



Resonance Specialties Limited

MATERIAL SAFETY DATA SHEET

3,5-Lutidine, 98+%

1. IDENTIFICATION :

MSDS Name:

3,5-Lutidine, 98+%

Catalog Numbers:

AC125210000, AC125210050, AC125211000, AC125215000

Synonyms:

3,5-Dimethylpyridine

2. COMPOSITION AND INFORMATION ON INGREDIENTS

CAS#	Chemical Name	%	EINECS#
591-22-0	3,5-Lutidine	98.0+	209-708-6

Hazard Symbols: XN

Risk Phrases: 10 20/21/22

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance:

colourless - gold. Flash Point: 53 deg C.

Warning! Flammable liquid. Hygroscopic. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: None.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation. Vapors may cause dizziness or suffocation.

Chronic:

No information found.

4. FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

Antidote:

None reported.

5. FIRE FIGHTING MEASURES**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable Liquid.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

6. ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

7. HANDLING AND STORAGE

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
3,5-Lutidine	none listed	none listed	none listed

OSHA Vacated PELs:

3,5-Lutidine:

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Liquid
Appearance	:	colourless - gold
Odor	:	None reported.
pH	:	Not available.
Vapor Pressure	:	2 hPa @ 20 C
Vapor Density	:	3.69
Evaporation Rate	:	Not available.
Viscosity	:	Not available.
Boiling Point	:	169 - 170 deg C @ 760.00mm Hg
Freezing/Melting Point	:	-9 deg C
Autoignition Temperature	:	Not applicable.
Flash Point	:	53 deg C (127.40 deg F)
NFPA Rating	:	(est.) Health: 1; Flammability: 2; Reactivity: 0
Explosion Limits, Lower	:	N/A
Upper	:	N/A
Decomposition Temperature:		
Solubility	:	33 G/L WATER (20°C)
Specific Gravity/Density	:	.9390g/cm ³
Molecular Formula	:	C ₇ H ₉ N
Molecular Weight	:	107.15

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials:

Oxidizing agents, acids, acid chlorides, chloroformates.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen.

Hazardous Polymerization:

Has not been reported.

11. TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 591-22-0 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:

3,5-Lutidine - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:

No information available.

Teratogenicity:

No information available.

Reproductive Effects:

No information available.

Neurotoxicity:

No information available.

Mutagenicity:

No information available.

Other Studies:

No information found.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

14. TRANSPORTATION INFORMATION

US DOT

- ⇒ Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S.*
- ⇒ Hazard Class: 3
- ⇒ UN Number: 1993
- ⇒ Packing Group: III

Canadian TDG

- ⇒ Shipping Name: POISONOUS LIQUID FLAMMABLE NOS (3,5-LUTIDINE)
- ⇒ Hazard Class: 6.1(3)
- ⇒ UN Number: UN2929

15. REGULATORY INFORMATION

US FEDERAL:

TSCA

⇒ CAS# 591-22-0 is listed on the TSCA inventory.

Health & Safety Reporting List

⇒ None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

⇒ None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

⇒ None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

⇒ None of the chemicals in this material have a SNUR under TSCA. SARA

Section 302 (RQ)

⇒ None of the chemicals in this material have an RQ.

Section 302 (TPQ)

⇒ None of the chemicals in this product have a TPQ.

Section 313

⇒ No chemicals are reportable under Section 313.

Clean Air Act:

⇒ This material does not contain any hazardous air pollutants.

⇒ This material does not contain any Class 1 Ozone depletors.

⇒ This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

⇒ None of the chemicals in this product are listed as Hazardous Substances under the CWA.

⇒ None of the chemicals in this product are listed as Priority Pollutants under the CWA.

⇒ None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

⇒ None of the chemicals in this product are considered highly hazardous by OSHA.

STATE:

⇒ 3,5-Lutidine is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level:

⇒ None of the chemicals in this product are listed.

European/International Regulations:

⇒ European Labeling in Accordance with EC Directives

Hazard Symbols:

⇒ XN

Risk Phrases:

⇒ R 10 Flammable. R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrases:

- ⇒ S 9 Keep container in a well-ventilated place.
- ⇒ S 16 Keep away from sources of ignition – No smoking.
- ⇒ S 33 Take precautionary measures against static discharges.
- ⇒ S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection):

CAS# 591-22-0:

⇒ No information available.

United Kingdom Occupational Exposure Limits

Canada

- ⇒ None of the chemicals in this product are listed on the DSL/NDSL list.
- ⇒ This product does not have a WHMIS classification.
- ⇒ CAS# 591-22-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

16. ADDITIONAL INFORMATION

MSDS Creation **Date:** 07/18/1996

MSDS Revision **Date:** 08/18/2007

The information above is believed to be accurate and represents the best information currently available to us. However we take no warranty of merchantability or any other warranty express or implied with respect to such information and we assume no liability resulting from the use. Users should make the own investigation to determine the suitability of information for there particular purposes. In no way shall be company be liable for any claim losses or damages of any third party of for lost profit or a special indirect incidental consequential or exemplary damages howsoever arising. Even if the company has been advised of the possibility of such damages.