

JOINT OIL ANALYSIS PROGRAM OFFICE -- MIL-L-6082 GRADE 1100 (BASE OIL) D12-50 --
6650-00-179-5143

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

Product ID:MIL-L-6082 GRADE 1100 (BASE OIL) D12-50

MSDS Date:03/16/1994

FSC:6650

NIIN:00-179-5143

MSDS Number: CCHDQ

=== Responsible Party ===

Company Name:JOINT OIL ANALYSIS PROGRAM OFFICE

Address:296 FARRAR RD STE B

City:PENSACOLA

State:FL

ZIP:32508-5150

Country:US

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:7

439-92-1
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/C
UM
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 CA

USE SLIGHT SKIN IRRITATION.

=====
First Aid Measures
=====

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

=====
Accidental Release Measures
=====

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
=====

Handling and Storage Precautions:USE NORMAL GOOD HOUSEKEEPING PROCEDURES.

=====
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 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
A

CCORDANCE W/LOCAL, STATE & FEDERAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability
of this information to their
particular situation.