

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-684/68476-31-3.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
68476-31-3
Code:
M
RTECS:
Code:
X
Name:
FUEL OIL NO. 4
Other REC Limits:
NONE RECOMMENDED
OSHA PEL:
NOT ESTABLISHED
Code:
M
OSHA STEL:
Code:
ACGIH TLV:
NOT ESTABLISHED
Code:
M
ACGIHSTEL:
N/P
Code:

Control Measures

Respiratory Protection:
IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR EMERGENCY OCCURS; USE NIOSH/MSHA APPROVED RESPIRATOR OR SUPPLIED AIR RESPIRATOR OR SCBA, AS REQUIRED. USE IAW 29 CFR 1910.134.
Ventilation:
USE ADEQUATE EXPLOSION-PROOF MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW PEL/TLV. 3
Protective Gloves:
CHEMICAL RESISTANT-EG. NITRILE.
Eye Protection:
SAFETY GLASSES/CHEMICAL SPLASH GOGGLES
Other Protective Equipment:
Equipment DEPENDING ON CONDITIONS, ADDITIONAL EQUIPMENT SUCH AS FACE SHIELD, APRON, ARMCOVERS ETC. SHOULD BE WORN. EYEWASH STATION
Work Hygienic Practices:
WASH HANDS AFTER USE AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.
Supplemental Safety and Health:
N/P

Health Hazards Data

LD50LC50Mixture:
ORAL LD50 (RAT) IS UNKNOWN
Route Of Entry Inds - Inhalation:
YES
Skin:
NO
Ingestion:
NO
Carcinogenicity Inds - NTP:
NO
IARC:
YES
OSHA:
NO
Health Hazards Acute And Chronic:
ACUTE: MAY BE IRRITATING TO SKIN, EYES AND RESPIRATORY TRACT. POSSIBLE ASPIRATION HAZARD IF SWALLOWED-CAN ENTER LUNGS AND CAUSE DAMAGE. INHALATION MAY CAUSE CNS EFFECTS. TOXIC HYDROGEN SULFIDE GAS MAY BE PRESENT IN CONFINED VAPOR SPACES. CHRONIC: SKIN CANCER HAZARD BASED ON TESTS WITH LABORATORY ANIMALS.
Explanation Of Carcinogenicity:
IARC HAS DETERMINED THAT DIESEL ENGINE EXHUST IS PORBABLY CARCINOGENIC TO HUMANS (IARC CLASS 2A).
Signs And Symptions Of Overexposure:
INHALED: EUPHORIA, HEADACHE, DIZZINESS, DROWSINESS, BLURRED VISION, FATIGUE, TREMORS, CONVULSIONS, LOSS OF CONSCIOUSNESS, COMA, RESPIRATORY ARREST AND DEATH. SWALLOWED: NAUSEA, VOMITING, DIARRHEA. SKI N: REDNESS, ITCHING, INFLAMMATION, CRACKING, POSSIBLE SECONDARY INFECTION. EYES: REDNESS, TEARING, DISCOMFORT.
Medical Cond Aggravated By Exposure:
NONE SPECIFIED BY MANUFACTURER.
First Aid:
INGESTION-DO NOT INDUCE VOMITING!IF SPONTANEOUS VOMITING OCCURS;MONITOR FOR BREATHING DIFFICULTY.GET IMMEDIATE MEDICAL ATTENTION.SKIN-REMOVE CONTAMINATED CLOTHES.WASH 2 WITH SOAP & WATER.GET MEDICAL ATTENTION IF IRRITATION PERSISTS.EYES-FLUSH WITH LOTS OF WATER FOR 15 MINUTES,HOLD LIDS OPEN.GET MEDICAL ATTENTION.INHALED-REMOVE TO FRESH AIR.RESTORE BREATHING.GET MEDICAL ATTENTION.
Spill Release Procedures:
TAKE IMMEDIATE STEPS TO S AND CONTAIN THE SPILL. EXERCISE CAUTION-ENSURE PERSONNEL WEAR PROPER CLOTHING/EQUIPMENT. NOTIFY NATIONAL RESPONSE CENTER (800-424-8802), IF REQUIRED. ALSO NOTIFY LOCAL/STATE REGULATORY AGENCIES, THE LEPC AND THE SERC.
Neutralizing Agent:
NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Methods:
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. UNUSED/UNCONTAMINATED PRODUCT IS NOT AN EPA/RCRA WASTE; HOWEVER, IF MIXED WITH OTHER MATERIALS OR HAZARDOUS WASTE, THE PRODUCT MAY BECOME REGULATED AS SUCH.
Handling And Storage Precautions:
AVOID EXTREMES OF TEMPERATURE IN STORAGE. STORE IN TIGHTLY CLSED CONTAINERS IN A COOL, DRY, WELL-VETILATED AREA AWAY FROM HEAT SOURCES OF IGNITION.
Other Precautions:
ALSO STORE AWAY FROM INCOMPATIBLE MATERIALS. GROUND LINES AND EQUIPMENT DURING TRANSFER TO REDUCE POSSIBILITY OF STATIC SPARK INITIATED FIRE OR EXPLOSION. USE NON-SPARKING TOOLS. DO NOT STORE IN UNLABELED CONTAINERS.

Fire and Explosion Hazard Information

Flash Point Method:
N/P
Flash Point:
Flash Point Text:
140F,60C
Autoignition Temp:
Autoignition Temp Text:
N/A
Lower Limits:
UNKNOWN
Upper Limits:
UNKNOWN
Extinguishing Media:
WATER SPRAY, DRY CHEMICAL, FOAM OR CARBON DIOXIDE. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.
Fire Fighting Procedures:
WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL BUNKER GEAR. IF NOT IGNITED, VENTILATE AREA AND USE WATER SPRAY TO DISPERSE VAPOR OR PROTECT PERSONNEL.
Unusual Fire/Explosion Hazard:
DANGEROUS WHEN EXPOSED TO HEAT OR FLAME. CONTAINERS MAY EXPLODE IN HEAT OF FIRE. RUNOFF TO SEWER MAY CAUSE FIRE OR EXPLOSION HAZARD.

Physical/Chemical Properties

HCC:
F4
NRC/State LIC No:
N/R
Net Prop WT For Ammo:
Boiling Point:
B.P. Text:
>399F,>204C
Melt/Freeze Pt:
M.P/F.P Text:
50.0F,10.0C
Decomp Temp:
Decomp Text:
UNKNOWN
Vapor Pres:
NEGLEGIBLE
Vapor Density:
NEGLEGIBLE
Volatile Org Content %:
Spec Gravity:
0.95-1.01
VOC Pounds/Gallon:
PH: N/K
VOC Grams/Liter:
Viscosity:
10-55 CST
Evaporation Rate & Reference:
Solubility in Water:
NEGLEGIBLE
Appearance and Odor:
BLACK VISCOUS LIQUID; PETROLEUM OIL ODOR.
Percent Volatiles by Volume:
N/K
Corrosion Rate:
UNKNOWN

Reactivity Data

Stability Indicator:
YES
Stability Condition To Avoid:
AVOID CONTACT WITH STRONG OXIDIZING AGENTS.
Materials To Avoid:
STRONG OXIDIZING AGENTS.
Hazardous Decomposition Products:
COMBUSTION MAY PRODUCE CARBON MONOXIDE & CARBON DIOXIDE & REACTIVE HYDROCARBONS.; MAY ALSO PRODUCE OXIDES OF SULFUR, H2S
Hazardous Polymerization Indicator:
NO
Conditions To Avoid Polymerization:
NONE SPECIFIED BY MANUFACTURER.

Toxicological Information

Information:N/P

MSDS Transport Information

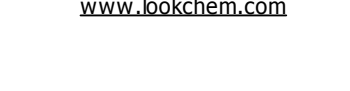
Information:N/P

Regulatory Information

Sara Title III Information: N/P
Federal Regulatory Information: N/P
State Regulatory Information: N/P

Other Information

Other Information:N/P



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WARRANTY
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