

PRODUCT NAME: ABRO Exhaust System Repair Cement

PRODUCT NUMBER/SIZE: ES-332-R Revision Date: 04/15/2015

SECTION 1

Identification of the Substance and of the Company/Undertaking

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.

ADDRESS: 3580 Blackthorn Court

South Bend, IN 46628

USA

PRODUCT DESCRIPTION: Brake Fluid

COMPANY PHONE: 574-232-8289

EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300

International +1-703-527-3887

SECTION 2 Hazards Identification

Classification:

Skin Corrosion/Irritation Category 1B Serious Eye Damage Category 1

Label Pictogram(s):



Signal Word: DANGER

Hazard Phrases: Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary Phrases:

Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective

gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair):

Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER/doctor/physician/first aider.

Storage / Disposal:

Store locked up. Dispose of contents/container to authorized chemical landfill or

if organic to high temperature incineration.

Other: Keep out of reach of children.



SECTION 3 Composition/Information on Ingredients

 COMPONENTS
 CAS Number
 Percent by weight

 Sodium Silicate
 1344-09-8
 55-60%

 Water
 7732-18-5
 5-5%

 Kaolin (Aluminum Silicate)
 1332-58-7
 35-40%

SECTION 4 First Aid Measures

IF ON SKIN: Immediately flush with water for at least 15 minutes. Remove contaminated clothing before re-use.

IF IN EYES: Immediately flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get immediate medical attention.

IF SWALLOWED: Do not induce vomiting. Immediately drink two glasses of water. Never give anything by mouth to an unconscious person. Call physician or transport to an emergency facility.

SECTION 5 Fire Fighting Measures

FLASH POINT: Not applicable

EXPLOSION LIMIT: Not applicable

EXTINGUISHING MEDIA: Not applicable

HAZARDOUS DECOMPOSITION PRODUCTS: Not applicable

FIREFIGHTING PRODEDURES: Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

SPECIAL FIRE & EXPLOSION HAZARDS: Not applicable

SECTION 6 Accidental Release Measures

SMALL SPILL: Absorb with vermiculite, floor absorbent or other absorbent material.

LARGE SPILL: Spills of this material are very slippery. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

WASTE DISPOSAL METHOD:

SMALL SPILL: Dispose of in accordance with all local, state and federal regulations.

LARGE SPILL: Dispose of in accordance with all local, state and federal regulations.



SECTION 7 Handling and Storage

HANDLING: Use appropriate personal protective equipment as specified in section 8. Handle in a well ventilated area.

STORAGE: Store in a covered in cool, dry place. Avoid elevated temperatures.

SECTION 8 Exposure Controls/Personal Protection

EXPOSURE GUIDELINES: No occupational exposure limits established.

PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE: Wear safety glasses.

SKIN: Wear resistant gloves such as natural rubber.

Wear impervious clothes and boots.

RESPIRATORY: Not required under normal conditions of use.

SECTION 9 Physical and Chemical Properties

BOILING POINT: 230.00 DEG. F (110 DEG. C @ 760.00 MM Hg)

VAPOR PRESSURE: 24.00 MM Hg @ 77.00 DEG. F (25.00 DEG. C)

SPECIFIC VAPOR DENSITY: AIR = 1 0.6

SPECIFIC GRAVITY: 1.60 - 1.69 @ 60 DEG. F

PERCENT VOLATILE: 30 - 35%

EVAPORATION RATE: SLOWER THAN ETHER

pH: 11.3

APPEARANCE: THICK, VISCOUS PASTE

SECTION 10 Stability and Reactivity

HAZARDOUS POLYMERIZATION: Cannot occur STABILITY: Stable None

SECTION 11 Toxicological Information

TOXICITY DATA: 1.0-2.2 gm/kg oral-rat LD50

IRRITATION DATA: Draize eye (pH/weight ratio of SiO2/Na2O): 11.6/2.54 irritant; 11.6/2.4 irritant;

12.2/2.0 corrosive; 12.4/1.8 corrosive



LOCAL EFFECTS: Irritant: skin, eye

ACUTE TOXICITY LEVEL: Moderately toxic: ingestion

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Skin disorders, and allergies

SKIN CONTACT:

ACUTE EXPOSURE: Direct skin contact may cause irritation.

CHRONIC EXPOSURE: Repeated or prolonged contact may result in dermatitis.

EYE CONTACT: ACUTE EXPOSURE:

Direct contact may cause severe irritation, pain, and corneal burns (possibly leading to blindness). The full extent of the injury may not be immediately apparent.

CHRONIC EXPOSURE: Effects depend on concentration and duration of exposure. Repeated or prolonged contact may result in conjunctivitis.

INGESTION:

ACUTE EXPOSURE: May cause irritation of the esophagus and gastrointestinal tract.

CHRONIC EXPOSURE: Repeated or prolonged ingestion may result in chronic irritation and possible ulcers.

SECTION 12 Ecological Information

ECOTOXICITY DATA:

FISH TOXICITY:

This material is believed to be non-toxic to aquatic life.

FATE AND TRANSPORT:

BIODEGRATION:

This material is inorganic and not subject to biodegradation.

PERSISTENCE: This material is believed to persist in the environment.

BIOCONCENTRATION: this material is believed not to bioaccumulate.

SECTION 13 Disposal Considerations

Containers of this material may be hazardous when emptied, since empty containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given in the data sheet must be observed.



SECTION 14 Transport Information

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

U.S. DOT UN/ID Number: Not Regulated

Proper shipping name:

Hazard class: Packing Group: Exceptions:

Environmental Hazards: Transport in Bulk:

Special Precautions:

IMO/IMDG UN/ID Number: Not Regulated

Proper shipping name:

Hazard class: Packing Group: Exceptions:

Environmental Hazards: Transport in Bulk: Special Precautions:

ICAO/IATA UN/ID Number: Not Regulated

Proper shipping name:

Hazard Class: Packing Group: Exceptions:

Environmental Hazards: Transport in Bulk: Special Precautions:

Canada UN/ID Number: Not Regulated

(TDG) Proper shipping name:

Hazard class: Packing Group: Exceptions:

Environmental Hazards: Transport in Bulk: Special Precautions:

Europe UN/ID Number: Not Regulated

(ADR/RID) Proper shipping name:

Hazard class: Packing Group: Exceptions:

Environmental Hazards: Transport in Bulk: Special Precautions:



SECTION 15 Regulatory Information

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30):

Not regulated

SARA TITLE III SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):

ACUTE: Yes CHRONIC: Yes FIRE: No REACTIVE: No SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated

OSHA PROCESS SAFETY (29CFR1910.119): Not regulated

FDA: Sodium silicates have generally recognized as safe (GRAS) status under specific FDA regulations. Refer to the code of federal regulations 21 CFR 173, 175, 176, 177, 182 and 184, which is accessible on the FDA's website.

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65: This product is not listed, but it may contain contaminants known to the state of California to cause cancer or reproductive toxicity as listed under proposition 65 state drinking water toxic enforcement act.

CANADIAN REGULATIONS:

CONTROLLED PRODUCTS REGULATIONS (CPR): This product has been classified in accordance with the criteria of the controlled products regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS CLASSIFICATION: D2B

NATIONAL INVENTORY STATUS:

U.S. INVENTORY (TSCA): All the components of this substance are listed on or are exempt from the inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed

SECTION 16 Other Information

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and



disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

ABBREVIATIONS:
NG="NOT GIVEN"
BT="BETWEEN"
<="LESS THAN"
>="GREATER THAN"
ND = Not Determined
NA = Not Applicable