

PRODUCT NAME: ABRO Motor Flush
PRODUCT NUMBER/SIZE: MF-390-R / 15 oz.

Rev Date: 2/19/2015

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: Engine Additive

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:

Flammable liquids Category 3
Aspiration Toxicity Category 1
Specific target organ toxicity - (repeated exposure) Category 1
Chronic aquatic toxicity Category 2

Label Pictogram(s):



Signal Word: DANGER

Hazard Phrases: Flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Precautionary Phrases: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Do not get in eyes, on skin, or on clothing. Avoid release to the environment.

Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Do

NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower. In case of fire: Use dry chemical, CO₂, water spray (FOG) or foam for extinction.

Storage / Disposal:

Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container to approved locations in compliance with all applicable regulations.

Other:

Keep out of reach of children.

**SECTION 3
Composition/Information on Ingredients**

COMPONENTS	CAS Number	Percent by weight
Stoddard Solvent	8052-41-3	90-100

**SECTION 4
First Aid Measures**

Eyes	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	DO NOT INDUCE VOMITING. If conscious, rinse out mouth with water. Get medical attention immediately.
Note to Physicians	There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and clinical conditions. A serious potential effect is aspiration pneumonitis, which may lead to non-cardiogenic pulmonary edema. The patient should be observed for signs of ling injury if aspiration is suspected.

**SECTION 5
Fire Fighting Measures**

Flammable Properties
Static accumulating liquid

Extinguishing Media
Use dry chemical, CO₂, water spray (FOG) or foam

Specific Hazards Arising from Chemical

Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposition products may include the following materials: carbon dioxide, carbon monoxide and hydrocarbons

Protective Equipment and Precautions for Firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6 **Accidental Release Measures**

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution.

Methods for Containment

Stop leak if without risk.

Methods for Cleanup

Move containers from spill area. Approach release from upwind. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 7 **Handling and Storage**

Handling Procedures

Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Use non-sparking tools.

Shipping and Storing Procedures

Store in accordance with local regulations. Store in a segregated and approved area. Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Do not store in unlabeled containers. Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers that retain product residue may be hazardous. Do not reuse container.

Warnings

Harmful or Fatal if Swallowed. Contains petroleum distillates.
Avoid eye contact. Avoid contact with skin or clothing.
Avoid breathing vapors.
Use with adequate ventilation.
Wash exposed skin thoroughly with soap and water after use.

Combustible Liquid.

Keep container away from heat, sparks, flames and other sources of ignition.

Keep container closed when not in use.

Store in a cool, dry area away from heat, oxidizers, and all sources of ignition.

Empty containers retain product residue. Do not reuse empty containers.

SECTION 8 Exposure Controls/Personal Protection

Product Exposure Limits

Motor Flush

ACGIH TLV: TWA: 100 ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

OSHA PEL: TWA: 500 ppm TWA: 2900 mg/m³ STEL: N/A ppm STEL: N/A mg/m³

NIOSH REL: TWA: 350 ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

ACGIH TLV: TWA: N/A ppm TWA: 5 mg/m³ STEL: N/A ppm STEL: N/A mg/m³

OSHA PEL: TWA: N/A ppm TWA: 5 mg/m³ STEL: N/A ppm STEL: N/A mg/m³

NIOSH REL: TWA: N/A ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

ACGIH TLV: TWA: N/A ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

OSHA PEL: TWA: N/A ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

NIOSH REL: TWA: N/A ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

ACGIH TLV: TWA: N/A ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

OSHA PEL: TWA: N/A ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

NIOSH REL: TWA: N/A ppm TWA: N/A mg/m³ STEL: N/A ppm STEL: N/A mg/m³

Engineering Controls

Static accumulating liquid. Ground/bond containers and equipment. Material should be handled in enclosed vessels and equipment. Use only in adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Eye/Face Protection

Chemical goggles or face shield.

Skin Protection

Chemical resistant, impervious gloves complying with an approved standard should be worn at all times. Coveralls, apron, and boots as necessary to minimize contact.

Respiratory Protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels.

General Hygiene

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

SECTION 9
Physical and Chemical Properties

Appearance	Clear to slightly cloudy	Vapor Pressure (mm Hg at 20°C)	Not Determined
Odor	Hydrocarbon	Water Soluble	No
Physical State	Liquid	Specific Gravity (g/cc)	0.77
Flash Point (°F)	105 (41°C)	Density (lbs/gal)	6.4
Boiling Point (°F)	>310	pH	Not Available

SECTION 10
Stability and Reactivity

Stability	Stable under normal conditions
Polymerization	No polymerization
Incompatibility	Strong acids and oxidizing materials
Conditions to Avoid	High temperatures can cause flash fire
Hazardous Decomposition Products	Smoke, carbon monoxide, carbon dioxide, hydrocarbons and other products of incomplete combustion.

SECTION 11
Toxicological Information

Acute Exposure	
Respiratory Irritation	May cause respiratory tract irritation. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.
Eye Irritation	May cause eye irritation. Vapors formed from heating may cause eye irritation.
Skin Irritation	May cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness.
Sensitization	Not expected to cause skin or respiratory sensitization.

Component Analysis – LD50 / LC50

Acute Toxicity Estimate (ATE) Values for Product:

Inhalation LC50	Rat >20	mg/L 1 HR
Oral LD50	Rat >7000	mg/kg
Dermal LD50	Rabbit >2000	mg/kg

Chronic Exposure	
Target Organ Effects	Data indicate reversible internal organ effects.
Carcinogenicity	The components greater than 0.1% are not listed as carcinogenic by IARC, NTP, ACGIH, or OSHA.
Mutagenicity	No data available to indicate product or any components present at greater than .1% are mutagenic or genotoxic.
Reproductive Toxicity	No data available to indicate either product or components present at greater than .1% may cause reproductive toxicity.
Teratogenicity	No data available to indicate product or any components contained at

greater than .1% may cause birth defects.

SECTION 12
Ecological Information

Component Analysis- Ecotoxicity – Aquatic Life

Duration/Test/Species	Concentration/Conditions	
Freshwater Fish Toxicity Acute LC50	ND	mg/L
Freshwater Invertebrates EC50	ND	mg/L
Algal Inhibition EC50	ND	Mg/L

Acute Toxicity	May be toxic to animal/aquatic life.
Chronic Toxicity	Do not dispose of in waterways or wetlands.
Degradability	Not determined
Bioaccumulation	Not determined
Soil Mobility	Not determined
Photodegradation	Yes
Partition Coefficient (log K_{ow})	Not determined
Stability in Water	Stable to hydrolysis

SECTION 13
Disposal Considerations

Disposal Instructions

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

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: NA1993 Proper shipping name: Combustible Liquid, N.O.S. (Stoddard Solvent) Hazard class: Combustible Liquid Packing Group: III Exceptions: Environmental Hazards: Transport in Bulk: Special Precautions:
IMO/MDG	UN/ID Number: UN1268 Proper shipping name: Petroleum Distillates, N.O.S. (Stoddard Solvent) Hazard class: 3

Packing Group: III
 Exceptions:
 Environmental Hazards: Marine Pollutant
 Transport in Bulk:
 Special Precautions: Flash Point – See Section 9

ICAO/IATA UN/ID Number: UN1268
 Proper shipping name: Petroleum Distillates, N.O.S. (Stoddard Solvent)
 Hazard Class: 3
 Packing Group: III
 Exceptions:
 Environmental Hazards:
 Transport in Bulk:
 Special Precautions:

Canada (TDG) UN/ID Number: UN1268
 Proper shipping name: Petroleum Distillates, N.O.S. (Stoddard Solvent)
 Hazard class: 3
 Packing Group: III
 Exceptions:
 Environmental Hazards: Marine Pollutant
 Transport in Bulk:
 Special Precautions:

Europe (ADR/RID) UN/ID Number: UN1268
 Proper shipping name: Petroleum Distillates, N.O.S. (Stoddard Solvent)
 Hazard class: 3
 Packing Group: III
 Exceptions:
 Environmental Hazards:
 Transport in Bulk:
 Special Precautions:

SECTION 15
Regulatory Information

SARA Extremely Hazardous Substances (Sections 302 & 304) This product does not contain greater than 1% of any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Section 313 This product contains naphthalene, which is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA Section 311 & 312 Classifications	Acute Hazard	Yes
	Chronic Hazard	Yes
	Fire Hazard	Yes
	Reactivity Hazard	Yes

CERCLA This product does not contain greater than 0.1% of any “hazardous

substances” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

California Prop 65

This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects:

Clean Water Act / Oil Pollution Act

This product contains petroleum distillates and may be subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

Global Chemical Inventories

Inventory	Component
	All components
US TSCA	Present
EU	Present
Japan	Not Available
Australia	Present
New Zealand	Present
Canada	Present
Switzerland	Not Available
Korea	Present
Philippines	Present
China	Present
Taiwan	Not Available

HMIS

Health – 2
 Flammability – 2
 Physical – 0
 PPE –

NFPA

Health – 2
 Flammability – 2
 Instability – 1
 Special Hazard -

**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"

<="LESS THAN"

ND = Not Determined

BT="BETWEEN"

>="GREATER THAN"

NA = Not Applicable