1. MATERIAL AND COMPANY IDENTIFICATION

Material Name: Black Magic Engine Degreaser
Uses: Degreaser

Manufacturer/Supplier: ITW Global Brands
6925 Portwest Dr., Suite 100
Houston, TX. 77024-8042
USA

MSDS Request: 1-855-888-1988

Emergency Telephone Number
Spill Information: (CHEMTREC) 1-800-424-9300, Local: 1-703-527-3887
Health Information: (RMPDC) 1-877-504-9352

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>30.00 - 60.00 %</td>
</tr>
<tr>
<td>Oxygenated solvent</td>
<td>34590-94-8</td>
<td>5.00 - 10.00 %</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>124-38-9</td>
<td>5.00 - 10.00 %</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>1.00 - 5.00 %</td>
</tr>
</tbody>
</table>

Aerosol spray consisting of solvent, additives, and hydrocarbon propellant.

3. HAZARDS IDENTIFICATION


Health Hazards: Vapours may cause drowsiness and dizziness. Repeated exposure may cause skin dryness or cracking. Harmful: may cause lung damage if swallowed.

Safety Hazards: Combustible liquid. Contents under pressure and can explode when exposed to heat or open flame.

Health Hazards
- Inhalation: Vapours may cause drowsiness and dizziness.
- Skin Contact: Moderately irritating to eyes.
- Eye Contact: Harmful: may cause lung damage if swallowed. Under normal conditions of use, this is not expected to be a primary route of exposure.
- Ingestion: Harmful: may cause lung damage if swallowed.

Signs and Symptoms: Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.
Material Safety Data Sheet

Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure.

### Aggravated Medical Condition
Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Respiratory system. Skin.

### Environmental Hazards
No specific hazards under normal use conditions.

### Additional Information
Under normal conditions of use or in a foreseeable emergency, this product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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### 4. FIRST AID MEASURES

#### General Information
In general no treatment is necessary, however, obtain medical advice.

#### Inhalation
No treatment necessary under normal conditions of use.

#### Skin Contact
No treatment necessary under normal conditions of use.

#### Eye Contact
Flush eye with copious quantities of water.

#### Ingestion
In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

#### Advice to Physician
Treat symptomatically.

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### 5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

#### Flash point
Not applicable.

#### Specific Hazards
Contents are under pressure and can explode when exposed to heat or flames.

#### Suitable Extinguishing Media
Aerosol containers may be cooled by a water fog.

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### 6. ACCIDENTAL RELEASE MEASURES

#### Protective measures
Remove all possible sources of ignition in the surrounding area. No specific measures.

#### Clean Up Methods
Not applicable.

#### Additional Advice
Observe the relevant local and international regulations.

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### 7. HANDLING AND STORAGE

#### Handling
Do not puncture or incinerate. Contents under pressure and can explode when exposed to heat or open flame.

#### Storage
Must be stored in a well-ventilated area, away from sunlight,
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Material</th>
<th>Source</th>
<th>Type</th>
<th>ppm</th>
<th>mg/m3</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum)</td>
<td>ACGIH</td>
<td>TWA(Non-aerosol.)</td>
<td></td>
<td>200 mg/m3</td>
<td>as total hydrocarbon vapor</td>
</tr>
<tr>
<td>hydrotreated light</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distillates (petroleum)</td>
<td>ACGIH</td>
<td>SKIN_DES(Non-aerosol.)</td>
<td></td>
<td></td>
<td>Can be absorbed through the skin. as total hydrocarbon vapor</td>
</tr>
<tr>
<td>hydrotreated light</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxygenated solvent</td>
<td>ACGIH</td>
<td>TWA</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxygenated solvent</td>
<td>ACGIH</td>
<td>STEL</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxygenated solvent</td>
<td>ACGIH</td>
<td>SKIN_DES</td>
<td></td>
<td></td>
<td>Can be absorbed through the skin.</td>
</tr>
<tr>
<td>Oxygenated solvent</td>
<td>OSHA Z1</td>
<td>PEL</td>
<td>100</td>
<td>600 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Oxygenated solvent</td>
<td>OSHA Z1</td>
<td>SKIN_DES</td>
<td></td>
<td></td>
<td>Can be absorbed through the skin.</td>
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<tr>
<td>Oxygenated solvent</td>
<td>OSHA Z1</td>
<td>TWA</td>
<td>100</td>
<td>600 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Oxygenated solvent</td>
<td>OSHA Z1</td>
<td>STEL</td>
<td>150</td>
<td>900 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Oxygenated solvent</td>
<td>OSHA Z1</td>
<td>SKIN_FINAL</td>
<td></td>
<td></td>
<td>Can be absorbed through the skin.</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>ACGIH</td>
<td>TWA</td>
<td>5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>ACGIH</td>
<td>STEL</td>
<td>30,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>OSHA Z1</td>
<td>PEL</td>
<td>5,000</td>
<td>9,000 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>OSHA Z1</td>
<td>TWA</td>
<td>10,000</td>
<td>18,000 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>OSHA Z1</td>
<td>STEL</td>
<td>30,000</td>
<td>54,000 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>ACGIH</td>
<td>Ceiling</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>OSHA Z1</td>
<td>PEL</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>OSHA Z1</td>
<td>Ceiling</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Additional Information: Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Shell has adopted as Interim Standards the OSHA Z1A values that were established in 1989 and later rescinded.

Exposure Controls: Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

Personal Protective Equipment: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory Protection: Check with respiratory protective equipment suppliers.

Hand Protection: Not normally required.

Eye Protection: Chemical splash goggles (chemical monogoggles).

Environmental Exposure Controls: Use only in well-ventilated areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Odour: Hydrocarbon.
PpH: 9.0 - 10.0
Initial Boiling Point and Boiling Range: 100 °C / 212 °F
Pour point: < -15 °C / 5 °F
Flash point: Not applicable.
Specific gravity: Typical 0.91 at 20 °C / 68 °F
Density: 908 g/cm3 at 20 °C / 68 °F (ASTM D-4052)
Water solubility: Negligible.
Kinematic viscosity: 100 - 500 mm²/s at 40 °C / 104 °F
Volatility: 74.9 % vol
Volatile organic carbon content: 9.1 % vol

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use.
Conditions to Avoid: Open flame.
Materials to Avoid: Not applicable.
Hazardous Decomposition Products: None expected under normal use conditions.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment: Information given is based on data from components.
Acute Oral Toxicity: Expected to be of low toxicity: LD50 >2000 mg/kg, Rat Aspiration into the lungs when swallowed or vomited may cause chemical pneumonia which can be fatal. Ingestion may cause drowsiness and dizziness.

Acute Dermal Toxicity: Expected to be of low toxicity: LD50 >2000 mg/kg, Rabbit
Material Safety Data Sheet

Acute Inhalation Toxicity: Expected to be of low toxicity: LC50 >20 mg/l Rat
High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Skin Irritation: Expected to be non-irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

Eye Irritation: Essentially non-irritating to eyes.

Respiratory Irritation: Not expected to be a respiratory irritant.

Sensitisation: Not expected to be a sensitisier.

Mutagenicity: No evidence of mutagenic activity.

Carcinogenicity: Not a carcinogen.

Reproductive and Developmental Toxicity: Not expected to be a developmental toxicant.

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product.

Acute Toxicity: Data not available

Mobility: Disperses in water.

Persistence/degradability: Data not available

Bioaccumulation: Data not available

Other Adverse Effects: Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Material Disposal: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14. TRANSPORT INFORMATION

US Department of Transportation Classification (49CFR)
Class / Division: Consumer Commodity, ORM-D

IMDG
Identification number: UN 1950
Proper shipping name: Aerosols, non-flammable
Class / Division: 2.2
Marine pollutant: No
Material Safety Data Sheet

IATA (Country variations may apply)
Identification number ID 8000
Proper shipping name Consumer Commodity
Class / Division 9

15. REGULATORY INFORMATION
The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Federal Regulatory Status

Notification Status
EINECS All components listed or polymer exempt.
TSCA All components listed.
DSL All components listed.

Comprehensive Environmental Release, Compensation & Liability Act (CERCLA)
Black Magic Engine Degreaser () Reportable quantity: 56180 lbs
Sodium hydroxide (1310-73-2) Reportable quantity: 1000 lbs

Clean Water Act (CWA) Section 311
Sodium hydroxide (1310-73-2) Reportable quantity: 1000 lbs

SARA Hazard Categories (311/312)
Delayed (Chronic) Health Hazard. Sudden Release of Pressure Hazard.

State Regulatory Status

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)
This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

New Jersey Right-To-Know Chemical List
- Distillates (petroleum), hydrotreated light (64742-47-8) Listed.
- Oxygenated solvent (34590-94-8) Listed.
- Carbon dioxide (124-38-9) Listed.
Material Safety Data Sheet

Sodium hydroxide (1310-73-2) Listed.

Pennsylvania Right-To-Know Chemical List

Distillates (petroleum), hydrotreated light (64742-47-8) Listed.
Oxygenated solvent (34590-94-8) Listed.
Carbon dioxide (124-38-9) Listed.
Sodium hydroxide (1310-73-2) Environmental hazard. Listed.

16. OTHER INFORMATION

NFPA Rating (Health, Fire, Reactivity) : 1, 2, 0
MSDS Version Number : 3.0
MSDS Effective Date : 10/08/2010
MSDS Revisions : A vertical bar (|) in the left margin indicates an amendment from the previous version.
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