1. Product and company identification

Product name: Rustilo DW 4130

MSDS #: 454604

Historic MSDS #: 09012-BE

Code: 454604-US03

Product use: Corrosion preventative. For specific application advice see appropriate Technical Data Sheet or consult our company representative.

Manufacturer: Castrol Industrial North America, Inc.
150 W. Warrenville Road
Naperville, IL 60563

Supplier: Castrol Industrial North America, Inc.
150 W. Warrenville Road
Naperville, IL 60563

Product Information: +1-877-641-1600

EMERGENCY SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)

2. Hazards identification

Physical state: Liquid.

Color: Amber.

Emergency overview: WARNING!

COMBUSTIBLE LIQUID AND VAPOR.
CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
ASPIRATION HAZARD.
HARMFUL OR FATAL IF SWALLOWED.
CAN ENTER LUNGS AND CAUSE DAMAGE.

Combustible liquid. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Aspiration hazard if swallowed. Can enter lungs and cause damage. Keep away from heat, sparks and flame. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Do not ingest. If ingested, do not induce vomiting. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential health effects:

Eyes: Causes eye irritation.

Skin: Causes skin irritation. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Inhalation: May cause respiratory tract irritation.

Ingestion: Aspiration hazard if swallowed. Can enter lungs and cause damage. Ingestion may cause gastrointestinal irritation and diarrhea.

See toxicological information (section 11)
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha, petroleum, medium alphalitic (Hydrocarbon solvent)</td>
<td>64742-88-7</td>
<td>75 - 80</td>
</tr>
<tr>
<td>Base oil - highly refined</td>
<td>Varies</td>
<td>10 - 15</td>
</tr>
<tr>
<td>Barium sulfonate</td>
<td>25619-56-1</td>
<td>5 - 10</td>
</tr>
</tbody>
</table>

4. First aid measures

**Eye contact**  
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin contact**  
Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.

**Inhalation**  
If inhaled, remove to fresh air. Get medical attention if symptoms occur.

**Ingestion**  
Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

5. Fire-fighting measures

**Flammability of the product**  
Combustible liquid.

**Flash point**  
Open cup: 82°C (179.6°F) [Cleveland.]

**Fire/explosion hazards**  
In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**Extinquishing media**

**Suitable**  
Use dry chemical, CO₂, water spray (fog) or foam.

**Not suitable**  
Do not use water jet.

**Fire-fighting procedures**  
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Hazardous combustion products**  
Combustion products may include the following:
- metal oxide/oxides
- carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)
- sulfur oxides (SO₂, SO₃ etc.)

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

6. Accidental release measures

**Personal precautions**  
No action shall be taken involving any personal risk or without suitable training. 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. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

**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 (sewers, waterways, soil or air).

**Methods for cleaning up**
Large spill
Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling
Put on appropriate personal protective equipment (see section 8). Workers should wash hands and face before eating, drinking and smoking. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. 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.

Storage
Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10). Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Occupational exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base oil - highly refined</td>
<td>ACGIH (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m³ 8 hour(s). Form: Mineral oil, mist</td>
</tr>
<tr>
<td></td>
<td>OSHA (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m³ 8 hour(s). Form: Mineral oil, mist</td>
</tr>
</tbody>
</table>

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Some states may enforce more stringent exposure limits.

Control Measures
Use only with 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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures
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. Wash contaminated clothing before reusing.

Personal protection

<table>
<thead>
<tr>
<th>Eyes</th>
<th>Avoid contact with eyes. Safety glasses with side shields or chemical goggles.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin and body</td>
<td>Do not get on skin or clothing. Wear suitable protective clothing.</td>
</tr>
<tr>
<td>Respiratory</td>
<td>Use adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.</td>
</tr>
</tbody>
</table>
The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

9. Physical and chemical properties

- **Physical state**: Liquid.
- **Color**: Amber.
- **Flash point**: Open cup: 82°C (179.6°F) [Cleveland.]
- **Density**: 820 kg/m³ (0.82 g/cm³) at 15.6°C
- **Viscosity**: Kinematic: 2.6 mm²/s (2.6 cSt) at 40°C
- **Solubility**: Insoluble in water.

10. Stability and reactivity

- **Stability and reactivity**: The product is stable.
- **Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Conditions to avoid**: Avoid all possible sources of ignition (spark or flame).
- **Incompatibility with various substances**: Reactive or incompatible with the following materials: oxidizing materials.
- **Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- **Hazardous polymerization**: Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

- **Other Toxicity Data**: Long term studies have shown that some of the base oils contained in this product may cause tumor promotion in laboratory animals. The mechanism of this promotion effect appears to be related to repetitive skin irritation from chronic exposure conditions. With the normal safety and personal hygiene work practices, it is believed that this promotion mechanism has little or no relevance to humans. None of the oils are classified as carcinogens.

- **Contains material that may cause target organ damage, based on animal data.**
  - **Target Organs**: Kidneys.

- **Other information**
- **Potential chronic health effects**
  - **Carcinogenicity**: No known significant effects or critical hazards.

12. Ecological information

- **Ecotoxicity**: No testing has been performed by the manufacturer.
13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

NOTE: The generator of waste has the responsibility for proper waste identification (based on characteristic(s) or listing), transportation and disposal.

14. Transport information

International transport regulations

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Class</th>
<th>Packing group</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>NA1993</td>
<td>Combustible liquid, n.o.s. (Solvent naphtha, petroleum, medium aliphatic (Hydrocarbon solvent))</td>
<td>Combustible liquid</td>
<td>III</td>
<td>Remarks Not regulated in containers less than 119 gallons.</td>
</tr>
<tr>
<td>TDG Classification</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>IMDG Classification</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>IATA/ICAO Classification</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

15. Regulatory information

U.S. Federal Regulations

United States inventory (TSCA 8b)

All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Rustilo DW 4130: Fire hazard, Immediate (acute) health hazard

SARA 313

<table>
<thead>
<tr>
<th>Form R - Reporting requirements</th>
<th>Product name</th>
<th>CAS number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier notification</td>
<td>Barium sulfonate</td>
<td>25619-56-1</td>
<td>4.5 - 5.5</td>
</tr>
</tbody>
</table>

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):

CERCLA: Hazardous substances.: Methanol: 5000 lbs. (2270 kg); 1,4-dioxane: 100 lbs. (45.4 kg); Ethylene oxide: 10 lbs. (4.54 kg); Acetaldehyde: 1000 lbs. (454 kg); Sodium phosphate, dibasic: 5000 lbs. (2270 kg); Formaldehyde.: 100 lbs. (45.4 kg);

State regulations

Massachusetts Substances

None of the components are listed.
The following components are listed: MINERAL SPIRITS; SOLVENT NAPHTHA (PETROLEUM) medium aliphatic; BARIUM COMPOUNDS.

The following components are listed: BARIUM COMPOUNDS.

WARNING: This product contains a chemical known to the State of California to cause cancer. 1,4-dioxane; Acetaldehyde; Formaldehyde.

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. Ethylene oxide.

Inventories
- Canada inventory: All components are listed or exempted.
- Europe inventory: All components are listed or exempted.
- Australia inventory (AICS): All components are listed or exempted.
- China inventory (IECSC): All components are listed or exempted.
- Japan inventory (ENCS): All components are listed or exempted.
- Korea inventory (KECI): All components are listed or exempted.
- Philippines inventory (PICCS): All components are listed or exempted.

16. Other information

Label requirements
WARNING!

COMBUSTIBLE LIQUID AND VAPOR.
CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
ASPIRATION HAZARD.
HARMFUL OR FATAL IF SWALLOWED.
CAN ENTER LUNGS AND CAUSE DAMAGE.

HMIS® Rating:
- Health: 2
- Flammability: 2
- Physical Hazard: 0
- Personal Protection: B
- National Fire Protection Association (U.S.A.): Health 2
- Fire hazard: 2
- Instability: 0
- Specific hazard:

History
- Date of issue: 11/05/2010.
- Date of previous issue: No previous validation.

Prepared by: Product Stewardship

Notice to reader
All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user’s obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product:...
product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.