MATERIAL SAFETY DATA SHEET

BIRCHWOOD CASEY BORE SCRUBBER® AEROSOL

Page 1 of 4 DATE REVISED: 6/1/10 REVISION MSDS NO. 4

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BORE SCRUBBER AEROSOL

PRODUCT PART NUMBERS: 33626, 33635,33640, BSA2, BSA6, BSA10

MANUFACTURED BY: BIRCHWOOD LABORATORIES, INCORPORATED

7900 Fuller Road

Eden Prairie, MN 55344 USA

Product Information Telephone Number: (952) 937-7900 (8:00-4:00pm CST)

Fax Number: (952) 937-7979 www.birchwoodcasey.com

24 HOUR TRANSPORTATION EMERGENCY NUMBER: CHEMTREC 800-424-9300 U.S. & CANADA 703-527-3887 INTERNATIONAL (Collect)

24 HOUR POISON CONTROL EMERGENCY NUMBER: 866-291-7152 U.S. & CANADA

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **DANGER!** Extremely flammable. May be harmful if swallowed. Keep away from sparks and open flames. Containers involved in fire may explode. Irritating to eyes, skin, upper respiratory tract.

APPEARANCE/ODOR: Yellow liquid, kerosene odor.

EYE CONTACT: Irritation upon direct contact.

SKIN CONTACT: Prolonged contact may cause irritation and dermatitis.

INGESTION: Irritation to the gastrointestinal tract.

INHALATION: Inhalation of high vapor concentrations may cause central nervous system effects, and symptoms such as headache, dizziness, disorientation. Extremely high vapor concentrations may lead to asphyxiation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Description	CAS#	Weight	OSHA PEL*	OSHA PEL	ACGIH TLV	ACGIH TLV
		%	TWA	STEL/C	TWA	STEL/C
Propane	74-98-6	<11	1000 ppm	NE	1000 ppm	NE
Isobutane	106-97-8	<10	NE	NE	NE	NE
Dipropylene Glycol	34590-94-8	<48	100 ppm ^(Skin)	NE	100 ppm ^(Skin)	150 ppm ^{STEL}
Monomethyl Ether						
Kerosene	8008-20-6	< 20	NE	NE	200 mg/m^3	NE
315 Sec Naphthenic Oil	64742-53-6	<4	NE	NE	NE	NE
Oxygenated	-	<4	NE	NE	NE	NE
Hydrocarbons						
Propylene Glycol	57-55-6	<6	NE	NE	NE	NE
Monoethanolamine	141-43-5	<4	6 mg/m ³	NE	7.5 mg/m^3	15 mg/m ^{3-STEL}
9-Octadecenoic Acid	112-80-1	<10	NE	NE	NE	NE

TWA – Time-weighted Average STEL – Short-term exposure limit C – Ceiling

(skin) - skin designation means that harmful amounts may be absorbed through the skin

NE = not established NA = not applicable NDA = no data available

^{*} Certain States enforce PELs that were in place in 1989, but were later removed by the U.S. Supreme Court. Check with your State OSHA to determine which PEL is enforced in your State.

Page 2 of 4 DATE REVISED: 6/1/10 REVISION MSDS NO. 4

4. FIRST AID MEASURES

EYE CONTACT: Flush immediately with clean water. Continue for at least 15 minutes. Seek medical attention if necessary.

SKIN CONTACT: Remove contaminated clothing to avoid prolonged contact. Wash affected areas with water. Seek medical attention if irritation develops.

INGESTION: Call Poison Control Center immediately. Do not induce vomiting. If victim is conscious, give 1-2 glasses of water.

INHALATION: Remove from exposure. Seek medical attention if necessary if breathing is difficult.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASHPOINT: ~ -156°F (based on propellant) METHOD USED: NDA

FLAMMABLE LIMITS: LFL: 1.9 % UFL: 15.0 %

EXTINGUISHING MEDIA: Water spray, carbon dioxide, dry chemical

FIRE & EXPLOSION HAZARDS: Excessive heat may cause bursting of aerosol cans. Vapors are heavier than air, and may travel along low surfaces to ignition sources, resulting in flashback.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear approved SCBA and full turn-out gear.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear recommended protective equipment. Eliminate ignition sources. Ventilate area. Vent remaining material to outdoor air.

Review current local, state and federal laws, codes, statutes, and regulations to determine appropriate agencies to be notified, and the conditions under which they are to be notified. (See Section 13 for waste disposal comments).

7. HANDLING AND STORAGE

HANDLING: Avoid breathing mists or vapor. Avoid eye and skin contact. Prohibit smoking in the area and exclude sources of spark or open flame. Avoid static discharge. Wear protective equipment when handling product. Empty containers may still have product residue and combustible vapors. Do not puncture or incinerate. Keep out of the reach of children.

STORAGE: Do not store where temperature may exceed 120°F.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use a NIOSH approved respirator (Full or half-face supplied-air or organic vapor cartridge/P95 type) if any of the occupational exposure limits in Section 3 may be exceeded.

EYE PROTECTION: safety glasses with side shields, or goggles

PROTECTIVE GLOVES / BODY PROTECTION: neoprene or butyl rubber

VENTILATION: Use general/dilution or local exhaust ventilation as needed to ensure that occupational exposure limits are not exceeded. Do not use in enclosed spaces.

OTHER PROTECTIVE EQUIPMENT: Eyewash

NOTE: All PPE should be selected on the basis of an exposure assessment performed by a competent person.

Page 3 of 4 DATE REVISED: 6/1/10 REVISION MSDS NO. 4

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: [-44] – [- 208°F] (range) SPECIFIC GRAVITY: (Water = 1): < 1 VAPOR PRESSURE: ~ 50 psig VOLATILE BY VOLUME: ~ 90%

VAPOR DENSITY: (Air = 1): >1 EVAPORATION RATE: (Ethyl Ether = 1): >1

SOLUBILITY IN WATER: Negligible pH: NA

APPEARANCE: Yellowish liquid ODOR: kerosene odor

10. STABILITY AND REACTIVITY

STABILITY: Stable.

CONDITIONS TO AVOID: Avoid high temperatures and ignition sources.

INCOMPATIBILITY (materials to avoid): Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce carbon monoxide, carbon dioxide,

sulfur oxides, aldehydes

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

There is no product based toxicological information for this product. Toxicology information is provided based on individual ingredients.

LD_{50s}, oral, rat: 1720 mg/kg (monoethanolamine)

TARGET ORGANS: Eyes, skin, lungs (irritant), CNS. Prolonged or repeated skin exposure may cause dermatitis. Excessive or chronic exposure to this product via inhalation, ingestion or skin absorption may result in liver or kidney effects and nervous system damage.

Medical conditions that may be aggravated by exposure: Pre-existing skin, eye, respiratory or CNS disorders.

Carcinogenicity: IARC: None NTP: None OSHA: None

12. ECOLOGICAL INFORMATION

ECOTOXICITY: NDA

ENVIRONMENTAL FATE: NDA

13. DISPOSAL CONSIDERATIONS

Empty can and discard as solid trash. Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate disposal method for the ingredients listed in Section 2. Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and disposal of hazardous waste must be dealt with by a licensed facility or waste hauler. Note: If incinerated, the resulting ash will contain extractable barium.

14. TRANSPORT INFORMATION

D.O.T. HAZARDOUS MATERIALS DESCRIPTION AND PROPER SHIPPING NAME:

Aerosols, Flammable / 2.1 / UN1950 / (Not exceeding 1 liter capacity) / Exceptions: CFR173.306

15. REGULATORY INFORMATION

TSCA (TOXIC SUBSTANCES CONTROL ACT): the materials in this product are listed on the TSCA Inventory. CERCLA (Comprehensive Response compensation and Liability Act, 40 CFR 117, 302: Reportable Quantity - NDA SARA TITLE III (Superfund Amendments and Authorization Act):

Section 311/312:

Immediate Health Effects: Yes Delayed Health Effects: Yes

Fire Hazard: Yes

Sudden Release of Pressure Hazard: Yes

Reactivity Hazard: No

Section 313 Reportable Ingredients: None

STATE "RIGHT-TO-KNOW": This product may contain components cited on certain state lists. Consult with your individual State regarding this product's components.

16. OTHER INFORMATION

National Fire Protection Association (NFPA): Health: 2 Flammability: 4 Reactivity: 0

The data here is for hazard communication to our employees, our customers and their employees, and authorized regulatory agencies. For the intended purpose, this MSDS (Material Safety data Sheet) may be duplicated or the data transcribed to an alternative form.

<u>NOTE</u>: The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Birchwood Laboratories, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular period.

Accordingly, Birchwood Laboratories, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information. NO REPRESENTATIONS, OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER TO WHICH THE INFORMATION REFERS. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.

FOR ASSISTANCE WITH PLACING ORDERS:

- Product Pricing / Payment Terms
- Shipping and Tracing of Shipments
- Sales Rep Locations

Call our <u>Sales Department</u> (952) 937-7933

Or 1-800-328-6156 or Fax (952) 937-7979

FOR PRODUCT USAGE ASSISTANCE

- Questions on Operation of Products
- Solving Finishing Problems
- Operator Safety and Pollution Control

Call our Customer Service Desk (952) 937-7916

Or 1-800-328-6156 or Fax (952) 937-7979