SAFETY DATA SHEET

Section 1. IDENTIFICATION

Product Identifier

Product Name: GASOILA® DEF

Other means of Identification

Product Code: DE04

Recommended Use: Pipe Thread Sealant.

Recommended Restrictions: None Known.

Manufacturer

Company Name: Federal Process Corporation
Address: 4520 Richmond Road
Cleveland OH 44128
Telephone: 1-800-846-7325

Emergency Telephone Number: Call Chemtrec at 1-800-424-9300

Section 2. HAZARDS IDENTIFICATION

Classification:

<table>
<thead>
<tr>
<th>Physical State: Liquid</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable</td>
<td>Category 3</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Signal Word: Warning

Hazard Statements:

H226 - Flammable liquid and vapor.
H302 – Harmful if swallowed.
H319 – Causes serious eye irritation.
Precautionary Statements:

H317 – May cause an allergic skin reaction

Prevention:
P210 – Keep away heat, sparks, open flames, and hot surfaces. No smoking.
P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 – Contaminated clothing should not be allowed out of the workplace.

Response:
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P331 + P310 – IF SWALLOWED: Do NOT induce vomiting. Immediately call POISON CENTER or doctor/physician.
P337 + P313 – If eye irritation persists: Get medical advice/attention.
P332 + P313 – If skin irritation or rash occurs: Get medical advice/attention.

Disposal:
P501 - Dispose of contents/container to an approved waste disposal plant.

Other Hazards:
Toxic to aquatic life with long lasting effects.

Unknown Acute Toxicity:
2% of the mixture consists of ingredient(s) of unknown toxicity.

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**Section 3. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral spirits</td>
<td>8052-41-3</td>
<td>30.0-39.0</td>
</tr>
<tr>
<td>Block copolymer</td>
<td>66070-58-4</td>
<td>5.0-15.0</td>
</tr>
<tr>
<td>Hydrocarbon resin</td>
<td>69430-35-9</td>
<td>4.0-9.0</td>
</tr>
</tbody>
</table>

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**Section 4. FIRST AID MEASURES**

First Aid Measures:

**Eye Contact**
Rinse thoroughly with plenty of water, for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

**Skin Contact**
If skin irritation occurs, rinse affected area with water. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation

Remove to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Ingestion

Do NOT induce vomiting. Get medical attention immediately. Rinse mouth with water. Never give anything by mouth to an unconscious individual.

Most Important Symptoms and Effects:

Symptoms

Direct contact with eyes may cause temporary irritation.

Do NOT ingest.

Section 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Use foam, dry chemical, carbon dioxide or water fog.

Unsuitable Extinguishing Media:

Avoid solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical:

Carbon oxides expected to be the primary hazardous combustion product.

Protective Equipment and Precautions for Firefighters:

As in any fire, wear self-contained breathing apparatus and other protective clothing (approved or equivalent) and full protective gear.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Personal Precautions:

Use personal protective equipment as required. Keep unnecessary personnel away.

Methods and Material for Containment and Cleaning Up:

Methods for Containment:

Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up:

Keep in suitable, closed containers for disposal.

Section 7. HANDLING AND STORAGE

Precautions for Safe Handling:
Advice on Safe Handling: Avoid breathing vapors or mists. Contaminated work-clothing should not be allowed out of the workplace.

Conditions for Safe Storage, including Any Incompatibilities:

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near heat, sparks, or open flames. KEEP OUT OF REACH OF CHILDREN.

Incompatible Materials: None known based on information supplied.

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Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>OSHA TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral spirits (CAS 8052-41-3)</td>
<td>100 ppm</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Block copolymer (CAS 66070-41-3)</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
</tr>
<tr>
<td>Hydrocarbon resin (CAS 69430-35-9)</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls:

Engineering Controls: Apply technical measures to comply with the occupational exposure limits.

Individual Protection Measures, such as Personal Protective Equipment:

Eye/Face Protection: Avoid contact with eyes.

Skin and Body Protection: No protective equipment is needed under normal use conditions.

Respiratory Protection: Ensure adequate ventilation, especially in confined areas. If confined in poorly ventilated areas use NIOSH/MSHA

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Wash exposed areas thoroughly before eating, drinking, smoking or leaving work area. Launder contaminated clothing before reusing.

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Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties
Physical State: Liquid.  
Appearance: Viscous liquid.  
Color: Black.  

Property  
Odor: Mild.  
Odor Threshold: Not available.  

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>105F (41°C) Closed Cup.</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>n/a-liquid.</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>None.</td>
<td></td>
</tr>
<tr>
<td>Solubility in other Solvents</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient (n-octanol/water)</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined.</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined.</td>
<td></td>
</tr>
</tbody>
</table>

Section 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions.
Chemical Stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: None under normal processing.
Conditions to Avoid: Keep out of reach of children.
Incompatible Materials: None known.
Hazardous Decomposition Products: Oxides of carbon.

Revised: 6th March, 2018
Section 11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure:

Eye Contact: Causes serious eye irritation.

Skin Contact: May cause an allergic skin reaction.

Inhalation: Avoid breathing vapors or mists.

Ingestion: Do not taste or swallow.

Component Information:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral spirits (8052-41-3)</td>
<td>&gt;5,000 mg/kg (Rat)</td>
<td>&gt;2,000 mg/kg (Rabbit)</td>
<td>&gt;5mg/L (48h mist) (Rat)</td>
</tr>
<tr>
<td>Block copolymer (CAS 66070-58-4)</td>
<td>&gt;2,000 mg/kg</td>
<td>NO DATA</td>
<td>NO DATA</td>
</tr>
<tr>
<td>Hydrocarbon resin (CAS 69430-35-9)</td>
<td>7,000 mg/kg (Mammal)</td>
<td>NO DATA</td>
<td>NO DATA</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects:

Symptoms: Please section 4 of this SDS for symptoms.

Delayed and Immediate Effects as Well as Chronic Effects From Short and Long Term Exposure:

Sensitization: May cause an allergic skin reaction.

Carcinogenicity: Not classifiable as a human carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral spirits (8052-41-3)</td>
<td>N/D</td>
<td>N/D</td>
<td>NN/D</td>
<td>N/D</td>
</tr>
<tr>
<td>Block copolymer (CAS 66070-58-4)</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
</tr>
<tr>
<td>Hydrocarbon resin (CAS 69430-35-9)</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
</tr>
</tbody>
</table>

Legend
IARC (International Agency for Research on Cancer).
Group3 IARC components are “not classifiable as human carcinogens”.
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical Measures of Toxicity:


Section 12. ECOLOGICAL INFORMATION

Ecotoxicity:
Toxic to aquatic life with lasting effects.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral spirits (8052-41-3)</td>
<td>N/D</td>
<td>LL50/96 hours Oncorhyncus mykiss: 8.2 mg/L</td>
<td>N/D</td>
<td>N/A</td>
</tr>
<tr>
<td>Block copolymer (66070-58-4)</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
</tr>
<tr>
<td>Hydrocarbon resin (CAS 69430-35-9)</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
<td>N/D</td>
</tr>
</tbody>
</table>

Persistence/Degradability: Not determined.

Bioaccumulation: Not determined.

Mobility: Not determined.

Other Adverse Effects: Not determined.

Section 13. DISPOSAL CONSIDERATIONS

Waste Treatment Method:

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

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

Section 14. TRANSPORT INFORMATION

DOT: Consumer Commodity ORM-D
IATA: ID8000 Consumer Commodity

IMDG: FLAMMABLE LIQUID N.O.S.(contains Mineral Spirits)3
IDENTIFICATION NUMBER: UN1993,III

Section 15. REGULATORY INFORMATION

International Inventories: Not determined.
SARA Title 313: Not determined.
U.S. State Regulations: Not determined.
U.S. Right-to-Know Regulations: Not determined.

Section 16. OTHER INFORMATION

NFPA: Health Hazards 1 Flammability 2 Instability 0 Special Hazards Not determined
HMIS Health Hazards 1 Flammability 2 Instability 0 Special Hazards Not determined

Issue Date: 1st March 2014
Revision Date: 6th March, 2018.

DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Revised: 6th March, 2018
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