

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-251/25134-21-8.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**

25134-21-8

**Code:**

M

**RTECS:**

RB9100000

**Code:**

M

**Name:**

NADIC METHYL ANHYDRIDE, (METHYL-5-NORBORNENE-2,3-

**Other REC Limits:**

TWA=5.0 MG/M3 (MFR)

**OSHA PEL:**

NOT ESTABLISHED

**Code:**

M

**OSHA STEL:****Code:****ACGIH TLV:**

NOT ESTABLISHED

**Code:**

M N/P

**ACGIH STEL:**

EPA Rpt Qty: DOT Rpt Qty: Ozone Depleting Chem

**Code:**

1 ACGIH STEL:

## Control Measures

**Respiratory Protection:**

USE NIOSH/MSHA-APPROVED RESPIRATOR THAT IS SELECTED BASED ON CONCENTRATION LEVELS IN THE WORK PLACE.

**Ventilation:**

PROVIDE LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION SYSTEM.

**Protective Gloves:**

IMPERVIOUS GLOVES TO PREVENT CONTACT.

**Eye Protection:**

SPLASH-PROOF SAFETY GOGGLES W/FACESHIELD

**Other Protective Equipment:**

Equipment CONTACT LENSES SHOULD NOT BE WORN. PROVIDE EYE WASH STATION AND SAFETY SHOWER IN IMMEDIATE WORK AREA.

**Work Hygienic Practices:**

3 WASH AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

**Supplemental Safety and Health:**

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT TO PREVENT ANY POSSIBILITY OF SKIN CONTACT WITH THIS SUBSTANCE.

## Health Hazards Data

**LD50/LC50 Mixture:**

ORAL RAT LD50 IS 914 MG/KG.

**Route Of Entry Inds - Inhalation:**

YES

**Skin:**

YES

**Ingestion:**

YES

**Carcinogenicity Inds - NTP:**

NO

**IARC:**

NO

**OSHA:**

NO

**Health Hazards Acute And Chronic:**

EYES: SEVERE IRRITATION, PAIN, SEVERE BURNS, CONJUNCTIVITIS. SKIN: ERYTHEMA, ITCHING, DERMATITIS, EDEMA, ALLERGIC EFFECTS. INHALATION: RESPIRATORY TRACT IRRITATION, BURNS OF THE MUCOUS MEMBRANES, PULMONARY EDEMA. INGESTION: SEVERE BURNS OF THE MUCOUS MEMBRANES, IRRITATION AND SEVERE CORROSION OF ESOPHAGUS AND GI TRACT.

**Explanation Of Carcinogenicity:**

N/P

**Signs And Symptoms Of Overexposure:**

EYES: IRRITATION, PAIN, SEVERE BURNS, CONJUNCTIVITIS. SKIN: ERYTHEMA, ITCHING, DERMATITIS, EDEMA. INHALATION: IRRITATION, BURNS OF MUCOUS MEMBRANES, PULMONARY EDEMA, DYSPNEA, CYANOSIS, DIZZINESS, RAPID PULSE, HYPERTENSION. INGESTION: SEVERE BURNS OF MUCOUS MEMBRANES, IRRITATION AND CORROSION OF ESOPHAGUS AND GI TRACT.

**Medical Cond Aggravated By Exposure:**

PRODUCT IS A SKIN IRRITANT, A SEVERE EYE AND MUCOUS MEMBRANE IRRITANT AND A SENSITIZER. PERSONS WITH ASTHMA OR CHRONIC PULMONARY CONDITIONS MAY BE AT AN INCREASED RISK FROM EXPOSURE.

**First Aid:**

EYES: FLUSH WITH LARGE AMOUNTS OF WATER AND THEN NORMAL SALINE. COVER WITH BANDAGES. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH AREA WITH SOAP AND WATER. GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR. IF BREATHING DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION: DILUTE BY DRINKING LARGE AMOUNTS OF WATER OR MILK. GET MEDICAL ATTENTION.

**Spill Release Procedures:**

S LEAK IF POSSIBLE. TAKE UP SMALL SPILLS WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE IN CONTAINER FOR DISPOSAL. FOR SMALL DRY SPILLS, SHOVEL MATERIAL INTO CLEAN DRY CONTAINER AND COVER. DIKE LARGER SPILLS FAR AHEAD OF SPILL FOR LATER DISPOSAL.

**Neutralizing Agent:**

2 NONE SPECIFIED BY MANUFACTURER.

**Waste Disposal Methods:**

CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER. DISPOSE OF WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

**Handling And Storage Precautions:**

STORE IN A COOL, DRY, WELL VENTILATED PLACE AWAY FROM INCOMPATIBLE SUBSTANCES. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

**Other Precautions:**

MAY BURN BUT DOES NOT IGNITE READILY. FLAMMABLE. POISONOUS GASES MAY ACCUMULATE IN TANKS AND HOPPER CARS. MAY IGNITE COMBUSTIBLES (WOOD, PAPER, OIL, ETC.).

## Fire and Explosion Hazard Information

**Flash Point Method:**

OC

**Flash Point:**

=140.C, 284.F

**Flash Point Text:****Autoignition Temp:**

N/A

**Autoignition Temp Text:**

UNKNOWN

**Upper Limits:**

UNKNOWN

**Extinguishing Media:**

DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY, STANDARD FOAM.

**Fire Fighting Procedures:**

MOVE CONTAINERS FROM FIRE AREA IF POSSIBLE. COOL CONTAINERS EXPOSED TO FLAMES WITH WATER FROM SIDE UNTIL AFTER FIRE IS OUT. STAY AWAY FROM STORAGE TANK ENDS.

**Unusual Fire/Explosion Hazard:**

DO NOT USE WATER DIRECTLY ON PRODUCT. USE WATER SPRAY TO ABSORB CORROSIVE VAPORS. COOL CONTAINER WITH FLOODING AMOUNT OF WATER AS FAR AS DISTANCE AS POSSIBLE.

## Physical/Chemical Properties

**HCC:**

C2

**NRC/State Lic No:**

NOT RELEVANT

**Net Prop WT For Ammo:**

NO

**Boiling Point:**

=135.C, 275.F

**B.P. Text:**

NO

**Melt / Freeze Pt:**

<17.8C, 64.F

**M.P./F.P. Text:**

NO

**Decomp Temp:**

OC

**Decomp Text:**

UNKNOWN

**Vapor Pres:**

1.5

**Vapor Density:**

6.1

**Volatile Org Content %:**

NO

**Spec Gravity:**

1.22

**VOC Pounds/Gallon:**

NO

**PH:**

N/K

**VOC Grams/Liter:**

NO

**Viscosity:**

N/P

**Evaporation Rate & Reference:**

>1 (ETHER=1)

**INSOLUBILITY (WATER):**

COLORLESS TO LIGHT YELLOW, VISCOS LIQUID. SLIGHT ODOR.

**Percent Volatiles by Volume:**

N/K

**Corrosion Rate:**

UNKNOWN

**Reactivity Data****Stability Indicator:**

YES

**Stability Condition To Avoid:**

KEEP PRODUCT DRY. EXOTHERMIC REACTION WITH WATER. MAY BURN BUT DOES NOT IGNITE READILY.

**Materials To Avoid:**

WATER, ACIDS, BASES, STRONG OXIDIZERS. CONTACT WITH WATER FROM SIDE UNTIL AFTER FIRE IS OUT. STAY AWAY FROM STORAGE TANK ENDS.

**Hazardous Decomposition Products:**

THEMAL DECOMPOSITION MAY RELEASE ACRID SMOKE AND IRRITANT FUMES.

**Hazardous Polymerization Indicator:**

YES

**Conditions To Avoid Polymerization:**

KEEP PRODUCT BELOW 200C. MAY POLYMERIZE ABOVE 200C.

## Toxicological Information

**Information:**

N/P

## Regulatory Information

**Sara Title III Information:**

N/P

**Federal Regulatory Information:**

N/P

**State Regulatory Information:**

N/P

**Other Information:**

N/P

## Other Information

**Other Information:**

N/P

## Physical Properties

**Physical Properties:**

NO

**Chemical Properties:**

NO

**Environmental Properties:**

NO

**Biological Properties:**

NO

**Other Properties:**

NO

**Regulatory Properties:**

NO

**Other Properties:**

NO