

PRODUCT NAME: ABRO Super Heavy Duty Industrial
Strength Engine Degreaser
PRODUCT NUMBER/SIZE: DG-400

Revision Date: 10/29/2014

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 Cleaner and Degreaser
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

HMIS: Health 2 Flamm 3 React. 0 NFPA: Tox. 2 Flamm. 3 React. 0

Classification:

Extremely Flammable Aerosol Category 1
Skin irritation Category 2
Acute toxicity, Oral Category 3
Acute toxicity, Inhalation Category 3
Acute toxicity, Dermal Category 3
Reproductive toxicity Category 2
Specific target organ toxicity - single exposure Category 3, Central nervous system
Specific target organ toxicity - repeated exposure Category 2
Aspiration hazard Category 1

Label Pictogram(s):



Signal Word: DANGER

Hazard Phrases: Extremely flammable aerosol. Pressurized container: may burst if heated
Causes skin irritation. Toxic if swallowed. Toxic if inhaled. Toxic in contact with
skin Suspected of damaging fertility or the unborn child. May cause drowsiness
or dizziness. May cause damage to organs through prolonged or repeated
exposure. May be fatal if swallowed and enters airways.

Precautionary Phrases:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from and do not spray on open flames or other ignition sources. No smoking. Do not pierce or burn, even after use. Keep container tightly closed. Do not breathe fumes. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water. If skin irritation occurs or if you feel unwell, call a doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

Storage / Disposal:

Store locked up in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of container in compliance with local and federal regulations.

Other:

Keep out of reach of children. If medical advice is needed, have product container or label at hand. Read label before use.

SECTION 3 Composition/Information on Ingredients

COMPONENTS	CAS Number	OSHA PEL	ACGIH TLV	Percent by weight
**Toluene	108-88-3	200 ppm (8hr)	200 ppm (8hr)	52%
**Methyl Alcohol	67-56-1	200 ppm	200 ppm	36%
Carbon Dioxide	68476-86-8	5000 ppm	5000 ppm	7%
Kerosene	64742-81-0	None	200 mg/m ³	5%

** Indicates ingredients that are subject to the reporting requirements of Section 313 of EPCRA and 40 CFR 372. Components of a blended material regulated under section 313 of SARA.

SECTION 4 First Aid Measures

First Aid Measures

Immediate Medical Attention:

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Eyes

Flush eyes with water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye. Remove contact lenses if present. If contact lenses cannot be removed, seek immediate medical attention.

Skin

Remove contaminated shoes and clothing. Flush affected area with large amounts of water. Clean affected area thoroughly with mild soap and water. Seek medical attention if pain or irritation develops and persists.

Ingestion

Do not induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not

fully conscious. Seek medical attention immediately.

Inhalation

Immediately move victim to fresh air. If victim is not breathing, seek medical attention immediately.

**Signs & Symptoms
Of Over Exposure:**

Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness. Breathing high concentrations of this material, for example, in an enclosed space or by intentional abuse, can cause irregular heartbeats. This material can cause eye irritation with tearing, redness, or a stinging or burning feeling. It can cause swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact. May cause mild skin irritation with redness and/or an itching or burning feeling. Effects may become more serious with repeated or prolonged contact. Swallowing this material may be harmful. Swallowing this material may cause stomach or intestinal upset with pain, nausea, and/or diarrhea. This material can get into the lungs during swallowing or vomiting. Small amounts in the lungs can cause lung damage.

Special Treatment:

Pre-existing disorders of the Skin, Respiratory System, Liver, Kidneys, Central Nervous System (CNS), Heart (Cardiac), auditory system can be aggravated by exposure.

SECTION 5 Fire Fighting Measures

Extinguishing media

Dry Chemical (B-C), Foam, CO₂

Hazardous Combustion:

Unknown

**Protective Equipment and
Precautions for firefighters:**

Keep containers cool using water spray. Use proper equipment to protect personnel from bursting containers.

Contents under pressure. Do not use near fire, sparks, or flame. Do not puncture or incinerate container. Exposure to temperatures above 120°F may cause container to burst.

**Flammability per Flame
Projection Test**

EXTREMELY FLAMMABLE

SECTION 6 Accidental Release Measures

**Personal precautions, protective
equipment and emergency
procedures:**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation.

**Methods/materials for
containment and cleanup:**

Absorb spill with inert material then place in a chemical waste container. Dispose of in accordance with local, state, and federal regulations

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 7 Handling and Storage

Precautions for Safe Handling DANGER: EXTREMELY FLAMMABLE. Vapor may cause a flash fire. Contents under pressure. Keep away from heat, sparks, open flames and any sources of ignition. Do not smoke while using. Use with adequate ventilation. Do not use in confined areas. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Do not puncture or incinerate containers.

Conditions for Safe Storage Do not store at temperatures above 120°F. Exposure to temperatures above 120°F may cause container to burst. Keep out of reach of children. Store in a cool, dry well-ventilated area away from incompatible materials. Store in accordance with NFPA 30B for Level 3 Aerosols.

SECTION 8 Exposure Controls/Personal Protection

COMPONENTS	CAS Number	OSHA PEL	ACGIH TLV
**Toluene	108-88-3	200 ppm (8hr)	200 ppm (8hr)
**Methyl Alcohol	67-56-1	200 ppm	200 ppm
Carbon Dioxide	68476-86-8	5000 ppm	5000 ppm
Kerosene	64742-81-0	None	200 mg/m ³

Engineering Controls: Ensure adequate ventilation.

Personal Protective Equipment:

Skin Impervious clothing and boots. Wash hands after each use. Wear CHEMICAL RESISTANT GLOVES if repeated skin contact occurs or causes irritation.

Eyes Wear SAFETY GLASSES to prevent eye contact

Respiratory Use respirator when TLV is exceeded

SECTION 9 Physical and Chemical Properties

Appearance and Physical State:	Pale yellow clear liquid mixture packaged in pressurized aerosol spray can.
Odor:	Solvent odor
Odor Threshold:	Unknown.
pH:	Not Applicable.
Melting Point/Freezing Point:	Not Available.
Initial boiling point & boiling range:	Greater than 100 °F
Flash Point:	Not Available.
Evaporation rate:	Greater than 1.0 (BuAc=1)
Flammability (solid, gas)	Not Available.
Upper/lower flammability or explosive limits	Not Available
Vapor pressure	Not Available.
Vapor density	Not Available.

Relative density / Specific gravity	Not Available.
Solubility	Insoluble in water
Partition Coefficient n-Octanol/Water	2.7
Auto-ignition Temperature:	Not Available.
Decomposition Temperature:	Not Available.
Viscosity:	Not Available.
%-VOC Content:	95.0%
CARB VOC Category/Standard(%)	EXPORT
OTC Model Rule Category/Standard(%)	EXPORT
US EPA Cons Prod Category/Standard(%)	EXPORT

SECTION 10

Stability and Reactivity

Reactivity	Product is non-reactive under normal conditions of use.
Chemical Stability:	Product is stable
Possibility of hazardous reactions:	None known.
Conditions to avoid (e.g. static discharge, shock or vibration):	Heat, fire, sparks, open flames, ignition sources, temperatures above 120°F
Incompatibilities:	Strong oxidizing agents
Hazardous decomposition products:	CO1 CO2, Hydrocarbons, smoke, fumes, aldehydes.
Hazardous polymerization:	Will not occur

SECTION 11

Toxicological Information

Likely Routes of Exposure:	Skin or eye contact and inhalation
Symptoms:	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. May cause redness and pain.
Delayed and Immediate Effects:	This material can cause eye irritation with tearing, redness, or a stinging or burning feeling. It can cause swelling of the eyes with blurred vision. Skin Contact May cause mild skin irritation with redness and/or an itching or burning feeling. Effects may become more serious with repeated or prolonged contact. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness. Breathing high concentrations of this material, for example, in an enclosed space or by intentional abuse, can cause irregular heartbeats.
Chronic Effects:	Deliberate inhalation at high concentrations has been associated with adverse effects on the liver, kidney and nervous system and can cause CNS depression, cardiac arrhythmias and death.

Case studies of persons suggest isolated incidences of adverse effects on the fetus including birth defects.

Studies of workers indicate long-term exposure may be related to impaired color vision and hearing. Some studies of workers suggest long-term exposure may be related to neurobehavioral and cognitive changes. Some of these effects have been observed in lab animals following repeated exposure to high levels. Several studies of workers suggest long-term exposure may be related to small increases in spontaneous abortions and changes in some gonadotropic hormones. However, the weight of evidence does not indicate a reproductive hazard to humans. Studies in laboratory animals indicate some changes in reproductive organs following high levels of exposure, but no significant effects on mating performance or reproduction were observed. Case studies suggest isolated incidences of adverse effects on the fetus including birth defects. Findings in laboratory animals were largely negative. Positive findings include small increases in minor skeletal and visceral malformations and developmental delays following very high levels of maternal exposure. Studies of workers indicate long-term exposure may be related to effects on the liver, kidney and blood, but these appear to be limited to changes in serum enzymes and decreased leukocyte counts. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland following very high levels of exposure. The relevance of these findings to humans is not clear at this time.

Toxicity Measures:

Acute oral toxicity : LD L0 Human: 300 mg/kg
Acute inhalation toxicity : LC₅₀ Rat: 64000 ppm, 4 h
Acute dermal toxicity : LD₅₀ Rabbit: 12,800 mg/kg

NTP Carcinogen:
IARC Carcinogen:
OSHA Carcinogen:

None
Toluene Group 3
No.

SECTION 12 Ecological Information

Ecotoxicity:

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and Degradability:

Rapidly biodegradable in aerobic conditions. Based on similar materials, this product will have a significant tendency to partition to air. Hydrocarbons from this product which do partition to air are expected to rapidly photo degrade.

Bioaccumulation Potential:

Species: Green algae (*Chlorella fusca vacuolata*) Exposure time: 24 h
Dose: 0.05 mg/l Bioconcentration factor (BCF): 28,400 Method: Static

Mobility in Soil:

No data available. Distribution is principally to air.

Other Adverse Effects:

Toxicity to daphnia and other aquatic invertebrates: 48 h EC 50 Water flea (*Daphnia magna*): > 10,000.00mg/l Method: Static Intoxication

SECTION 13 Disposal Considerations

- Storage and Disposal** Keep out of reach of children. Do not store near heat, sparks or open flame. Do not puncture or incinerate container. Do not store in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible materials.
- Waste Disposal Method:** Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition. Dispose of in accordance with all applicable local, state and federal regulations. Recovered liquids may be sent to an EPA permitted re-claimer or incineration facility. Contaminated material must be disposed of in a permitted waste management facility. Consult Federal, state, or local disposal authorities for approved procedures.

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: UN1950
 Proper shipping name: Aerosols
 Hazard class: 2.1
 Packing Group: None
 Exceptions: May be shipped as a limited quantity or consumer commodity
 Environmental Hazards: No
 Transport in Bulk: Not Applicable.
 Special Precautions: ERG#126 (no toxic subrisk for domestic shipments (MeOH))

IMO/IMDG UN/ID Number: UN1950
 Proper shipping name: Aerosols
 Hazard class: 2.1
 Packing Group: None
 Exceptions: May be shipped as a limited quantity
 Environmental Hazards: No
 Transport in Bulk: Not Applicable
 Special Precautions: EmS F-D, S-U

ICAO/IATA UN/ID Number: UN1950
 Proper shipping name: Aerosols
 Hazard Class: 2.1
 Packing Group: None
 Exceptions: May be shipped as a limited quantity
 Environmental Hazards: No
 Transport in Bulk: Not Applicable
 Special Precautions: FORBIDDEN FOR TRANSPORT BY AIR

Canada (TDG)	UN/ID Number:	UN1950
	Proper shipping name:	Aerosols
	Hazard class:	2.1
	Packing Group:	None
	Exceptions:	None
	Environmental Hazards:	No
	Transport in Bulk:	Not Applicable
	Special Precautions:	ERG#126

SECTION 15 Regulatory Information

This product is considered to be hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Section 313 Information (40 CFR 372): This product contains a chemical which is listed in Section 313 at or above the de minimis concentrations. TOLUENE, METHANOL

U. S. Toxic Substance Control Act (TSCA): All components of this product are listed on the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Proposition 65 – California Safe Drinking Water and Toxic Enforcement Act of 1986:

WARNING: This product contains chemical know to the state of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 Other Information

We believe all information given is accurate. It is offered in good faith but without guarantee. Since conditions of use are beyond our control, user assumes all responsibility and risk.

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