

JOINT OIL ANALYSIS PROGRAM OFFICE -- MIL-L-6082, GRAD 1100 (BASE OIL) D19-0 --
6650-00-179-5137

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

Product ID:MIL-L-6082, GRAD 1100 (BASE OIL) D19-0

MSDS Date:03/16/1994

FSC:6650

NIIN:00-179-5137

MSDS Number: CCGDQ

=== Responsible Party ===

Company Name:JOINT OIL ANALYSIS PROGRAM OFFICE

Address:296 FARRAR RD STE B

City:PENSACOLA

State:FL

ZIP:32508-5150

Country:US

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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:74

29-90-5
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:743

9-92-1
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 CAUS

E 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.

=====
Fire Fighting Measures
=====

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.

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

=====
Exposure Controls/Personal Protection
=====

Respiratory Protection:NO
T 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
=====

HCC:N1
Vapor Pres:0
Spec Gravity:0.9119
Solubility in Water:INSOLUBLE
Appearance and Odor:GOLDEN

BROWN 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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