



# SAFETY DATA SHEET

## Nemco MS-X Plus Syn Blend 0W-40 & HD Semi Syn 0W-30

### Section 1. Identification

|   |  |
|---|--|
| <b>GHS product identifier</b>                               | : Commercial HDEO 0W-40, 0W-30   |
| <b>Product code</b>   | : 0098, 0099   |
| <b>Other means of identification</b>                        | : Diesel Engine Oil  |
| <b>Product type</b>   | : Liquid.  |
| <b>Identified uses</b>                                      | : Heavy Duty Engine Oil - Diesel Engines.  |
| <b>Supplier/Manufacturer</b>                                | : Nemco Resources Ltd<br>25 Midland Street<br>Winnipeg, Manitoba R3E 3J6<br>PH 204.788.1030   FX 204.788.1593   TF 855.755.6737<br>EM info@nemco.ca   WEB www.nemco.ca |
| <b>Emergency telephone number (with hours of operation)</b> | : CANUTEC: +1-613-996-6666 or *666 (cellular) (24/7)<br>Nemco: Monday-Friday 8am-4:30pm 204.788.1030 or Toll free 1-855-755-6737                                       |

### Section 2. Hazards identification

|  |  |
|--|--|
| <b>OSHA/HCS status</b>                                   | : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).                      |
| <b>Classification of the substance or mixture</b>        | : AQUATIC HAZARD (ACUTE) - Category 3<br>AQUATIC HAZARD (LONG-TERM) - Category 3   |
| <b><u>GHS label elements</u></b>                         |  |
| <b>Signal word</b>                                       | : No signal word.  |
| <b>Hazard statements</b>                                 | : H412 - Harmful to aquatic life with long lasting effects.  |
| <b><u>Precautionary statements</u></b>                   |  |
| <b>Prevention</b>  | : P273 - Avoid release to the environment.   |
| <b>Response</b>  | : Not applicable.  |
| <b>Storage</b>   | : Not applicable.  |
| <b>Disposal</b>  | : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| <b>Physical hazards not otherwise classified (PHNOC)</b> | : None known.  |

## Section 2. Hazards identification

Health hazards not otherwise classified (HHNOC) : None known.

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture  
Other means of identification : Diesel Engine Oil

### CAS number/other identifiers

CAS number : Not applicable.  
Product code : 0098, 0099

| Ingredient name   | %        | CAS number |
|---|----------|------------|
| Distillates (petroleum), hydrotreated heavy paraffinic                  | >50      | 64742-54-7 |
| Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated | >25      | 68037-01-4 |
| Cadmium (Non-pyrophoric)  | <0.00025 | 7440-43-9  |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

## Section 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. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Maintain an open airway. Get medical attention if symptoms occur.

**Skin contact** : Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : If material has been swallowed, do not induce vomiting. Get medical attention immediately.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

## Section 4. First aid measures

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : 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 special protection is required.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : No specific data.

**Special protective actions for fire-fighters** : No special measures are required.

**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.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Put on appropriate personal protective equipment.
- For emergency responders** : 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). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Spill** : Contain with dikes or absorbent to prevent migration to sewers/streams. Take up small spill with dry chemical absorbent; large spills may require pump or vacuum prior to absorbent. May require excavation of severely contaminated soil.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice 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. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container 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.

## Section 8. Exposure controls/personal protection

### Control parameters

| <b>Occupational exposure limits</b>                    |                  | <b>TWA (8 hours)</b> |                         |              | <b>STEL (15 mins)</b> |                         |              | <b>Ceiling</b> |                         |              |                  |
|--|------------------|----------------------|-------------------------|--------------|-----------------------|-------------------------|--------------|----------------|-------------------------|--------------|------------------|
| <b>Ingredient</b>                                      | <b>List name</b> | <b>ppm</b>           | <b>mg/m<sup>3</sup></b> | <b>Other</b> | <b>ppm</b>            | <b>mg/m<sup>3</sup></b> | <b>Other</b> | <b>ppm</b>     | <b>mg/m<sup>3</sup></b> | <b>Other</b> | <b>Notations</b> |
| Distillates (petroleum), hydrotreated heavy paraffinic | US ACGIH 3/2015  | -                    | 5                       | -            | -                     | -                       | -            | -              | -                       | -            | [a]              |
|  | AB 4/2009        | -                    | 5                       | -            | -                     | 10                      | -            | -              | -                       | -            | [b]              |
|  | ON 7/2015        | -                    | 5                       | -            | -                     | 10                      | -            | -              | -                       | -            | [b]              |
|  | QC 1/2014        | -                    | 5                       | -            | -                     | 10                      | -            | -              | -                       | -            | [b]              |
| Distillates (petroleum), hydrotreated heavy paraffinic | US ACGIH 3/2015  | -                    | 5                       | -            | -                     | -                       | -            | -              | -                       | -            | [a]              |
|  | AB 4/2009        | -                    | 5                       | -            | -                     | 10                      | -            | -              | -                       | -            | [b]              |
|  | ON 7/2015        | -                    | 5                       | -            | -                     | 10                      | -            | -              | -                       | -            | [b]              |
|  | QC 1/2014        | -                    | 5                       | -            | -                     | 10                      | -            | -              | -                       | -            | [b]              |

Form: [a]Inhalable fraction [b]Mist

- 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.

### 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. 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**

## Section 8. Exposure controls/personal 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.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Amber
- Odor** : Mild.
- Odor threshold** : Not available.
- pH** : Not available.
- Freezing point** : -51°C, -51°C
- Boiling point** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.872, 0.880
- Solubility in water** : Insoluble in water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic: 14.7, 11 cSt (100°C)  
Kinematic: 86, 63 cSt (40°C)

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

**Conditions to avoid** : No specific data.

**Incompatible materials** : 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.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name  | Result    | Species | Dose       | Exposure |
|--------------------------|-----------|---------|------------|----------|
| Cadmium (Non-pyrophoric) | LD50 Oral | Rat     | 2330 mg/kg | -        |

#### Irritation/Corrosion

There is no data available.

#### Sensitization

There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

| Name                     | Category   | Route of exposure | Target organs  |
|--------------------------|------------|-------------------|----------------|
| Cadmium (Non-pyrophoric) | Category 1 | Not determined    | Not determined |

#### Aspiration hazard

| Name  | Result   |
|---|--|
| Distillates (petroleum), hydrotreated heavy paraffinic<br>Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

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

## Section 11. Toxicological information

|                     |   |
|---------------------|---|
| <b>Eye contact</b>  | : No known significant effects or critical hazards. |
| <b>Inhalation</b>   | : No known significant effects or critical hazards. |
| <b>Skin contact</b> | : No known significant effects or critical hazards. |
| <b>Ingestion</b>    | : No known significant effects or critical hazards. |

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

|                                    |   |
|------------------------------------|---|
| <b>Potential immediate effects</b> | : No known significant effects or critical hazards. |
| <b>Potential delayed effects</b>   | : No known significant effects or critical hazards. |

#### Long term exposure

|                                    |   |
|------------------------------------|---|
| <b>Potential immediate effects</b> | : No known significant effects or critical hazards. |
| <b>Potential delayed effects</b>   | : No known significant effects or critical hazards. |

#### Potential chronic health effects

|                              |   |
|------------------------------|---|
| <b>General</b>               | : No known significant effects or critical hazards. |
| <b>Carcinogenicity</b>       | : No known significant effects or critical hazards. |
| <b>Mutagenicity</b>          | : No known significant effects or critical hazards. |
| <b>Teratogenicity</b>        | : No known significant effects or critical hazards. |
| <b>Developmental effects</b> | : No known significant effects or critical hazards. |
| <b>Fertility effects</b>     | : No known significant effects or critical hazards. |

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

| Product/ingredient name  | Result                             | Species  | Exposure |
|--------------------------|------------------------------------|--|----------|
| Cadmium (Non-pyrophoric) | Acute EC50 97 µg/L Fresh water     | Algae - Pseudokirchneriella subcapitata - Exponential growth phase     | 72 hours |
|                          | Acute EC50 0.095 mg/L Marine water | Algae - Ulva pertusa   | 96 hours |
|                          | Acute EC50 200 µg/L Fresh water    | Aquatic plants - Lemna minor   | 4 days   |
|                          | Acute EC50 13.5 µg/L Fresh water   | Daphnia - Daphnia magna - Neonate                                      | 48 hours |
|                          | Acute LC50 0.072 µg/L Marine water | Crustaceans - Amphipoda - Adult  | 48 hours |
|                          | Acute LC50 1 µg/L Fresh water      | Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
|                          | Chronic NOEC 2 µg/L Fresh water    | Algae - Parachlorella kessleri - Exponential growth phase              | 72 hours |
|                          | Chronic NOEC 0.02 µg/L Fresh water | Fish - Cyprinus carpio   | 4 weeks  |

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

## Section 12. Ecological information

| Product/ingredient name   | LogP <sub>ow</sub> | BCF | Potential |
|---|--------------------|-----|-----------|
| Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated | >6.5               | -   | high      |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : There is no data available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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 fully 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. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | TDG            | IMDG           | IATA           |
|-----------------------------------|----------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated. | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -              | -              | -              |
| <b>Transport hazard class(es)</b> | -              | -              | -              |
| <b>Packing group</b>              | -              | -              | -              |
| <b>Environmental hazards</b>      | No.            | No.            | No.            |
| <b>Additional information</b>     | -              | -              | -              |

**AERG** : Not applicable

**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.



## Section 15. Regulatory information

### Canadian lists

- Canadian NPRI** : None of the components are listed.  
**CEPA Toxic substances** : None of the components are listed.  
**Canada inventory** : All components are listed or exempted.

### International lists

#### National inventory

- Australia** : All components are listed or exempted.  
**China** : All components are listed or exempted.  
**Europe** : All components are listed or exempted.  
**Japan** : **Japan inventory (ENCS)**: Not determined.  
**Japan inventory (ISHL)**: Not determined.  
**Malaysia** : Not determined.  
**New Zealand** : All components are listed or exempted.  
**Philippines** : All components are listed or exempted.  
**Republic of Korea** : All components are listed or exempted.  
**Taiwan** : All components are listed or exempted.

## Section 16. Other information

### History

- Date of issue** : 04/15/2016  
**Version** : 1  
**Prepared by** : KMK Regulatory Services Inc. (www.kmkregservices.com)

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.