1. IDENTIFICATION

Product Name: Haynes Oil
Chemical Name: N/A
Chemical Family: Petroleum Oil
Manufacturer: Haynes Manufacturing Co.
24142 Detroit Road
Westlake, Ohio 44145, USA

Emergency Telephone Number: 1-800-992-2166 X195 or 1-440-871-2188 X195
For MSDS, Product Safety, or Regulatory Inquiries call: 1-800-992-2166 or 1-440-871-2188
Customer Service: 1-800-992-2166 or 1-440-871-2188

Recommended use of the chemical and restrictions on use
Recommended use
No information available
Applications
No information available

2. HAZARDS IDENTIFICATION

OSHA/HCS Status
While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance of mixture: Not classified

GHS label elements
Signal word: No signal word
Hazard statements: No known significant effects or critical hazards

Precautionary statements
Prevention: Not applicable
Response: Not applicable
Storage: Not applicable
Disposal: Not applicable
Hazards not otherwise classified: None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance
Chemical name: Haynes Oil
Other means of identification
Petroleum

CAS number/other identifiers
CAS number
8042-47-5

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight - %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haynes Oil</td>
<td>8042-47-5</td>
<td>60-100%</td>
<td>*</td>
</tr>
</tbody>
</table>

*The concentration shown as a range is to protect the confidentiality.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

Description of necessary first aid measures

Eye Contact
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin Contact
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion
Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most Important Symptoms and Effects, Acute and Delayed

Potential acute health effects

Eye Contact
No know significant effects or critical hazards.

Inhalation
No know significant effects or critical hazards.

Skin Contact
No know significant effects or critical hazards.

Ingestion
No know significant effects or critical hazards.

Over-exposure signs/symptoms

Eye Contact
No specific data.

Inhalation
No specific data.

Skin Contact
No specific data.
Ingestion

No specific data.

**Indication of Any Immediate Medical Attention and Special Treatment Needed, if necessary**

**Note to physicians**

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

No specific treatment.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

5. **FIRE-FIGHTING MEASURES**

**Extinguishing Media**

*Suitable extinguishing media*

Use an extinguishing agent suitable for the surrounding fire.

*Unsuitable extinguishing media*

Do not use water jet.

**Specific Hazards Arising from the Chemical**

If a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products**

Decomposition products may include the following materials: carbon dioxide, carbon monoxide.

**Special protective actions for fire-fighters**

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.

**Special protective equipment for fire-fighters**

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, protective equipment and emergency procedures**

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency personnel: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in “For non-emergency personnel”.

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 and material for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillage 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). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Protective measures
Put on appropriate personal protective equipment (see Section 8).

Advise on general occupational hygiene
Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations. Store in original containers protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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. See Section 10 for incompatible materials before handling or use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haynes Oil</td>
<td>OSHA PEL (United States, 06/2016). TWA: 5 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>ACGIH TLV (United States, 03/2017). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction.</td>
</tr>
<tr>
<td></td>
<td>NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist. STEL: 10 mg/m³ 15 minutes. Form: Mist.</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls
Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental Exposure Controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection
Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin protection
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection
Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- **Physical State**: Liquid (Viscous liquid)
- **Color**: Colorless
- **Odor**: Mild. Hydrocarbon.
- **Odor Threshold**: Not available
- **pH**: Not available
- **Melting point**: -60 to -9°C (-76 to 15.8 °F)
- **Boiling point**: 218 to 800 °C (424.4 to 1472 °F)
- **Flash point**: Closed cup: >112 °C (>233.6 °F)
  Open cup: 223.33 °C (434 °F) [Cleveland]
- **Evaporation rate**: Not available
- **Flammability (solid, gas)**: Not available
- **Lower and upper explosive (flammable limits)**: Not available
- **Vapor pressure**: 0.011 kPa (0.08 mm Hg) [room temperature]
- **Vapor density**: Not available
- **Relative density**: 0.869
- **Solubility**: Insoluble in the following materials: cold water and hot water.
- **Solubility in water**: Not available
- **Partition coefficient n-Octanol/water**: >6
- **Auto-ignition temperature**: 325 to 355 °C (617 to 671 °F)
- **Decomposition temperature**: Not available
- **Viscosity**: Kinematic (40 °C (104 °F)): 0.68 cm²/s (68 cSt)
- **Flow time (ISO 2431)**: Not available
Pour Point 16.111ºC (3ºF)

10. STABILITY AND REACTIVITY

Reactivity
No specific test data related to reactivity available for this product or its ingredients.

Chemical stability
This product is stable.

Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid
No specific data

Incompatible materials
No specific data

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haynes Oil</td>
<td>LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral</td>
<td>Rat Rabbit Rat</td>
<td>&gt;5mg/l &gt;2000 mg/kg &gt;5000 mg/kg</td>
<td>4 hours - -</td>
</tr>
</tbody>
</table>

Irritation/Corrosion
Not available

Sensitization
Not available

Mutagenicity
Not available

Carcinogenicity
Not available

Conclusions/Summary:
The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346.

**Reproductive toxicity**
Not available

**Teratogenicity**
Not available

**Specific target organ toxicity (single exposure)**
Not available

**Specific target organ toxicity (repeated exposure)**
Not available

**Aspiration hazard**
Not available

**Information on the likely routes of exposure**
Routes of entry anticipated: Oral, Dermal, Inhalation

**Potential acute health effects**

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

**Symptoms related to the physical, chemical, and toxicological characteristics**

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>No specific data</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No specific data</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No specific data</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No specific data</td>
</tr>
</tbody>
</table>

**Delayed and immediate effects and also chronic effects from short and long terms exposure**

**Short term exposure**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential immediate effects</td>
<td>Not available</td>
</tr>
<tr>
<td>Potential delayed effects</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Long term exposure**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential immediate effects</td>
<td>Not available</td>
</tr>
<tr>
<td>Potential delayed effects</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Potential Chronic health effects**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Development effects</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Fertility effects</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

**Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haynes Oil</td>
<td>Acute LC50&gt;100 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50&gt;10000 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Persistence and Degradability**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haynes Oil</td>
<td>-</td>
<td>-</td>
<td>Inherent</td>
</tr>
</tbody>
</table>

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haynes Oil</td>
<td>&gt;6</td>
<td>-</td>
<td>high</td>
</tr>
</tbody>
</table>

**Mobility in soil**

<table>
<thead>
<tr>
<th>Soil/water partition</th>
<th>Coefficient (K&lt;sub&gt;oc&lt;/sub&gt;)</th>
<th>Other adverse effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless full compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

**RCRA Classification**

Not regulated

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th></th>
<th>Dot Classification</th>
<th>TDG Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>

**Special precautions for user**
Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code. Not available

15. REGULATORY INFORMATION

U.S. Federal regulations
TSCA 8(a) CDR Exempt/Partial exemption: This material is listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)
Not listed

Clean Air Act Section 602 Class I Substance
Not listed

Clean Air Act Section 602 Class II Substance
Not listed

DEA List I Chemicals (Precursor Chemicals)
Not listed

DEA List II Chemicals (Essential Chemicals)
Not listed

SARA 302/304
Composition/information on ingredients
No products were found.

SARA 304 RQ
Not applicable

SARA 311/312 Classification
Not applicable

Composition/information on ingredients
No products were found.

State Regulations
Massachusetts This material is listed.

New York This material is not listed.

New Jersey This material is listed.

Pennsylvania This material is not listed.

California Proposition 65
This product is not known to contain chemicals currently listed as carcinogens or reproductive toxins.
International List
National inventory

Australia  This material is listed or exempted.
Canada  This material is listed or exempted.
China  This material is listed or exempted.
Europe  This material is listed or exempted.
Japan
Japan Inventory (ENCS)  This material is listed or exempted.
Japan Inventory (ISHL)  Not determined
Malaysia  Not determined
New Zealand  This material is listed or exempted.
Philippines  This material is listed or exempted.
Republic of Korea  This material is listed or exempted.
Taiwan  This material is listed or exempted.
Thailand  Not determined
Turkey  This material is listed or exempted.
United States  This material is listed or exempted.
VietNam  Not determined

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Classified</td>
<td></td>
</tr>
</tbody>
</table>

History
Date of Issue/Date of Revision: 12/08/2017
Version: 3

Key to abbreviations
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Immediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
UN – United Nations

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