile organic Compounds (VOC's)

: N/Av

Absolute pressure of container

: N/Av

Flame projection length

: N/Av

Other physical/chemical comments

: None known or reported by the manufacturer.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.

Chemical stability : Material is stable under normal conditions. Dust can form an explosive mixture in air.

Possibility of hazardous reactions

: Hazardous polymerization does not occur.

Conditions to avoid

: Avoid excessive heat, sparks and open flame. Avoid contact with incompatible materials. Do not use in areas without adequate ventilation. Avoid dust formation.

Incompatible materials

: Oxidizing agents; Acids.

Hazardous decomposition products

: See Section 5 (Fire Fighting Measures).

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES

Routes of entry skin & eye : YES

Routes of entry Ingestion : YES

Routes of exposure skin absorption

: NO

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: Inhalation of dust or fumes may cause irritation of the nose, throat and upper respiratory tract.

Sign and symptoms ingestion

: Ingestion may irritate digestive tract and cause nausea, vomiting and diarrhea.

Sign and symptoms skin

: Direct skin contact may result in little or no irritation.

Sign and symptoms eyes

: May cause mild transient irritation.

Potential Chronic Health Effects

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Mutagenicity

: Not expected to be mutagenic in humans.

Carcinogenicity

: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity

: Not expected to cause reproductive effects.

Sensitization to material

: Not expected to be a skin or respiratory sensitizer.



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 6 of 11

SAFETY DATA SHEET

Specific target organ effects : Target Organs::Eyes, skin, respiratory system, digestive system, central nervous system.

This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Medical conditions aggravated by overexposure

: None known.

Synergistic materials

: Not available.

Toxicological data

: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<u>Chemical name</u>	<u>LC₅₀(4hr)</u>	<u>LD₅₀</u>	
	<u>inh. rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	N/Av	3800 mg/kg	N/Av
Sodium sulfate	> 2.4 mg/L (dust) (No mortality)	> 5000 mg/kg	N/Av
Water	N/Av	>90 mL/kg	N/Av
The following ingredient may be released from the product only when heated above 150°C:			
Formaldehyde	287 ppm	800 mg/kg (rat) The estimated human lethal dose is: 317 - 475 mg/kg	300 mg/kg

Other important toxicological hazards

: None known.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : Not expected to be harmful to aquatic organisms. Do not allow material to contaminate ground water system. See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Fish</u>		
		<u>LC50 / 96h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	N/Av	N/Av	N/Av
Sodium sulfate	7757-82-6	7960 mg/L (Fathead minnow)	N/Av	None.
Water	7732-18-5	No information available.	No information available.	Not applicable.
Formaldehyde	50-00-0	6.7 mg/L (Striped bass)	≥ 48 mg/L/28-day (Japanese ricefish)	None.



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 7 of 11

SAFETY DATA SHEET

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	N/Av	N/Av	N/Av
Sodium sulfate	7757-82-6	1766 mg/L (Daphnia magna)	N/Av	None.
Water	7732-18-5	No information available.	No information available.	Not applicable.
Formaldehyde	50-00-0	5.8 mg/L (Daphnia magna)	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	N/Av	N/Av	N/Av
Sodium sulfate	7757-82-6	N/Av	N/Av	None.
Water	7732-18-5	No information available.	No information available.	Not applicable.
Formaldehyde	50-00-0	14.7 mg/L/24hr (Green algae)	N/Av	None.

Persistence and degradability

: No data is available on the product itself.

Bioaccumulation potential

: No data is available on the product itself.

<u>Components</u>	<u>Partition coefficient n-octanol/ater (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt (CAS 9084-06-4)	N/Av	N/Av
Sodium sulfate (CAS 7757-82-6)	- 3	0.5
Water (CAS 7732-18-5)	N/Av	N/Av
Formaldehyde (CAS 50-00-0)	0.35	3

Mobility in soil : No data is available on the product itself.

Other Adverse Environmental effects

: No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal

: Handle waste according to recommendations in Section 7.

Methods of Disposal

: Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 8 of 11

SAFETY DATA SHEET

SECTION 14. TRANSPORTATION INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	None.	Not regulated.	not regulated	none	
49CFR/DOT Additional information	None.				
TDG	None.	Not regulated.	Not regulated	none	
TDG Additional information	None.				

Special precautions for user : None known or reported by the manufacturer.

Environmental hazards : See ECOLOGICAL INFORMATION, Section 12.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

<u>Ingredients</u>	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de minimus Concentration
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	Yes	N/Ap	N/Av	No	N/Ap
Sodium sulfate	7757-82-6	Yes	None.	None.	No	N/Ap
Water	7732-18-5	Yes	N/Ap	N/Av	No	N/Ap
Formaldehyde	50-00-0	Yes	100 lbs / 45.4 kg	500 lb TPQ	Yes	0.1%

Fire Hazard Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 9 of 11

SAFETY DATA SHEET

<u>Ingredients</u>	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	No	N/Ap	No	No	No	No	No	No
Sodium sulfate	7757-82-6	No	N/Ap	No	Yes	No	No	Yes	No
Water	7732-18-5	No	N/Ap	No	No	No	No	No	No
Formaldehyde	50-00-0	Yes	Cancer (gas)	Yes	Yes	Yes	Yes	Yes	Yes

Canadian Information:

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	CAS #	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	N/Av	Present	Present	(4)-557	KE-25565	Present	HSR003160
Sodium sulfate	7757-82-6	231-820-9	Present	Present	(1)-501	KE-31609	Present	May be used as a single component chemical under an appropriate group standard
Water	7732-18-5	231-791-2	Present	Listed	Listed	KE-35400	Present	Listed
Formaldehyde	50-00-0	200-001-8	Present	Present	(2)-482	KE-17074	Present	HSR001584, HSR001162, HSR001518, HSR001583 (dilution)

SECTION 16. OTHER INFORMATION

Legend

- : ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- CSA: Canadian Standards Association
- DOT: Department of Transportation
- EPA: Environmental Protection Agency
- HMIS: Hazardous Materials Identification System
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- LC: Lethal Concentration



BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 10 of 11

SAFETY DATA SHEET

LD: Lethal Dose
 MN: Minnesota
 N/Ap: Not Applicable
 N/Av: Not Available
 NFPA: National Fire Protection Association
 NIOSH: National Institute of Occupational Safety and Health
 NJ: New Jersey
 NTP: National Toxicology Program
 OECD: Organisation for Economic Co-operation and Development
 OSHA: Occupational Safety and Health Administration
 PA: Pennsylvania
 PEL: Permissible exposure limit
 RCRA: Resource Conservation and Recovery Act
 RI: Rhode Island
 RTECS: Registry of Toxic Effects of Chemical Substances
 SARA: Superfund Amendments and Reauthorization Act
 STEL: Short Term Exposure Limit
 TLV: Threshold Limit Values
 TWA: Time Weighted Average
 WHMIS: Workplace Hazardous Materials Identification System

References

: Material Safety Data Sheet from manufacturer
 OECD- The Global Portal to Information on Chemical Substances - eChemPortal, 2015
 Canadian Centre for Occupational Health and Safety, CCHInfoWeb Databases, 2015 (Chempendium, RTECs, HSDB, INCHEM).
 European Chemicals Agency, Classification Legislation, 2015

Preparation Date (mm/dd/yyyy)

: 11/25/2015

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

HMIS Rating

: * - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
 Health: 0 Flammability: 1 Reactivity: 0

NFPA Rating

: 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
 Health: 0 Flammability: 1 Instability: 0 Special Hazards: None.

<p><u>Prepared for:</u> Borden & Remington Corp 63 Water St. Fall River, MA 02722 Telephone: 508-675-0096</p>	
<p><u>Prepared by:</u> ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.); (888) 977-4834 (Canada) http://www.thecompliancecenter.com</p>	

DISCLAIMER

This Safety Data Sheet was prepared by ICC The Compliance Center Inc using information provided by / obtained from Borden & Remington Corp and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Borden & Remington Corp expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any

BOREM 100-HMP

SDS Preparation Date (mm/dd/yyyy): 11/25/2015

Page 11 of 11

SAFETY DATA SHEET

other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc and Borden & Remington Corp.

END OF DOCUMENT