International SDS Documents

*FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.

Safety Data Sheet

SDS #051

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Automotive Lubricant Additive Sample
Product Number(s): N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified Uses: Identified uses:
Laboratory test sample

Uses advised against: Other uses are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.

1.3 Details of the supplier of the safety data sheet
Clark Laboratories
1801 Route 51 South
Jefferson Hills, PA 15025
412-387-1001

1.4 Emergency telephone number
Transportation Emergency Response
Chemtrec - 24 hour emergency response: (800) 424-9300
International Collect: +1 703 741 5970
SDS Assistance Email: sds@clarktesting.com

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
DSD/DPD CLASSIFICATION: Not classified as dangerous according to EU regulatory guidelines.

Not classified as hazardous according to 29 CFR 1910.1200 (2012)

2.2 Label elements: Not Applicable

Signal Word: No signal word
Health Hazards: No known significant effects or critical hazards.
Precautionary Statements:
Prevention: Not applicable
Response: Not applicable
Storage: Store in well ventilated place
Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards Not applicable.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Mixtures
Hazardous Components

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CAS NUMBER</th>
<th>EC NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly refined mineral oil</td>
<td>Trade Secret</td>
<td>Trade Secret</td>
<td>&gt;=10-&lt;= 100</td>
</tr>
</tbody>
</table>

All concentrations are weight percent units for liquids or volume percent units for gaseous products.

Other ingredients are either not hazardous or are below the regulatory disclosure limit.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures
Eye: No known significant effects or critical hazards.
Skin: No known significant effects or critical hazards.
Ingestion: No known significant effects or critical hazards.
Inhalation: Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

4.2 Most important symptoms and effects, both acute and delayed
IMMEDIATE SYMPTOMS AND HEALTH EFFECTS:
Eye: No specific data
Skin: No specific data
Ingestion: No specific data
Inhalation: No specific data

DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS: Not classified.

4.3 Indication of any immediate medical attention and special treatment needed
Not applicable.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media: In case of fire, use water spray (fog), foam, dry chemical or CO2
Unsuitable extinguishing media: Do not use water jet.

5.2 Special hazards arising from the substance or mixture
In a fire or if heated, a pressure increase will occur and the container may burst. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.’

5.1 Advice for firefighters
Protection of firefighters

5.3.1 FIRE CLASSIFICATION:
NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

5.3.2 FLAMMABLE PROPERTIES:
Flashpoint: >200 deg. F
OSHA/NFPA FLAMIBILITY CLASS: Not classified as flammable or combustible by OSHA (see sect. 14 for transport class)

This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures
Eliminate all sources of ignition in vicinity of spilled material. Refer to Sections 5 and 8 for more information.

6.2 Environmental precautions
Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater.

6.3 Methods and material for containment and cleaning up
Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as appropriate or required.

6.4 Reference to other sections
See sections 8 and 13.

SECTION 7 HANDLING AND STORAGE
7.1 Precautions for safe handling
Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not taste or swallow.

7.2 Conditions for safe storage, including any incompatibilities
General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.
Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use
appropriate mitigating procedures.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

7.3 Specific end use(s): Chain Saw Oil

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**GENERAL CONSIDERATIONS:**

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

8.1 Control parameters

**Occupational Exposure Limits:**

Exposure limits for materials that can be formed when handling this product: When mists/aerosols can occur, the following are recommended: 5mg/m$^3$ – ACGIH TLV, 10 mg/m$^3$ – ACGIH STEL

8.2 Exposure controls

**ENGINEERING CONTROLS:**

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

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Neoprene, Nitrile Rubber.

**Respiratory Protection:** No respiratory protection is normally required. No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices,
precautions should be taken to avoid breathing of material. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

**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.

**Occupational Exposure Limits:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Agency</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil</td>
<td>OSHA Z-1</td>
<td>5 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>5 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Attention: the data below are typical values and do not constitute a specification.

**9.1 Information on basic physical and chemical properties**

**Appearance**

Color: N/A  
Physical State: Liquid  
Odor: hydrocarbon-like  
Odor Threshold: not determined  
PH: Not Applicable  
Freezing Point: not determined  
Initial Boiling Point: not determined  
Flashpoint: Closed cup: 100 °C (212 °F) Method: Pensky–Martens Closed Cup (ASTM D93)  
Flammability (solid, gas): No Data Available  
Vapor Pressure: <0.1 hPa (<0.1 mmHg) at 20 °C (68 °F) estimated  
Vapor Density (Air = 1): No data available  
Density: not determined  
Water Solubility: 0.00001 g/1 at 20 °C (68 °F)  
Partition coefficient: n-octanol/water: not determined  
Auto-ignition temperature: not determined  
Decomposition temperature: not determined  
Viscosity, kinematic: ca.100 mm²/s at 40 °C (104 °F)  
Explosive Properties: not determined

**9.2 Other Information:** No Data Available

**SECTION 10 STABILITY AND REACTIVITY**

**10.1 Reactivity:** No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical Stability: The chemical is stable.
10.3 Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to Avoid: No specific data
10.5 Incompatible materials to avoid: Strong oxidizing and reducing agents.
10.6 Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
Serious Eye Damage/Irritation: No known significant effects or critical hazards.
Skin Corrosion/Irritation: No known significant effects or critical hazards.
Skin Sensitization: No known significant effects or critical hazards.
Acute Inhalation Toxicity: No known significant effects or critical hazards.
Germ Cell Mutagenicity: No known significant effects or critical hazards.

CHRONIC EFFECTS AND CARCINOGENITY
Carcinogenicity: OSHA: NO  IARC: NO  NTP: NO  ACGIH: 1997  NIOC: A3

Dermal carcinogenicity: positive (mice)  Studies have shown that similar products produce skin cancer in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined.

Reproductive Toxicity: The hazard evaluation is based on data for components or a similar material.
Specific Target Organ Toxicity – Single Exposure: The hazard evaluation is based on data for components or a similar material.
Specific Target Organ Toxicity – Repeated Exposure: The hazard evaluation is based on data for components or a similar material.

SECTION 12 ECOLOGICAL INFORMATION
12.1 Toxicity
This material is expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

12.2 Persistence and degradability
This material is not expected to be readily biodegradable. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the individual components.

12.3 Bioaccumulative potential
Bioconcentration Factor: No Data Available
Octanol/Water Partition Coefficient: No data available

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
This product is not, or does not contain, a substance that is a potential PBT or a vPvB.

12.6 Other adverse effects
No other adverse effects identified.
SECTION 13 DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods
Use material for its intended purpose or recycle if possible. Oil collection services are
available for used oil
recycling or disposal. Place contaminated materials in containers and dispose of in a manner
consistent
with applicable regulations. Contact your sales representative or local environmental or
health authorities
for approved disposal or recycling methods.
In accordance with European Waste Catalogue (E.W.C.) the codification is the following: 13 02
05

SECTION 14 TRANSPORT INFORMATION
The description shown may not apply to all shipping situations. Consult appropriate Dangerous
Goods
Regulations for additional description requirements (e.g., technical name) and mode-specific or
quantity-specific shipping requirements.

ADR/RID
NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

ICAO
NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

IMO
NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not
applicable

SECTION 15 REGULATORY INFORMATION
15.1 Safety, health and environmental regulations/legislation specific for the substance or
mixture
REGULATORY LISTS SEARCHED:
02=EU Directive 90/394/EEC: Carcinogens at work.
03=EU Directive 92/85/EEC: Pregnant or breastfeeding workers.
04=EU Directive 96/82/EC (Seveso II): Article 9.
05=EU Directive 96/82/EC (Seveso II): Articles 6 and 7.
06=EU Directive 98/24/EC: Chemical agents at work.
08=EU Regulation EC No. 689/2008: Annex 1, Part 1.
09=EU Regulation EC No. 689/2008: Annex 1, Part 2.
10=EU Regulation EC No. 689/2008: Annex 1, Part 3.
12=EU REACH, Annex XVII: Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixture & article.
14=Netherlands, Cancer List
15=Netherlands, Cancer List, Annex 1
16=Netherlands, Toxic to Reproduction

No components of this material were found on the regulatory lists above.

CHEMICAL INVENTORIES:
All components comply with the following chemical inventory requirements: EINECS (European Union).
One or more components does not comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

15.2 Chemical safety assessment
No chemical safety assessment.

SECTION 16 OTHER INFORMATION

REVISION STATEMENT: This revision updates the following sections of this Material Safety Data Sheet:
Revision Date: December 2013

Full text of R-phrases:
R36: Irritating to eyes.
R38: Irritating to skin.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of CLP H-statements:
H411: Toxic to aquatic life with long lasting effects

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:
TLV - Threshold Limit Value TWA - Time Weighted Average
STEL - Short-term Exposure Limit PEL - Permissible Exposure Limit
CVX - Chevron CAS - Chemical Abstract Service Number
NQ - Not Quantifiable

References
NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. Adequate training and instruction should be given by you to your employees and affected personnel. Appropriate warnings and safe handling procedures should be provided by you to handlers and users. Additionally, the user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with the applicable federal, state, provincial or local hazard communication requirements. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the fitness for use of the material, or the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, vendor neither assumes nor retains any responsibility for any damage or injury resulting from abnormal use, from any failure to adhere to appropriate practices, or from any hazards inherent in the nature of the material. Moreover, unless an employee or a customer accesses or receives a SDS directly from the company, there is no assurance that a document obtained from alternate sources is the most currently available SDS. The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Completed by Clark PTP Staff

No Annex
Domestic SDS Documents

*FOR INFORMATION REFERENCE ONLY.* A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.
FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.

Safety Data Sheet

SDS #051

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Automotive Lubricant Additive Sample
Product Number(s): N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified Uses: Identified uses:
Laboratory test sample

Uses advised against: Other uses are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.

1.3 Details of the supplier of the safety data sheet
Clark Laboratories
1801 Route 51 South
Jefferson Hills, PA 15025
412-387-1001

1.4 Emergency telephone number
Transportation Emergency Response
Chemtrec - 24 hour emergency response: (800) 424-9300
International Collect: +1 703 741 5970
SDS Assistance Email: sds@clarktesting.com

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
DSD/DPD CLASSIFICATION: Not classified as dangerous according to EU regulatory guidelines.

Not classified as hazardous according to 29 CFR 1910.1200 (2012)

2.2 Label elements: Not Applicable

Signal Word: No signal word
Health Hazards: No known significant effects or critical hazards.
Precautionary Statements:
Prevention: Not applicable
Response: Not applicable
Storage: Store in well ventilated place
Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards Not applicable.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Mixtures
### Hazardous Components

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CAS NUMBER</th>
<th>EC NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly refined mineral oil</td>
<td>Trade Secret</td>
<td>Trade Secret</td>
<td>&gt;=10-&lt;=100</td>
</tr>
</tbody>
</table>

All concentrations are weight percent units for liquids or volume percent units for gaseous products.

Other ingredients are either not hazardous or are below the regulatory disclosure limit.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

### SECTION 4 FIRST AID MEASURES

#### 4.1 Description of first aid measures

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

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

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

**Inhalation:** Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

#### 4.2 Most important symptoms and effects, both acute and delayed

**IMMEDIATE SYMPTOMS AND HEALTH EFFECTS**

- **Eye:** No specific data
- **Skin:** No specific data
- **Ingestion:** No specific data
- **Inhalation:** No specific data

**DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS:** Not classified.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Not applicable.

### SECTION 5 FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

**Suitable extinguishing media:** In case of fire, use water spray (fog), foam, dry chemical or C02

**Unsuitable extinguishing media:** Do not use water jet.

#### 5.2 Special hazards arising from the substance or mixture

In a fire or if heated, a pressure increase will occur and the container may burst. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**5.1 Advice for firefighters**

**Protection of firefighters**

5.3.1 FIRE CLASSIFICATION:
NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

5.3.2 FLAMMABLE PROPERTIES:
Flashpoint: >200 deg. F
OSHA/NFPA FLAMIBILITY CLASS: Not classified as flammable or combustible by OSHA (see sect. 14 for transport class)

This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures
Eliminate all sources of ignition in vicinity of spilled material. Refer to Sections 5 and 8 for more information.

6.2 Environmental precautions
Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater.

6.3 Methods and material for containment and cleaning up
Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as appropriate or required.

6.4 Reference to other sections
See sections 8 and 13.

SECTION 7 HANDLING AND STORAGE
7.1 Precautions for safe handling
Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not taste or swallow.

7.2 Conditions for safe storage, including any incompatibilities
General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.
Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use
appropriate mitigating procedures. 

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

7.3 Specific end use(s): Chain Saw Oil

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

8.1 Control parameters

Occupational Exposure Limits:
Exposure limits for materials that can be formed when handling this product: When mists/aerosols can occur, the following are recommended: 5mg/m\(^3\) – ACGIH TLV, 10 mg/m\(^3\) – ACGIH STEL

8.2 Exposure controls

ENGINEERING CONTROLS:
Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Neoprene, Nitrile Rubber.

Respiratory Protection: No respiratory protection is normally required. No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices,
precautions should be taken to avoid breathing of material. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

**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.

### Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Component</th>
<th>Agency</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
<th>Notation</th>
</tr>
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<tbody>
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<td>Mineral Oil</td>
<td>OSHA Z-1</td>
<td>5 mg/m³</td>
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<td>ACGIH</td>
<td>5 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Attention:** the data below are typical values and do not constitute a specification.

#### 9.1 Information on basic physical and chemical properties

**Appearance**

- **Color:** N/A
- **Physical State:** Liquid
- **Odor:** hydrocarbon-like
- **Odor Threshold:** not determined
- **pH:** Not Applicable
- **Freezing Point:** not determined
- **Initial Boiling Point:** not determined
- **Flashpoint:** Closed cup: 100 °C (212 °F) Method: Pensky–Martens Closed Cup (ASTM D93)

**Flammability (solid, gas):** No Data Available
- **Vapor Pressure:** <0.1 hPa (<0.1 mmHg) at 20 °C (68 °F) estimated
- **Vapor Density (Air = 1):** No data available

**Density:** not determined
- **Water Solubility:** 0.00001 g/l at 20 °C (68 °F)

**Partition coefficient:** n-octanol/water: not determined
- **Auto-ignition temperature:** not determined
- **Decomposition temperature:** not determined
- **Viscosity, kinematic:** ca. 100 mm²/s at 40 °C (104 °F)

**Explosive Properties:** not determined

#### 9.2 Other Information: No Data Available

### SECTION 10 STABILITY AND REACTIVITY

#### 10.1 Reactivity: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical Stability: The chemical is stable.
10.3 Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to Avoid: No specific data
10.5 Incompatible materials to avoid: Strong oxidizing and reducing agents.
10.6 Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
Serious Eye Damage/Irritation: No known significant effects or critical hazards.
Skin Corrosion/Irritation: No known significant effects or critical hazards.
Skin Sensitization: No known significant effects or critical hazards.
Acute Inhalation Toxicity: No known significant effects or critical hazards.
Germ Cell Mutagenicity: No known significant effects or critical hazards.

CHRONIC EFFECTS AND CARCINOGENICITY
Carcinogenicity: OSHA: NO IARC: NO NTP: NO ACGIH: 1997 NIOM: A3

Dermal carcinogenicity: positive (mice) Studies have shown that similar products produce skin cancer in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined.

Reproductive Toxicity: The hazard evaluation is based on data for components or a similar material.
Specific Target Organ Toxicity - Single Exposure: The hazard evaluation is based on data for components or a similar material.
Specific Target Organ Toxicity - Repeated Exposure: The hazard evaluation is based on data for components or a similar material.

SECTION 12 ECOLOGICAL INFORMATION
12.1 Toxicity
This material is expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

12.2 Persistence and degradability
This material is not expected to be readily biodegradable. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the individual components.

12.3 Bioaccumulative potential
Bioconcentration Factor: No Data Available
Octanol/Water Partition Coefficient: No data available

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
This product is not, or does not contain, a substance that is a potential PBT or a vPvB.

12.6 Other adverse effects
No other adverse effects identified.
SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.
In accordance with European Waste Catalogue (E.W.C.) the codification is the following: 13 02 05

SECTION 14 TRANSPORT INFORMATION
The description shown may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

ADR/RID
NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable

14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

ICAO
NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

IMO
NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

SECTION 15 REGULATORY INFORMATION
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REGULATORY LISTS SEARCHED:
02=EU Directive 90/394/EEC: Carcinogens at work.
04=EU Directive 96/82/EC (Seveso II): Article 9.
05=EU Directive 96/82/EC (Seveso II): Articles 6 and 7.
06=EU Directive 98/24/EC: Chemical agents at work.
08=EU Regulation EC No. 689/2008: Annex 1, Part 1.
09=EU Regulation EC No. 689/2008: Annex 1, Part 2.
10=EU Regulation EC No. 689/2008: Annex 1, Part 3.
12=EU REACH, Annex XVII: Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixture & article.
14=Netherlands, Cancer List
15=Netherlands, Cancer List, Annex 1
16=Netherlands, Toxic to Reproduction
No components of this material were found on the regulatory lists above.

CHEMICAL INVENTORIES:
All components comply with the following chemical inventory requirements: EINECS (European Union).
One or more components does not comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

15.2 Chemical safety assessment
No chemical safety assessment.

SECTION 16 OTHER INFORMATION
REVISION STATEMENT: This revision updates the following sections of this Material Safety Data Sheet:
Revision Date: December 2013
Full text of R-phrases:
R36; Irritating to eyes.
R38; Irritating to skin.
R51/53; Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53; Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Full text of CLP H-statements:
H411; Toxic to aquatic life with long lasting effects

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:
TLV - Threshold Limit Value TWA - Time Weighted Average
STEL - Short-term Exposure Limit PEL - Permissible Exposure Limit
CVX - Chevron CAS - Chemical Abstract Service Number
NQ - Not Quantifiable

References