1. Product and company information

Name: **FM 186-2, Hydrocarbon Mitigation Agent**  
Manufacturer: Environmental Chemical Solutions  
P.O. Box 2029  
Gig Harbor, WA 98335  
Tel: (877) 253-2665 Fax: (253) 263-8037  
www.ecschem.com

2. Hazards Identification

ROUTE OF ENTRY:  
SKIN CONTACT............PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN IRRITATION,  
SKIN ABSORPTION.........A SINGLE PROLONGED SKIN EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN HARMFUL AMOUNTS. THE DERMAL LD50 HAS NOT BEEN DETERMINED.  
EYE CONTACT..............MAY CAUSE IRRITATION  
NO HAZARDS ANTICIPATED FROM SWALLOWING SMALL AMOUNTS INCIDENTAL TO NORMAL HANDLING OPERATIONS. LARGE AMOUNTS MAY CAUSE GASTROINTESTINAL IRRITATION.  
EFFECTS OF ACUTE EXPOSURE.......SEE ABOVE  
EFFECTS OF CHRONIC EXPOSURE......NO RELEVANT INFORMATION FOUND.  
THE FHSA ACUTE ORAL TOXICITY WAS PERFORMED WITH AN ORAL DOSE OF 5,000 MG/KG OF BODY WEIGHT AND IT PRODUCED NO MORTALITY OR TOXIC SIGNS IN SPRAGUE-DAWLEY RATS

3. Composition/information on ingredients

Water  
Proprietary Blend of Ethoxylated Octylphenolic Surfactants

4. First aid measures

Emergency First Aid Procedures -  
Eyes: Flush thoroughly with water for 15 minutes. Get medical attention.  
Skin: Remove contaminated clothing. Wash exposed areas with soap and water. Wash clothing before reuse. Get attention if irritation develops.  
Ingestion: Get medical attention.  
Inhalation: None considered necessary.
5. Fire-fighting measures

T.D.G. FLAM. CLASS..............NOT REGULATED
FLAMMABILITY......................NOT FLAMMABLE
SPECIAL PROCEDURES...........WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING
APPARATUS.
FLASH POINT (C), METHOD ........NONE
AUTO IGNITION TEMPERATURE........N.AV.
UPPER FLAMMABLE LIMIT (% BY......N.AP. VOL.)
LOWER FLAMMABLE LIMIT (% BY......N.AP. VOL.)

EXPLOSION DATA
EXPLOSIVE POWER....................N.AV.
RATE OF BURNING......................N.AV.
SENSITIVITY TO STATIC..............N.AV.
DISCHARGE SENSITIVITY TO IMPACT......N.AV.
UNUSUAL FIRE AND EXPLOSION.........NONE
HAZARDOUS COMBUSTION PRODUCTS....HAZARDOUS COMBUSTION PRODUCTS MAY INCLUDE
AND ARE NOT LIMITED TO OXIDES OF NITROGEN

6. Accidental release measures

Precautions to be taken in Handling and Storage: Use good normal hygiene.
Precautions to be taken in case of Spill or Leak -

Small spills. Soak up with absorbent materials.
Large spills: dike and contain. Remove with vacuum truck or pump to storage/salvage
vessel. Soak up residue with absorbent materials.

Waste Disposal Procedures: Dispose in an approved disposal area or in a manner that
complies with all local, state, and federal regulations.

7. Handling and storage

AVOID CONTACT WITH EYES, SKIN, AND CLOTHING.
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES.
STORAGE NEEDS:
NORMAL STORAGE CONDITIONS. STORE AWAY FROM INCOMPATIBLE MATERIALS.

8. Exposure controls/personal protection

GLOVES/ TYPE............IMPERVIOUS FOR SOLUTIONS OR WHERE CONTACT IS REPEATED
9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>None</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.003 ± .01</td>
</tr>
<tr>
<td>Pounds Per Gallon</td>
<td>8.36</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Complete</td>
</tr>
<tr>
<td>Viscosity</td>
<td>15 Centipoise</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&gt;1 as compared to Water</td>
</tr>
<tr>
<td>Appearance</td>
<td>Light Purple</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Melting Point</td>
<td>28F</td>
</tr>
<tr>
<td>Vapor Pressure mm/Hg</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Density Air 1</td>
<td>NA</td>
</tr>
<tr>
<td>Reactivity with Water</td>
<td>No</td>
</tr>
<tr>
<td>Surface Tension 5%</td>
<td>29.1 Dyne/cm at 25°C</td>
</tr>
<tr>
<td>pH</td>
<td>9.5 ± .75</td>
</tr>
<tr>
<td>Fire Extinguisher Media</td>
<td>NA</td>
</tr>
<tr>
<td>Fire Fighting Procedures</td>
<td>NA</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Stability: Stable
Polymerization: No
Incompatible Substances: None known
Hazardous Decomposition Products: NA

11. Toxicological information

Threshold limit values: NA

**Signs and symptoms of over exposure:**
Acute: Moderate eye irritation. Skin: Causes redness, edema, drying of skin.
Chronic: Pre-existing skin and eye disorders may be aggravated by contact with this product.
Medical Conditions Generally Aggravated by Exposure: Unknown
Carcinogen: No

12. Ecological information

No relevant information found.

**Persistence and Degradability**
Material is readily biodegradable. All surfactant components Passes OECD test(s) for ready biodegradability.
Aquatic toxicity is very low
13. Disposal Considerations

Dispose in accordance with local, state, and federal regulations.

14. Transport information

<table>
<thead>
<tr>
<th>DOT Class</th>
<th>Not Regulated/Non Hazardous</th>
<th>Freeze Temperature: 28°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>35°F-120°F</td>
<td>Freeze Harm: None</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>Approximately one year</td>
<td>unopened</td>
</tr>
</tbody>
</table>

15. Regulatory information

The Information on this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under the recommended conditions of use. Any use of this product or method of application, which is not described on the Product label or in this Material Safety Data Sheet is the sole responsibility of the user. This Material Safety Data Sheet was prepared to comply with the OSHA Hazardous Communication Regulation.

All information appearing herein is based upon data obtained by the manufacturer and technical sources. Judgments as to the suitability of information herein for the purchaser’s purposes are necessarily purchaser’s responsibility. Therefore, although reasonable care has been taken in the preparation of this information, ICS, ECS or Gold Crew, or its distributors extends no warranties, makes no representations and assumes no responsibility as to the suitability of such information for application to purchasers intended purposes or for consequences of its use.

16. Other information

Generic Description: Water Based, Biodegradable, Wetting Agents & Surfactants
HMIS Code: Health 0, Fire 0, Reactivity 0
HMIS Key: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant
D.O.T. Class: Not regulated; not hazardous
Formula: Proprietary