



Safety Data Sheet

As per Globally Harmonized System (GHS)

Product Identification: 2-Methyl-5-ethylpyridine 0459A02 Div.03 sds 2-Methyl-5-ethylpyridine

Date of issue: May 31, 2013

SDS Code : 0459A02 Div.03 sds 2-Methyl-5-ethylpyridine

Date of Compilation : December 12, 2012

Date of Revision : May 31, 2013

Due Date of Revision : April, 2015

Revision Number : 02

Version Number : 0459A02 Div.03 sds 2-Methyl-5-ethylpyridine

Supersedes date : December 12, 2012

Supersedes version : 0459A01 Div.03 sds 2-Methyl-5-ethylpyridine



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SECTION 1.: IDENTIFICATION

PRODUCT NAME: 2-Methyl-5-ethylpyridine

CAS RN: 104-90-5

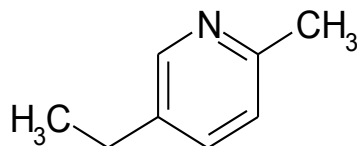
EC#: 203-250-0

SYNONYMS: 2,5-Aldehydine; 2-Picoline, 5-ethyl-; 3-Ethyl-6-methylpyridine, 5-Ethyl-2-picoline;5-Ethyl-alpha-picoline;6-Methyl-3-ethylpyridine;5-Ethyl-2-methylpyridine; MEP

SYSTEMATIC NAME: 2-Picoline, 5-ethyl-; 5-Ethyl-2-methylpyridine

MOLECULAR FORMULA: C₈H₁₁N

STRUCTURAL FORMULA:



FACTORY & REGISTERED OFFICE:

Jubilant Life Sciences Limited
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Emergency telephone: Medical and Transport Emergencies: +91-9997022412 (India)
Logistics Emergencies: +91-120-4365441(India)

Product Uses:

- 2-Methyl-5-ethylpyridine is used in the manufacture of nicotinic acid, nicotinamide and vinyl pyridines for copolymers. It is also used as an intermediate for germicides and textile finishes and as a corrosion inhibitor for chlorinated solvents.

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Eye irritation: Category 2A
Skin Corrosion/irritation: Category 1C
Flammable Liquids: Category 4
Acute toxicity Oral: Category 4
Acute Toxicity Dermal: Category 3
Acute Toxicity Inhalation: Category 3



Hazard Pictogram: GHS 05, GHS 06

Signal Word: Danger!

HAZARD AND PRECAUTIONARY STATEMENTS:

HAZARD STATEMENTS

- H319: Causes serious eye irritation.
- H314: Causes severe skin burns and eye damage.
- H227: Combustible liquid.
- H302: Harmful if swallowed.
- H311: Toxic in contact with skin.
- H331: Toxic if inhaled.

PRECAUTIONARY STATEMENTS

Prevention

- P260: Do not breathe dust/fume/gas/mist/vapours/spray.
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P271: Use only outdoors or in a well-ventilated area.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P264: Wash hands thoroughly after handling.
- P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking.
- P270: Do not eat, drink or smoke when using this product.



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Response

- P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
- P337+313: If eye irritation persists: Get medical advice/attention.
- P301+330+331: IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
- P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P363: Wash contaminated clothing before reuse.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P310: Immediately call a POISON CENTER or doctor/physician.
- P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330: Rinse mouth.
- P302+352: IF ON SKIN: Wash with plenty of soap and water.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P361: Remove/Take off immediately all contaminated clothing.
- P320: Specific treatment is urgent.
- P370+P378: In case of fire, use water for extinction.

Storage

- P403+235: Store in a well ventilated place. Keep cool.
- P403+P233: Store in a well-ventilated place. Keep container tightly closed.
- P405: Store locked up.

Disposal

- P501: Dispose of contents/container to local/regional/national/international regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Sr.No.	Chemical	CAS #	EC#	Purity
1	2-Methyl-5-ethylpyridine	104-90-5	203-250-0	>99%



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SECTION 4:

FIRST AID MEASURES

Key symptoms

Acute effects:

- 2-Methyl-5-ethylpyridine is toxic in contact with skin and if inhaled and it is harmful if swallowed. The following acute health effects may occur immediately or shortly after exposure to 2-Methyl-5-ethylpyridine:
- 2-Methyl-5-ethylpyridine is a CORROSIVE CHEMICAL and contact can irritate and burn the skin and eye damage.
- Breathing 2-Methyl-5-ethylpyridine can irritate the lungs causing coughing and/or shortness of breath. Higher exposures can cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath.
- Exposure to 2-Methyl-5-ethylpyridine can cause headache, nausea, vomiting and diarrhea.

Chronic effects:

- Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.

FIRST AID:

- **Eyes:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses if easy to do so. Continue rinsing. If irritation persists, seek medical attention.
- **Skin:** Immediately take off all contaminated clothing. Quickly and gently blot or brush away excess chemical. Wash thoroughly with lukewarm, gently flowing water and non-abrasive soap for 15-20 minutes. Wash contaminated clothes before reuse. If irritation persists, obtain medical advice.
- **Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if you feel unwell. If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve.
- **Ingestion:** If swallowed call a poison center if you feel unwell. Rinse mouth. Do NOT induce vomiting by use of emetics. Seek medical attention. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive

Basic treatment: Establish a patent airway. Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if necessary. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for pulmonary edema and treat if necessary. Monitor for shock and treat if necessary. For eye contamination, flush



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eyes immediately with water. Irrigate each eye continuously with normal saline during transport. Do not use emetics. For ingestion, rinse mouth and administer 5 ml/kg up to 200 ml of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool. Administer activated charcoal /Aromatic hydrocarbons and related compounds.

Advanced treatment: Consider orotracheal or nasotracheal intubation for airway control in the patient who is unconscious or in respiratory arrest. Positive pressure ventilation techniques with a bag valve mask device may be beneficial. Monitor cardiac rhythm and treat arrhythmias if necessary. Start an IV with D5W /SRP: "To keep open", minimal flow rate/. Use lactated Ringer's if signs of hypovolemia are present. Watch for signs of fluid overload. Consider drug therapy for pulmonary edema. Treat seizures with diazepam (Valium). Use proparacaine hydrochloride to assist eye irrigation. /Aromatic hydrocarbons and related compounds.

SECTION 5 :

FIRE-FIGHTING MEASURES

Flash Point: 68 °C Open cup

Flammability: Combustible Liquid

Extinguishing media:

- *Appropriate extinguishing media:* Dry chemical powder, chemical foam, and alcohol resistant foam. Water may also be used. Water sprays can be effective in cooling down the fire-exposed containers and knocking down the vapors. Water jets may be used to flush spills away and dilute the same to non-flammable mixtures.

Special Protective Equipment and Precautions for Fire Fighter:

- Evacuate the area and fight fires from a safe distance.
- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions or as per locally valid procedures.
- Fire fighters must wear Self Contained Breathing Apparatus (SCBA) and full protective clothing. The chemical is harmful in contact with skin.
- Report any run-off of fire waters contaminated with this chemical as per local and federal procedures applicable.

Unusual fire and explosion hazard:

- Toxic vapors may be released on thermal decomposition including nitrogen oxides, carbon monoxide carbon di-oxide, hydrogen chloride, cyanide and irritating and toxic fumes.
- High vapor concentration may result in an explosion hazard.
- When heated to decomposition, it emits highly toxic fumes of phosgene and chlorides.
- Vapors are heavier than air. May travel considerable distance from source and flashback.



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SECTION 6 : ACCIDENTAL RELEASE MEASURES

Minor Spills

- Clean up all spills immediately following relevant Standard Operating Procedures.
- Avoid breathing vapors and contact with skin and eyes.
- Shut off leak source if possible.
- Shut off all possible sources of ignition.
- Wear protective clothing, boots, impervious gloves and safety glasses.
- Wipe up.
- Decontaminate all equipment.
- Use non-sparking tools.

Major Spill

- Alert Emergency Responders and tell them location and nature of hazard.
- Shut off all possible sources of ignition and increase ventilation.
- Wear protective clothing, full boots, impervious gloves, safety glasses and Self Contained Breathing Apparatus (SCBA), as may be deemed appropriate.
- Clear area of personnel and move upwind.
- Stop leaks if possible.
- Prevent, by any means available, spillage from entering drains or water and watercourses.
- Collect recoverable product into labeled containers for recycling, recovery or disposal.
- Contain spill with sand, earth or vermiculite.
- Spread area with lime or absorbent material, and leave for at least 1 hour before washing.
- Clean up all tools and equipment.
- Inform authorities in event of contamination of any public sewers, drains or water bodies.

SECTION 7: HANDLING AND STORAGE

Handling

- Do not breathe vapor or mist.
- Wear protective gloves/clothing and eye/face protection.
- Wash thoroughly after handling.
- Ground and secure containers when dispensing or pouring product.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Launder contaminated clothing before re-use.
- If on skin or hair, IMMEDIATELY remove all contaminated clothing and rinse/shower with plenty of water.



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- Use in a well ventilated place/Use protective clothing commensurate with exposure levels.
- Use non-sparking tools.

Storage

- Store in a cool, well ventilated place.
- Store in a flame proof area.
- Store away from incompatible materials.
- Keep only in original container.
- Keep securely closed when not in use.

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

• Exposure Limits Values

Chemical name	STEL (ppm)	NIOSH	ACGIH	OSHA
2-Methyl-5-ethylpyridine	None available	None available	None available	None available

Exposure controls

Appropriate Engineering Controls:

- Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. Local ventilation is usually preferred. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protection:

- Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
- **Eyes:** Use goggles and/or face-shield.
- **Clothing:** Boots and clothing to prevent contact.
- **Respirator:** 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.
- **Hands:**
 - In full Contact:**
 - Glove material: Butyl rubber
 - Layer thickness: 0.70 mm
 - Breakthrough Time: >480 Min



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In Splash Contact:

- Glove material: Nitrile Rubber
- Layer thickness: 0.40 mm
- Breakthrough Time: >120 Min

General Hygiene and general comments:

- Wash hands and face after working with substance.
- Immediately change contaminated clothing.
- Apply skin protective barrier cream.
- Wash hands and face after working with substance.
- Under no circumstances eat or drink at workplace.
- Work under hood.
- Do not inhale substance

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

- Information on basic physical and chemical properties.

Sr.No.	Parameter	Typical value
1	Appearance	Clear colorless liquid
2	Odor	Sharp penetrating odor
3	Odor Threshold	0.03 mg/cu m (odor low); 94.1 mg/cu m (odor high)
4	Melting point	-70.3 deg C (freezing point)
6	Boiling point	177.8 deg C @ 747 mm Hg
7	Flash point	68 ⁰ C Open cup
8	Evaporation rate (n-BuAc=1)	Not available
9	Explosive limits	Lower 1.1%, upper 6.6% (Flammable Limits)
10	Vapor pressure	1.43 mm Hg @ 25 deg C
11	Relative Vapor density (air=1)	4.2 (AIR= 1)



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12	Specific gravity (water=1)	0.9184 @ 23 deg C/4 deg C
13	Solubility	Soluble in acetone, alcohol, ether, benzene, dilute acids and , conc. sulfuric acid
14	pH	Not available
15	Log Kow (octanol/water)	2.390 (estimated)
16	Auto-ignition temperature	939 deg F
17	Decomposition temperature	Not available
18	Viscosity	Not available
19	Molecular Weight	121
22	Oxidizer	No
23	Corrosivity	Yes
24	Explosive material	No

SECTION 10: STABILITY AND REACTIVITY

- **Stability:** Stable at normal conditions of temperature and pressure. It can react vigorously with oxidizers. Potentially explosive reaction with nitric acid at 145 deg C/ 14.5 bar.
- **Conditions to avoid:** Keep away from heat, sparks, flame, high temperature and incompatible chemicals.
- **Incompatible materials:** Not compatible with strong acids (such as hydrochloric, sulfuric and nitric); isocyanates; aldehydes; strong bases (such as sodium hydroxide and potassium hydroxide); oxidizing agents (such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine); acid chlorides; and chloroformates.
- **Hazardous decomposition products:** Thermal decomposition including nitrogen oxides, carbon monoxide carbon di-oxide, hydrogen chloride, cyanide and irritating and toxic fumes.
- **Possibility of hazardous reactions:** Hazardous Polymerization: Will not occur.



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SECTION 11: TOXICOLOGICAL INFORMATION

a) Acute Toxicity:

- 2-Methyl-5-ethylpyridine is toxic in contact with skin and if inhaled and it is harmful if swallowed.

The following acute health effects may occur immediately or shortly after exposure to 2-Methyl-5-ethylpyridine:

- 2-Methyl-5-ethylpyridine is a CORROSIVE CHEMICAL and contact can irritate and burn the skin and eye damage.
- Breathing 2-Methyl-5-ethylpyridine can irritate the lungs causing coughing and/or shortness of breath. Higher exposures can cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath.
- Exposure to 2-Methyl-5-ethylpyridine can cause headache, nausea, vomiting and diarrhea.

RTECS#: TJ6825000

ACUTE ORAL LD50 RAT = 1300 μ L/kg

ACUTE DERMAL LD50 Rabbit = 566 μ L /kg

ACUTE INHALATION LC50 = 540ppm/4H

b) Skin corrosion/irritation

- Open irritation test: Administration onto the skin (rabbit) = 10 mg/24H (Severe). Open irritation test: Administration onto the skin (rabbit) = 500 mg (Severe).

c) Serious eye damage/irritation

- 2-methyl-5-ethyl pyridine rated 9 on rabbit eyes. Substances designated in this manner have been tested externally on eyes of rabbits & have been rated numerically on scale of 1-10 according to degree of injury observed after 24 hr, paying particular attention to condition of cornea. [Grant, W.M. Toxicology of the Eye. 3rd ed. Springfield, IL: Charles C. Thomas Publisher, 1986, p. 774]

Open irritation test: Administration into the eye (rabbit) = 250 μ g (Severe).

d) Respiratory or skin sensitization

- No data is available.

e) Germ cell Mutagenicity

- Sex chromosome loss and non disjunction: Saccharomyces cerevisiae = 1500 ppm

f) Carcinogenicity

- Not listed by NTP, IARC and OSHA.
- Not present on the EU CMR list.
- According to the information presently available 2-Methyl-5-ethylpyridine has not been tested for its ability to cause cancer in animals.



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g) Reproductive toxicity

- According to the information presently available 2-Methyl-5-ethylpyridine has not been tested for its ability to affect reproduction.

h) STOT-single exposure

- No data is available.

i) STOT-repeated exposure

- Repeated exposure to high levels of 2-Methyl-5-ethylpyridine may affect the central nervous system causing muscle weakness, loss of coordination and loss of consciousness.

j) Aspiration Hazards

- No data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity :

Ecotoxicity:

- LC50 Pimephales promelas (fathead minnow) 81.1 mg/l/96 hr (confidence limit 77.6 - 84.8 mg/l), flow-through bioassay with measured concentrations, 26.2 deg C, dissolved oxygen 5.9 mg/l, hardness 45.5 mg/l CaCO₃, alkalinity 42.0 mg/l CaCO₃, and pH 7.49
- EC50 Pimephales promelas (fathead minnow) 69.8 mg/l/96 hr (confidence limit 61.2 - 79.6 mg/l), flow-through bioassay with measured concentrations, 26.2 deg C, dissolved oxygen 5.9 mg/l, hardness 45.5 mg/l CaCO₃, alkalinity 42.0 mg/l CaCO₃, and pH 7.49. Effect: loss of equilibrium.

Persistence and degradability

- It has estimated that Pyridine, 5-ethyl-2-methyl- is expected to be found predominantly in soil and its persistence estimate is based on its transformation in this medium. Its half-life in soil, 75 days, exceeds the EPA criteria of ≥ 2 months (and ≤ 6 months). Therefore, Pyridine, 5-ethyl-2-methyl- is estimated to be persistent in the environment.

Bio accumulative potential

- BCF = 14(Estimated).
- Log Kow = 2.41 (Estimated).
An estimated BCF of 14 was calculated for 2-methyl-5-ethylpyridine(SRC), using an estimated log Kow of 2.4(1,SRC) and a regression-derived equation (2). According to a classification scheme(3), this BCF suggests the potential for bio concentration in aquatic organisms is low(SRC).

Mobility in soil

- Koc = 170 (Estimated).
- Henry's Law Constant = 0.000019 atm/m³ mole at 25 degrees. (Estimated).
- Log Kow = 2.41 (Estimated).

If released to soil, 2-methyl-5-ethylpyridine is expected to have moderate mobility.



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Other adverse effects.

- **Environment Fate:**
- If released to air, a vapor pressure of 1.43 mm Hg at 25 deg C indicates 2-methyl-5-ethylpyridine will exist solely as a vapor in the ambient atmosphere.
- Vapor-phase 2-Methyl-5-ethylpyridine will be degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the half-life for this reaction in air is estimated to be 7 days, respectively.
- If released to soil, 2-methyl-5-ethylpyridine is expected to have moderate mobility based upon an estimated Koc of 170.
- 2-Methyl-5-ethylpyridine has a pKa of 6.51, which indicates that this compound will partially exist in the protonated form in moist acidic to neutral soils;
- Cations; adsorb more strongly to soils than neutral molecules. Therefore, the mobility of 2-methyl-5-ethyl pyridine is expected to be lower in acidic and neutral soils than in alkaline soils.
- Volatilization from moist soil surfaces is expected to be an important fate process based upon an estimated Henry's Law constant of 1.9×10^{-5} atm-cu m/mole.
- Since this is an estimated result it is recommended that the material should not be disposed into the environment. The material should never be disposed into the sewage.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

- Burn in a chemical incinerator equipped with an afterburner and scrubber.
- Exert extra care in igniting, as this material is combustible.
- Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable federal, state or local laws. Note that disposal regulations may also apply to empty containers and equipment rinsates.



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SECTION 14: TRANSPORT INFORMATION

- This substance is considered to be Hazardous for transport by Air/Rail/Road and Sea and thus regulated by IATA/ICAO/ARD/RID/IMO/IMDG.

S.No	Agency	UN Number	Proper Shipping name	Hazard Class	Packing Group
Land Transport	ADR/RIC	UN 2300	2-Methyl-5-ethylpyridine	6,(6.1)	III
Maritime Transport	IMDG	UN 2300	2-Methyl-5-ethylpyridine	6,(6.1)	III
Air Transport	IATA	UN 2300	2-Methyl-5-ethylpyridine	6,(6.1)	III
Hazard Label		Toxic			

Environmental hazards:

- Marine pollutant: No

SECTION 15: REGULATORY INFORMATION

European Union Information

Classification as per Regulation 67/548/EEC: +T;R23/24 - Xn;R22 - C;R34 - Xi;R36

- T - Toxic
- Xn- Harmful
- C - Corrosive
- Xi - Irritant

Risk Phrases:

- R22: Harmful if swallowed.
- R23/24: Toxic by inhalation and in contact with skin.
- R34 : Causes burns.
- R36: Irritating to eyes.

Safety Phrases:

- S1: Keep locked up.



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- S23: Do not breathe gas/fumes/vapour/spray.
- S24/25 Avoid contact with skin and eyes.
- S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
- S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Classification as per CLP Regulation 1272/2008:

- **Hazards Class and Category:** *Acute toxicity Oral Cat4, Acute toxicity Dermal/Inhalation category 3, Skin corrosion category 1C, Eye Irrit cat 2*
- **Hazard Statements:** H302, H311, H331, H314, H319

Chemical Inventory Lists:	Status
TSCA:	Present
EINECS:	203-250-0
Canada(DSL/NDSL):	Listed/NDSL
Japan:	5-714
Korea:	Present
Australia:	Not listed
China: IECSC	Present

US information

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.

CERCLA Hazardous Substances and corresponding RQs

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

SARA Section 302 Extremely Hazardous Substances

- 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.



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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

- CAS# 104-90-5 can be found on the following state right to know lists: New Jersey Pennsylvania, Massachusetts. California Prop 65

California No Significant Risk Level:

- None of the chemicals in this product are listed.

SECTION 16: OTHER INFORMATION

Compilation information of safety data sheet

Chemical: 2-Methyl-5-ethylpyridine

CAS #: 104-90-5

File Name: 0459A02 Div.03 sds 2-Methyl-5-ethylpyridine.

Revision Number: 02

Date of Revision: May 31, 2013

Revision Due Date: April, 2015

(a) A key or legend to aberrations and acronyms used in the safety data sheet;

- PBT = Persistent Bio accumulative and Toxic.
- vPvB= Very Persistent and Very Bio accumulative.
- SCBA= Self Contained Breathing Apparatus.
- NIOSH REL= National Institute for Occupational Safety and Health Recommended Exposure Limit.
OSHA PEL=Occupational Safety and Health Administration Permissible Exposure Limit.
- OELTWA= Occupational Exposure Limit Time Weighted Averages.
- IDLH= Immediately Dangerous to Life or Health.
- UEL= Upper Explosive Limit.
- LEL= Lower Explosive Limit.
- RTECS= Registry of Toxic Effects of Chemical Substances.
- NTP=National Toxicology Program.
- IARC= International Agency for Research on Cancer.
- EPA=Environmental Protection Agency.
- TSCA= Toxic Substances Control Act.
- CERCLA= Comprehensive Environmental Response, Compensation, and Liability Act.
- SARA= Superfund Amendments and Reauthorization Act.
- NFPA= National Fire Protection Association.
- WHIMS= Workplace Hazardous Materials Information System.



Safety Data Sheet

As per Globally Harmonized System (GHS)

Product Identification: 2-Methyl-5-ethylpyridine 0459A02 Div.03 sds 2-Methyl-5-ethylpyridine

Date of issue: May 31, 2013

- DSL/NDSL= Domestic/Non-Domestic Substances List.
- CSR=Chemical Safety Report.
- BCF = Bio Concentration Factor.
- DNEL = Derived No Effect Level.
- PNEC = Predicted No Effect Concentration.
- TLV = Threshold Limit Value.
- ACGIH = American Conference of Governmental Industrial Hygienists.
- REACH = Registration, Evaluation .Authorization and Restriction of Chemicals.
- CLP = Classification, Labeling and Packaging.
- LD / LC = Lethal Doses / Lethal Concentration.
- GHS = Globally Harmonized System.
- ADR = Accord European relative au transport international de marchandises.
- IMDG-Code = International Maritime Code for Dangerous Goods.
- EmS = Emergency measures on Sea.
- ICAO = International Civil Aviation Organization.
- IATA/DGR= International Air Transport Association/Dangerous Goods Regulation.

(b) Key Literature reference and sources for data

Biographical reference and data sources

- CLP REG (regulation) (EC) no. 1272/2008, last modification by regulation (EC) no. 790/2009
- DIR 67/548/EWG, last modification by DIR 2009/2/EC
- REG (EC) no. 1907/2006, last modification by REG (EC) Nr. 453/2009

Internet

- RTECS
- ESIS
- PBT profiler

Company's Declaration:

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(End of Safety Data Sheet)