

ACTIO MSDS ID: 1244494

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## SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

(N/A)

Product Name: **Greenlee 4016 GB Hydraulic Oil**

Distributor Name: Exxon Mobil Corporation

Distributor Address: 3225 GALLOWS RD.  
FAIRFAX, VA. 22037  
USA

MSDS Internet Address: <http://www.exxon.com>,  
<http://www.mobil.com>

**NFPA****1****0 0**

Distributor Telephone: Product Technical: 800-662-4525, 800-947-9147

Health Phone: 24 Hour Health Emergency: 609-737-4411

Transportation Phone: 800-424-9300; ExxonMobil: 281-834-3296

Revision Date: 12 Jul 2012

Manufacturer Name: Greenlee Textron

General Use: Intended Use: Hydraulic fluid

Product Description: Base Oil and Additives

**HMIS**

<b>HEALTH</b>	<b>0</b>
<b>FIRE</b>	<b>1</b>
<b>REACTIVITY</b>	<b>0</b>
<b>PPE</b>	

Product Codes: 201560103630, 622621-00, 97AY99

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## SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS

: (N/A)

Ingredient Name	CAS#	Ingredient Percent
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HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM	64742-55-8	Concentration*: 20 - 30%
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Hazardous Paragraph: Reportable Hazardous Substance(s) or Complex Substance(s)

EC Index Number: 1

Comments: \* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

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## SECTION 3 : HAZARDS IDENTIFICATION

: (N/A)

Potential Health Effects: Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage.

This material is not considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

NFPA Hazard ID:  
Health: 0  
Flammability: 1  
Reactivity: 0

HMIS Hazard ID:  
Health: 0  
Flammability: 1  
Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

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## SECTION 4 : FIRST AID MEASURES

: (N/A)

<b>Eye Contact:</b>	Flush thoroughly with water. If irritation occurs, get medical assistance.
<b>Skin Contact:</b>	Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.
<b>Inhalation:</b>	Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.
<b>Ingestion:</b>	First aid is normally not required. Seek medical attention if discomfort occurs.

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## SECTION 5 : FIRE FIGHTING MEASURES

: (N/A)

<b>Flash Point:</b>	> 175 deg C (347 deg F)
<b>Flash Point Method:</b>	[ASTM D-92]
<b>Upper Flammable or Explosive Limit:</b>	(Approximate volume % in air): 7.0
<b>Lower Flammable or Explosive Limit:</b>	(Approximate volume % in air): 0.9
<b>Auto Ignition Temperature:</b>	Not Determined
<b>Extinguishing Media:</b>	Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO <sub>2</sub> ) to extinguish flames.
<b>Unsuitable Media:</b>	Inappropriate Extinguishing Media: Straight Streams of Water
<b>Hazardous Combustion Byproducts:</b>	Smoke, Fume, Aldehydes, Sulfur oxides, Incomplete combustion products, Oxides of carbon
<b>Fire Fighting Instructions:</b>	Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

NFPA

Health: 0

Flammability: 1

Reactivity: 0

Other:

**Unusual Fire Hazards:** Pressurized mists may form a flammable mixture.

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**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

: (N/A)

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<b>Personal Precautions:</b>	PROTECTIVE MEASURES: Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders. For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.
<b>Large Spill:</b>	Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.
<b>Land Spill:</b>	Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.
<b>Water Spill:</b>	Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.
	Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.
<b>Spill/Release Reporting:</b>	NOTIFICATION PROCEDURES: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800) 424-8802.

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**SECTION 7 : HANDLING and STORAGE**

: (N/A)

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<b>Handling:</b>	Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).
	Static Accumulator: This material is a static accumulator.
<b>Storage:</b>	The container choice, for example storage vessel, may effect static accumulation and dissipation. Do not store in open or unlabelled containers. Keep away from incompatible materials.
<b>Hygiene Practices:</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

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**SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION**

: (N/A)

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<b>Engineering Controls:</b>	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: No special requirements under ordinary conditions of use and with adequate
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	ventilation.
<b>Personal Protective Equipment Routine Handling:</b>	Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.
<b>Skin Protection Description:</b>	Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.
<b>Hand Protection Description:</b>	Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: No protection is ordinarily required under normal conditions of use.
<b>Eye/Face Protection:</b>	If contact is likely, safety glasses with side shields are recommended.
<b>Protective Clothing/Body Protection:</b>	Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.
<b>Respiratory Protection:</b>	If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: No special requirements under ordinary conditions of use and with adequate ventilation.  For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.
<b>Exposure Limits:</b>	Exposure limits/standards (Note: Exposure limits are not additive)  Source: HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM Form: Mist. Limit/Standard TWA: 5 mg/m <sup>3</sup> NOTE: Not Applicable Source: OSHA Z1  Form: Inhalable fraction. Limit/Standard TWA: 5 mg/m <sup>3</sup> NOTE: Not Applicable Source: ACGIH  Form: Mist. Limit/Standard TWA: 5 mg/m <sup>3</sup> NOTE: Not Applicable Source: ACGIH
<b>Specific Hygiene Measures:</b>	NOTE: Limits/standards shown for guidance only. Follow applicable regulations. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.  ENVIRONMENTAL CONTROLS: Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

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## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

: (N/A)

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<b>Color:</b>	Amber
<b>Odor:</b>	Characteristic
<b>Physical State:</b>	Liquid
<b>pH:</b>	Not Applicable

Decomposition Temperature:	Not Determined
Vapor Pressure:	< 0.013 kPa (0.1 mm Hg) at 20 deg C [Estimated]
Vapor Density:	(Air = 1): > 2 at 101 kPa [Estimated]
Flash Point:	> 175 deg C (347 deg F)
Flash Point Method:	[ASTM D-92]
Auto Ignition Temperature:	Not Determined
Upper Explosive Limit:	(Approximate volume % in air): 7.0
Lower Explosive Limit:	(Approximate volume % in air): 0.9
Boiling Point:	> 316 deg C (600 deg F) [Estimated]
Freezing Point:	Not Determined
Melting Point:	Not Applicable
Solubility:	In Water: Negligible
Density:	Relative Density (at 15 deg C): 0.84
Evaporation Point:	(n-Butyl acetate = 1): Not Determined
Volatile Organic Compound Content:	6.1 G/L [ASTM E1868-10]
Viscosity:	32.5 cSt (32.5 mm <sup>2</sup> /sec) at 40 deg C 6.6 cSt (6.6 mm <sup>2</sup> /sec) at 100 deg C
Pour Point:	-51 deg C (-60 deg F)
Odor Threshold:	Not Determined
Coefficient of Water/Oil Distribution:	Log Pow (n-Octanol/Water Partition Coefficient): > 3.5 [Estimated]
Oxidizing Properties:	See Hazards Identification Section.

DMSO Extract (mineral oil only), IP-346: < 3 %wt

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

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## SECTION 10 : STABILITY and REACTIVITY : (N/A)

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Chemical Stability:	Material is stable under normal conditions.
Conditions to Avoid:	Excessive heat. High energy sources of ignition.
Incompatibilities with Other Materials:	MATERIALS TO AVOID: Strong oxidizers
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	Material does not decompose at ambient temperatures.

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## SECTION 11 : TOXICOLOGICAL INFORMATION : (N/A)

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### HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM :

Routes of Exposure:	Inhalation, Ingestion, Skin, Eye
Skin Effects:	Toxicity: No end point data for material. Conclusion/Remarks: Minimally Toxic. Based on assessment of the components.
Ingestion Effects:	Toxicity: No end point data for material. Conclusion/Remarks: Minimally Toxic. Based on assessment of the components.
Inhalation Effects:	Toxicity: No end point data for material. Conclusion/Remarks: Minimally Toxic. Based on assessment of the components.
Chronic Effects:	CHRONIC/OTHER EFFECTS: Contains: Base oil severely refined: Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation.
Carcinogenicity:	Base oil severely refined: Not carcinogenic in animal studies.
Sensitization:	Not sensitizing in test animals.

<b>Irritation:</b>	<p>Inhalation: Irritation: No end point data for material. Conclusion/Remarks: Negligible hazard at ambient/normal handling temperatures. Based on assessment of the components.</p> <p>Skin: Irritation: No end point data for material. Conclusion/Remarks: Negligible irritation to skin at ambient temperatures. Based on assessment of the components.</p> <p>Eye: Irritation: No end point data for material. Conclusion/Remarks: May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.</p>
<b>Other Toxicological Information:</b>	Additional information is available by request.
<b>REGULATORY LISTS SEARCHED:</b>	<p>The following ingredients are cited on the lists below: None.</p> <p>1 = NTP CARC 2 = NTP SUS 3 = IARC 1 4 = IARC 2A 5 = IARC 2B 6 = OSHA CARC</p>

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## SECTION 12 : ECOLOGICAL INFORMATION

: (N/A)

<b>Ecological Paragraph:</b>	The information given is based on data available for the material, the components of the material, and similar materials.
<b>Ecotoxicity:</b>	Material -- Not expected to be harmful to aquatic organisms.
<b>MOBILITY:</b>	Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.
	<p><b>PERSISTENCE AND DEGRADABILITY:</b> Biodegradation: Base oil component -- Expected to be inherently biodegradable</p> <p><b>BIOACCUMULATION POTENTIAL:</b> Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.</p> <p><b>OTHER ECOLOGICAL INFORMATION:</b> VOC: 6.1 G/L [ASTM E1868-10]</p>

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## SECTION 13 : DISPOSAL CONSIDERATIONS

: (N/A)

<b>Waste Disposal:</b>	<p>Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.</p> <p>DISPOSAL RECOMMENDATIONS: Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.</p>
<b>RCRA Hazard Class:</b>	RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.
<b>Empty Container Warning:</b>	Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and

in accordance with governmental regulations. DO NOT PRESSURISE, 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.

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## SECTION 14 : TRANSPORT INFORMATION

: (N/A)

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DOT Shipping Information:	LAND (DOT): Not Regulated for Land Transport
IATA:	AIR (IATA): Not Regulated for Air Transport
Canadian TDG:	LAND (TDG): Not Regulated for Land Transport
SEA (IMDG):	Not Regulated for Sea Transport according to IMDG-Code

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## SECTION 15 : REGULATORY INFORMATION

: (N/A)

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### HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM :

TSCA 8(b): Inventory Status:	Complies with the following national/regional chemical inventory requirements: TSCA
Section 302:	EPCRA SECTION 302: This material contains no extremely hazardous substances.
Section 312 Hazard Category:	SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.
Section 313 Toxic Release Form:	SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.
OSHA 29 CFR 1200:	OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.
Regulatory Paragraph:	The following ingredients are cited on the lists below: Chemical Name: HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM CAS Number: 64742-55-8 List Citations: 1, 4, 17  REGULATORY LISTS SEARCHED: 1 = ACGIH ALL 2 = ACGIH A1 3 = ACGIH A2 4 = OSHA Z 5 = TSCA 4 6 = TSCA 5a2 7 = TSCA 5e 8 = TSCA 6 9 = TSCA 12b 10 = CA P65 CARC 11 = CA P65 REPRO 12 = CA RTK 13 = IL RTK 14 = LA RTK 15 = MI 293 16 = MN RTK 17 = NJ RTK 18 = PA RTK 19 = RI RTK  Code key: CARC = Carcinogen; REPRO = Reproductive
Canada WHMIS:	Complies with the following national/regional chemical inventory requirements: DSL

**Japan Chemical Inventory Status:** Complies with the following national/regional chemical inventory requirements:  
ENCS

**Australia Chemical Inventory Status:** Special Cases:  
Inventory: AICS  
Status: Restrictions Apply

**International Chemical Inventory Lists:** Complies with the following national/regional chemical inventory requirements:  
PICCS

Special Cases:  
Inventory: IECSC  
Status: Restrictions Apply

Inventory: KECI  
Status: Restrictions Apply

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## SECTION 16 : ADDITIONAL INFORMATION

: (N/A)

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### HMIS:

Health Hazard: 0  
Fire Hazard: 1  
Reactivity: 0

### NFPA:

Health: 0  
Fire Hazard: 1  
Reactivity: 0

**MSDS Revision Date:** 12 Jul 2012

### THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

#### Revision Changes:

Section 7: Handling and Storage - Storage Phrases was modified.  
Hazard Identification: Health Hazards was modified.  
Section 11: Dermal Lethality Test Data was modified.  
Section 11: Dermal Lethality Test Comment was modified.  
Section 11: Oral Lethality Test Data was modified.  
Section 11: Inhalation Lethality Test Data was modified.  
Section 11: Dermal Irritation Test Data was modified.  
Section 11: Eye Irritation Test Data was modified.  
Section 11: Oral Lethality Test Comment was modified.  
Section 11: Inhalation Irritation Test Data was modified.  
Composition: Component table was modified.  
Section 15: List Citation Table - Header was modified.  
Section 15: National Chemical Inventory Listing was modified.  
Section 16: Code to MHCs was modified.  
Section 15: Community RTK - Header was modified.  
Section 8: Exposure limits/standards was modified.  
Section 15: Special Cases Table was modified.  
Section 12: Other Ecological Information - Header was added.  
Section 15: Chemical Name - Header was added.  
Section 15: CAS Number - Header was added.  
Section 15: List Citations - Header was added.  
Section 15: List Citations Table was added.  
Section 8: Exposure Limits Table was added.  
Section 8: Exposure Limit Values - Header was added.  
Section 8: OEL Table - Form Column - Header was added.  
Section 8: OEL Table - Limit Column - Header was added.  
Section 8: OEL Table - Notation Column - Header was added.  
Section 8: OEL Table - Source Column - Header was added.  
Section 8: Exposure Limit Values - Header was added.  
Section 12: California VOC was added.  
Section 12: California VOC was added.  
Section 8: Exposure limits/standards - Header was deleted.

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**Abbreviations:** N/D = Not determined  
N/A = Not applicable

Internal Use Only:  
MHC: 0B, 0B, 0, 0, 0, 0  
PPEC: A  
DGN: 7087020XUS (1013882)

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