Material Safety Data Sheet

Chevron AIO 115, ISO 22, 32, 46, 68, 100, 150, 220

MSDS: 8425 Revision #: 1 Revision Date: 04/27/01

Click here to search the product data sheet database

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEVRON AIO

PRODUCT NUMBER(S): CPS230360  CPS230361  CPS230362  CPS230363
             CPS230364  CPS230365  CPS230366  CPS230367
SYNONYM: CHEVRON Authentic Industrial Oil ISO 100
          CHEVRON Authentic Industrial Oil ISO 150
          CHEVRON Authentic Industrial Oil ISO 22
          CHEVRON Authentic Industrial Oil ISO 220
          CHEVRON Authentic Industrial Oil ISO 32
          CHEVRON Authentic Industrial Oil ISO 46
          CHEVRON Authentic Industrial Oil ISO 68
          CHEVRON Authentic Industrial Oil ISO 115
          CHEVRON AIO ISO 100
          CHEVRON AIO ISO 150
          CHEVRON AIO ISO 22
          CHEVRON AIO ISO 220
          CHEVRON AIO ISO 32
          CHEVRON AIO ISO 46
          CHEVRON AIO ISO 68
          CHEVRON AIO 115

COMPANY IDENTIFICATION

Chevron Products Company
Lubricants and Specialty Products
6001 Bollinger Canyon Rd., T3325/B10
San Ramon, CA 94583
www.chevron-lubricants.com

EMERGENCY TELEPHONE NUMBERS

HEALTH (24 hr): (800)231-0623 or
(510)231-0623 (International)
TRANSPORTATION (24 hr): CHEMTREC
(800)424-9300 or (703)527-3887
Emergency Information Centers
are located in U.S.A.
Int'l collect calls accepted

PRODUCT INFORMATION: MSDS Request:(800)414-6737 email:lubemsds@chevron.com
Environmental, Safety, & Health Info: (925) 842-5535
Product Information: (800) 582-3835

2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 %  CHEVRON AIO

CONTAINING
COMPONENTS

LUBRICATING BASE OIL
SEVERELY REFINED PETROLEUM DISTILLATE
> 98.00%  5 mg/m³ (mist)  ACGIH TWA
          10 mg/m³ (mist) ACGIH STEL
          5 mg/m³ (mist)  OSHA PEL

The BASE OIL may be a mixture of any of the following: CAS 64741884,
CAS 64741895, CAS 64741964, CAS 64741975, CAS 64742014, CAS 64742525,
CAS 64742536, CAS 64742547, CAS 64742558, CAS 64742570, CAS 64742627,
CAS 64742650, or CAS 72623837.

ADDITIVES
< 2.00%

COMPOSITION COMMENT:
All the components of this material are on the Toxic Substances Control
Act Chemical Substances Inventory.

This product fits the ACGIH definition for mineral oil mist. The ACGIH
TLV is 5 mg/m³, the OSHA PEL is 5 mg/m³.

3. HAZARDS IDENTIFICATION

IMMEDIATE HEALTH EFFECTS
EYE:
Not expected to cause prolonged or significant eye irritation.

SKIN:
Contact with the skin is not expected to cause prolonged or significant
irritation. Not expected to be harmful to internal organs if absorbed
through the skin. High-Pressure Equipment Information: Accidental
high-velocity injection under the skin of materials of this type may
result in serious injury. Seek medical attention at once should an
accident like this occur. The initial wound at the injection site may not
appear to be serious at first; but, if left untreated, could result in
disfigurement or amputation of the affected part.

INGESTION:
Not expected to be harmful if swallowed.

INHALATION:
Contains a petroleum-based mineral oil. May cause respiratory irritation
or other pulmonary effects following prolonged or repeated inhalation of
oil mist at airborne levels above the recommended mineral oil mist
exposure limit.

4. FIRST AID MEASURES

EYE:
No specific first aid measures are required because this material is not
expected to cause eye irritation. As a precaution remove contact lenses,
if worn, and flush eyes with water.

SKIN:
No specific first aid measures are required because this material is not
expected to be harmful if it contacts the skin. As a precaution, remove
clothing and shoes if contaminated. Wash skin with soap and water. Wash or clean contaminated clothing and shoes before reuse.

INGESTION:
No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.

INHALATION:
If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

NOTE TO PHYSICIANS:
In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

5. FIRE FIGHTING MEASURES

SPECIAL NOTES: Leak/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (e.g. open flame, pilot lights, sparks, or electric arcs).

FIRE CLASSIFICATION:
Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

FLAMMABLE PROPERTIES:
FLASH POINT: (COC) 349-500°F (176-260°C) Min.
AUTOIGNITION: NDA

FLAMMABILITY LIMITS (% by volume in air): Lower: NA Upper: NA

EXTINGUISHING MEDIA:
- CO2, Dry Chemical, Foam, Water Fog

NFPA RATINGS: Health 0; Flammability 1; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS:
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.

COMBUSTION PRODUCTS:
Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

CHEMTREC EMERGENCY NUMBER (24 hr): (800)424-9300 or '(703)527-3887
International Collect Calls Accepted

ACCIDENTAL RELEASE MEASURES:
Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/Personal Protection. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.
7. HANDLING AND STORAGE

DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

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 properly disposed of. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), 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.

ENGINEERING CONTROLS
Use in a well-ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits.

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. Suggested materials for protective gloves include: <Nitrile> <Silver Shield> <Viton>

RESPIRATORY PROTECTION:
No respirator protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the recommended mineral oil mist exposure limits. If not wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators: particulate.

9. PHYSICAL AND CHEMICAL PROPERTIES
PHYSICAL DESCRIPTION:
  Clear, colorless liquid.
PH: NA
VAPOR PRESSURE: <0.01 mm Hg at 100°F
VAPOR DENSITY (AIR=1): Heavier than air.
BOILING POINT: >500°F (>260°C)
FREEZING POINT: NA
MELTING POINT: NA
SOLUBILITY: Soluble in hydrocarbon solvents; insoluble in water.
SPECIFIC GRAVITY: 0.86 - 0.87 @ 15.6/15.6°C
VOLATILE ORGANIC COMPOUNDS (VOC): 1.8 (wt%); 14.94 g/l approx.
VISCOSITY: 22 - 210 cSt @ 40°C (Min.)
POUR POINT: -12°C (Max.)

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:
None known.
CHEMICAL STABILITY:
Stable.
CONDITIONS TO AVOID:
No data available.
INCOMPATIBILITY WITH OTHER MATERIALS:
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
HAZARDOUS POLYMERIZATION:
Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:
The eye irritation hazard is based on data for a similar material.
SKIN EFFECTS:
The skin irritation hazard is based on data for a similar material.
ACUTE ORAL EFFECTS:
The acute oral toxicity is based on data for a similar material.
ACUTE INHALATION EFFECTS:
The acute respiratory toxicity is based on data for a similar material.
ADDITIONAL TOXICOLOGY INFORMATION:
This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

12. ECOLOGICAL INFORMATION
ECOTOXICITY:
This material is not expected to be harmful to aquatic organisms.

ENVIRONMENTAL FATE:
This material is not expected to be readily biodegradable.

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: NONE
DOT HAZARD CLASS: NONE
DOT IDENTIFICATION NUMBER: NONE
DOT PACKING GROUP: N/A
ADDITIONAL INFO: Petroleum Lubricating Oil - Not Hazardous by U.S. DOT.
ADR/RID Hazard class - Not applicable.

15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

<table>
<thead>
<tr>
<th>SARA 311</th>
<th>CERCLA</th>
<th>TSCA</th>
</tr>
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<tbody>
<tr>
<td>01=SARA 313</td>
<td>12=CERCLA 302.4</td>
<td>22=TSCA Sect 5(a)(2)</td>
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<tr>
<td>02=MASS RTK</td>
<td>13=MN RTK</td>
<td>23=TSCA Sect 6</td>
</tr>
<tr>
<td>03=NTP Carcinogen</td>
<td>14=ACGIH TWA</td>
<td>24=TSCA Sect 12(b)</td>
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<tr>
<td>04=CA Prop 65-Carcin</td>
<td>15=ACGIH STEL</td>
<td>25=TSCA Sect 8(a)</td>
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<td>05=CA Prop 65-Repro Tox</td>
<td>16=ACGIH Calc TLV</td>
<td>26=TSCA Sect 8(d)</td>
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<tr>
<td>06=IARC Group 1</td>
<td>17=OSHA PEL</td>
<td>27=TSCA Sect 4(a)</td>
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<td>07=IARC Group 2A</td>
<td>18=DOT Marine Pollutant</td>
<td>28=Canadian WHMIS</td>
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<tr>
<td>08=IARC Group 2B</td>
<td>19=Chevron TWA</td>
<td>29=OSHA CEILING</td>
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<tr>
<td>09=SARA 302/304</td>
<td>20=EPA Carcinogen</td>
<td>30=Chevron STEL</td>
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</table>

The following components of this material are found on the regulatory lists indicated.

SEVERELY REFINED PETROLEUM DISTILLATE
is found on lists: 14,15,17,
NEW JERSEY RTK CLASSIFICATION:
Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A.
34:5A-1 et. seq., the product is to be identified as follows:
PETROLEUM OIL

WHMIS CLASSIFICATION:
This product is not considered a controlled product according to the
criteria of the Canadian Controlled Products Regulations.

16. OTHER INFORMATION

NFPA RATINGS: Health 0; Flammability 1; Reactivity 0;
HMIS RATINGS: Health 1; Flammability 1; Reactivity 0;
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme; PPE: Personal
Protection Equipment Index recommendation, *- Chronic Effect
Indicator). These values are obtained using the guidelines or
published evaluations prepared by the National Fire Protection
Association (NFPA) or the National Paint and Coating Association
(for HMIS ratings).

REVISION STATEMENT:
This revision updates Section 1.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:
TLV - Threshold Limit Value
STEL - Short-term Exposure Limit
RQ - Reportable Quantity
C - Ceiling Limit
A1-5 - Appendix A Categories
NDA - No Data Available
TWA - Time Weighted Average
TPQ - Threshold Planning Quantity
PEL - Permissible Exposure Limit
CAS - Chemical Abstract Service Number
() - Change Has Been Proposed
NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard
(29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology
and Health Risk Assessment Unit, CRTC, P.O. Box 1627, Richmond, CA 94804

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 modification of the information, we do not assume any responsibil-
ity 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.

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