MATERIAL SAFETY DATA SHEET For R&D use only. Not for drug, household or other uses.

Composition/Information on Ingredient

NO SPECIAL REQUIREMENTS UNDER ORDINARY CNDTNS OF USE & W/ADEQ VENT. NIOSH/MSHA APPROVED

FIRE FIGHT PROC:RUNOFF FROM FIRE CONTROL/DILUTION FROM ENTERING STREAMS, SEWERS/DRINKING WATER SUPPLY. FIRST AID PROC:CALL PHYS, HOSPITAL EMER ROOM/POIS CTL CTR FOR ASSISTANCE. DO NOT INDUCE VOMIT/GIV E ANYTHING BY MOUTH TO UNCON PERSON. SPILL PROC:(800)424-9300. ABSORB ON FIRE RETARDANT

9 ACUTE: INGEST: SLIGHTLY TOXIC. SKIN: SLIGHTLY TOXIC. MAY CAUSE SLIGHT IRRITATION ON PROLONGED/REPEATED CONTACT. EYE: MAY CAUSE SLIGHT IRRITATION. SUBCHRONIC TOX: SEV SOLV REFINED & SEV HYDROTREATED MINERA L BASE OILS HAVE BEEN

HLTH HAZ: FOR 90 DAYS @ SIGNIFICANTLY HIGHER /THOSE EXPECTED DURING NORM INDUST EXPOS. EXAMINATION SHOWED NO ADVERSE EFTS.CHRONIC MOUSE SKIN PAINTING STUDIES SHOWED NO CARCINOGENIC EFFECTS. CHRONIC TOX: BASE OILS IN THIS

EYE:FLUSH THORO W/WATER FOR @ LEAST 15 MINS. IF IRRIT PERSISTS, CALL PHYS. SKIN:WASH W/SOAP & WATER. INHAL:REMOVE FROM FURTHER EXPOS. IF RESP IRRIT, DIZZ, NAUS, OR UNCON OCCURS, SEEK IMMED MED ASSISTA NCE & CALL PHYS. IF BRTHG HAS SPED, USE MOUTH TO MOUTH RESUSCITATION. INGEST: NOT EXPECTED TO BE PROBLEM. HOWEVER, IF GREATER THAN 1/2 LITER(PINT)

RPT SPILLS AS REQD TO APPROP AUTH. U.S. COAST GUARD REGS REQ IMMED RPTG OF SPILLS THAT COULD REACH ANY WATERWAY INCLDG INTERMITTENT DRY CREEKS. RPT SPILL TO COAST GUARD TOLL FREE NO: (800)424-8802. IN C ASE OF ACCIDENT/ROAD SPILL

PROD IS SUITABLE FOR BURNING IN ENCLOSED, CONTROLLED BURNER FOR FUEL VALUE/DISP BY SUPERVISED INCIN. SUCH BURNING MAY BE LIM PURSUANT TO RCRA. IN ADDTN, PROD IS SUITABLE FOR PROCESSING BY APPRVD RECYC LING FACILITY/CAN BE DISPOS OF @

NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP (FP N). USE WATER TO KEEP FIRE EXPOS CNTNRS COOL. WATER SPRAY MAY BE USED

TESTED @ MOBIL ENVIRON & HLTH SCIENCES LAB BY DERMAL APPLIC TO RATS 5 DAYS/WEEK (EFTS OF OVEREXP)

RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN (FP N).

Equipment EMERGENCY EYE WASH DELUGE SHOWER (FP N). 11

GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

Cas: 112-90-3 Code: Μ

RTECS: RG4130000

Code: Μ

Name:

NK

OSHA PEL: NK (FP N)

OSHA STEL:

ACGIH TLV: NK (FP N)

ACGIHSTEL:

Ventilation:

Protective Gloves:

Eye Protection:

NO SPEC EQUIP REQD.

Other Protective Equipment:

Supplemental Safety and Health:

TREATED SAWDUST, (ING 16)

LD50LC50Mixture:

YES

Skin: YES

NO

IARC: NO

OSHA: NO

Ingestion:

Health Hazards Data

NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation:

Carcinogenicity Inds - NTP:

Health Hazards Acute And Chronic:

Explanation Of Carcinogenicity:

Signs And Symptions Of Overexposure:

Medical Cond Aggravated By Exposure: NONE SPECIFIED BY MANUFACTURER.

PROD ARE SEV SOLV REFINED AND/OR SEV HYDROTREATED.

INGEST, IMMED GIVE 1-2 GLASSES OF WATER & (SUPDAT)

NOT RELEVANT.

First Aid:

Spill Release Procedures:

NOTIFY CHEMTREC(SUPDAT)

Waste Disposal Methods:

NONE SPECIFIED BY MANUFACTURER.

Handling And Storage Precautions: NONE SPECIFIED BY MANUFACTURER.

NONE SPECIFIED BY MANUFACTURER. 10

Fire and Explosion Hazard Information

CARBON DIOXIDE, FOAM, DRY CHEMICAL AND WATER FOG.

TO FLUSH SPILLS AWAY FROM EXPOS. PVNT(SUPDAT)

Physical/Chemical Properties

Neutralizing Agent:

ANY GOVT (ING 18)

Other Precautions:

Flash Point Method:

COC

N/A

0.6%

7.0%

NONE.

HCC:

NRC/State LIC No:

Boiling Point:

Melt/Freeze Pt:

M.P/F.P Text:

Decomp Temp:

Decomp Text:

Vapor Pres: <0.1 @ 20C

Vapor Density:

Spec Gravity:

VOC Pounds/Gallon:

VOC Grams/Liter:

Evaporation Rate & Reference:

BROWN VISCOUS LIQUID, MILD ODOR

0.9

PH: N/A

Viscosity: N/P

NOT KNOWN

NEGLIGIBLE

N/K

N/K

YES

NO

Solubility in Water:

Corrosion Rate:

Stability Indicator:

EXTREME HEAT. 12

Materials To Avoid: STRONG OXIDIZERS.

CARBON MONOXIDE.

NOT RELEVANT.

Information:N/P

Information:N/P

Appearance and Odor:

Percent Volatiles by Volume:

Reactivity Data

Stability Condition To Avoid:

Hazardous Decomposition Products:

Hazardous Polymerization Indicator:

Conditions To Avoid Polymerization:

Toxicological Information

Regulatory Information

Sara Title III Information: N/P

Federal Regulatory Information: N/P

State Regulatory Information: N/P

Other Information

www.lookchem.com

Other Information:N/P

MSDS Transport Information

For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any

guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from

handling or from contact with the above product. See reverse side of invoice or packing slip for additional

WARRANTY

terms and conditions of sale.

Volatile Org Content %:

N/A

N/K

B.P. Text: >600F,>316C

Net Prop WT For Ammo:

Lower Limits:

Upper Limits:

Extinguishing Media:

Fire Fighting Procedures:

Unusual Fire/Explosion Hazard:

Flash Point:

Flash Point Text: >330F,>166C

Autoignition Temp:

Autoignition Temp Text:

Work Hygienic Practices:

Control Measures

USE IN WELL VENTILATED AREA.

ANSI APPRVD CHEM WORKERS GOGGLES (FP N).

Respiratory Protection:

Code:

Code:

Code: Μ

NP Code:

Μ

Other REC Limits:

9-OCTADECENYLAMINE, (Z)-; (OLEYLAMINE)

Click http://www.lookchem.com/cas-112/112-90-3.html for suppliers of this product.