

JOINT OIL ANALYSIS PROGRAM OFFICE -- MIL-L-6082 GRADE 1100 (BASE OIL) D12-300 --  
6650-00-179-5141

===== Product Identification =====

Product ID:MIL-L-6082 GRADE 1100 (BASE OIL) D12-300  
MSDS Date:03/16/1994  
FSC:6650  
NIIN:00-179-5141  
MSDS Number: CCHDN  
=== Responsible Party ===  
Company Name:JOINT OIL ANALYSIS PROGRAM OFFICE  
Address:296 FARRAR RD STE B  
City:PENSACOLA  
State:FL  
ZIP:32508-5150  
Country:U  
S  
Info Phone Num:904-452-3191  
Emergency Phone Num:904-452-3191  
CAGE:JOINT  
=== Contractor Identification ===  
Company Name:JOINT OIL ANALYSIS PROGRAM OFFICE  
Address:296 FARRAR RD STE B  
City:PENSACOLA  
State:FL  
ZIP:32508-5150  
Country:US  
Phone:904-452-3191  
CAGE:JOINT

===== Composition/Information on Ingredients =====

Ingred Name:SILVER \*96-2\*  
CAS:7440-22-4  
RTECS #:VW3500000  
OSHA PEL:0.01 MG/CUM  
ACGIH TLV:0.1 MG/CUM  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:ALUMINUM \*96-2\*  
CAS

:7429-90-5  
RTECS #:BD0330000  
OSHA PEL:15 MG/CUM  
ACGIH TLV:10 MG/CUM (DUST)

Ingred Name:BORON \*96-2\*  
CAS:7440-42-8  
RTECS #:ED7350000

Ingred Name:COPPER (DUST & MIST), BRONZE POWDER \*96-2\*  
CAS:7440-50-8  
RTECS #:GL5325000  
Other REC Limits:1 MG(CU)/M3 (DUST)  
OSHA PEL:0.1 MG(CU)/M3 (FUME)  
ACGIH TLV:0.2 MG/M3 (FUME)  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:CHROMIUM METAL, CHROMIUM, CHROME (CARCINOGEN BY NTP; IARC  
GROUP 3) \*96-2\*  
CAS:7440-47-3  
RTECS #:GB4200000  
ACGIH TLV  
:0.5 MG/CUM  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:IRON \*96-2\*  
CAS:7439-89-6  
RTECS #:NO4565500

Ingred Name:MAGNESIUM  
CAS:7439-95-4  
RTECS #:OM2100000

Ingred Name:NICKEL (SUSPECTED ANIMAL/HUMAN CARCINOGEN BY IARC GROUP 2B,  
SUSPECTED CARCINOGEN BY NTP) \*96-2\*  
CAS:7440-02-0  
RTECS #:QR5950000  
Other REC Limits:1 MG/CUM  
OSHA PEL:1 MG/CUM  
ACGIH TLV:0.05 MG/CUM IC

Ingred Name:SODIUM  
CAS:15307-79-6  
RTECS #:AG6310000

Ingred Name:LEAD, INORGANIC LEAD (IARC CARC GROUP 2B) \*96-2\*  
CAS:

7439-92-1  
RTECS #:OF7525000  
ACGIH TLV:0.15 MG/CUM  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
ACGIH TLV:10 MG/CUM

Ingred Name:TIN \*96-2\*  
CAS:7440-31-5  
RTECS #:XP7320000  
OSHA PEL:2 MG/CUM  
ACGIH TLV:2.0 MG/CUM

Ingred Name:TITANIUM, DRY POWDER \*96-2\*  
CAS:7440-32-6  
RTECS #:XR1700000

Ingred Name:ZINC  
CAS:7440-66-6  
RTECS #:ZG8600000  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:MANGANESE \*96-2\*  
CAS:7439-96-5  
RTECS #:OO9275000  
OSHA PEL:5 MG/  
CUM  
ACGIH TLV:5 MG/CUM (DUST)

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50(RAT): 29,000 MG/KG  
Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:THIS PRODUCT MAY BE IRRITATING TO THE  
EYES & MAY CAUSE SLIGHT SKIN IRRITATION.  
Explanation of Carcinogenicity:SEE INGREDIENTS.  
Effects of Overexposure:THIS PRODUCT MAY BE IRRITATING TO THE EYES &  
MAY C

AUSE SLIGHT SKIN IRRITATION.

=====  
First Aid Measures  
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First Aid:INHALATION: REMOVE FROM EXPOSURE. EYES: WASH W/CLEAR WATER FOR 15 MINS. SKIN: WASH W/SOAP & WATER. INGESTION: DON'T INDUCE VOMITING. OBTAIN MEDICAL ATTENTION IN ALL CASES.

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Fire Fighting Measures  
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Flash Point Method:COC  
Flash Point:420F  
Extinguishing Media:CO2, DRY CHEMICAL, FOAM  
Fire Fighting Procedures:NONE  
Unusual Fire/Explosion Hazard:NONE

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Accidental Release Measures  
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Spill Release Procedures:TREAT AS AN OIL SPILL. CLEAN W/TOWEL/RAG. DISPOSE OF RAG IN TRASH. DON'T STORE W/OXIDIZERS. FLOOR MAY BE SLIPPERY. DETERGENT WASH MAY BE REQUIRED.

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Handling and Storage  
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Handling and Storage Precautions:USE NORMAL GOOD HOUSEKEEPING PROCEDURES.

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Exposure Controls/Personal Protection  
=====

Respiratory Protection  
:NOT NORMALLY NEEDED UNLESS OIL MIST OCCURS THEN USE DUST/MIST CARTRIDGE.  
Ventilation:EXHAUST SYSTEM SHOULD BE IN PROPER WORKING ORDER TO FURNISH NORMAL WORKPLACE VENTILATION.  
Protective Gloves:RUBBER  
Eye Protection:SAFETY GLASSES  
Work Hygienic Practices:USE NORMAL GOOD HOUSEKEEPING PROCEDURES.  
Supplemental Safety and Health

=====  
Physical/Chemical Properties  
=====

Vapor Pres:0  
Spec Gravity:0.9119  
Solubility in Water:INSOLUBLE  
Appearance and Odor:GOLDEN BROW

N COLOR W/CHARACTERISTIC ODOR OF  
LUBRICATING OIL

Percent Volatiles by Volume:0

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZERS

Hazardous Decomposition Products:PARTIALLY BURNED HYDROCARBONS, METAL  
OXIDES

===== Disposal Considerations =====

Waste Disposal Methods:SMALL: RESIDUES OF THESE PRODUCTS MAY BE  
DISCARDED IN TRASH. MATERIAL MAY BE DISPOSED OF AS WASTE OIL IN

ACCORDANCE W/LOCAL, STATE & FEDERAL REGULATIONS.

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