



2-PICOLINE (D7, 98%)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 14/01/2011
DLM-1293

Revision date: 21/02/2017

Supersedes: 15/10/2014

Version: 3.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Substance name : 2-PICOLINE (D7, 98%)
EC Index No : 613-036-00-2 (Unlabeled)
EC No : 203-643-7 (Unlabeled)
CAS No : 93951-93-0
Product code : DLM-1293
Formula : C5ND4CD3
Synonyms : 2-Methylpyridine

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3 H226
Acute Tox. 4 (Oral) H302
Acute Tox. 3 (Dermal) H311
Acute Tox. 4 (Inhalation) H332
Eye Irrit. 2 H319
STOT SE 3 H335

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R10
Xn; R20/22
T; R24
Xi; R36/37

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 3 H226
Acute Tox. 4 (Oral) H302
Acute Tox. 3 (Dermal) H311
Acute Tox. 4 (Inhalation) H332
Eye Irrit. 2A H319
STOT SE 3 H335

Full text of H statements : see section 16

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Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H226 - Flammable liquid and vapour
H302+H332 - Harmful if swallowed or if inhaled
H311 - Toxic in contact with skin
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P261 - Avoid breathing dust, fume, gas, mist, spray, vapours
P264 - Wash Both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H226 - Flammable liquid and vapour
H302+H332 - Harmful if swallowed or if inhaled
H311 - Toxic in contact with skin
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary statements (GHS-US)

: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/Bond container and receiving equipment
P241 - Use explosion-proof lighting, electrical, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing dust, fume, gas, mist, spray, vapours
P264 - Wash Both hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective clothing, protective gloves
P301+P312 - If swallowed: Call a doctor if you feel unwell
P302+P352 - If on skin: Wash with plenty of water
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a doctor if you feel unwell
P330 - Rinse mouth
P337+P313 - If eye irritation persists: Get medical advice/attention
P361 - Take off immediately all contaminated clothing
P363 - Wash contaminated clothing before reuse
P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide, Dry chemical, Water spray to extinguish
P403+P233 - Store in a well-ventilated place. Keep container tightly closed

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P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to Comply with applicable regulations

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
2-PICOLINE (D7, 98%)	(CAS No) 93951-93-0 (EC No) 203-643-7 (Unlabeled) (EC Index No) 613-036-00-2 (Unlabeled)	100	R10 Xn; R20/22 T; R24 Xi; R36/37

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-PICOLINE (D7, 98%)	(CAS No) 93951-93-0 (EC No) 203-643-7 (Unlabeled) (EC Index No) 613-036-00-2 (Unlabeled)	100	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of R- and H-statements: see section 16

Name	Product identifier	%	GHS-US classification
2-PICOLINE (D7, 98%) (Main constituent)	(CAS No) 93951-93-0	100	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Seek medical attention immediately.
First-aid measures after inhalation	: Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.
First-aid measures after skin contact	: Wash with plenty of soap and water. Call a physician immediately.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Call a physician immediately.
First-aid measures after ingestion	: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use water spray to cool exposed surfaces. Alcohol resistant foam. Dry chemical. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

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5.3. Advice for firefighters

- Firefighting instructions : Wear a self contained breathing apparatus. Evacuate area.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ensure adequate air ventilation. In order to avoid inhalation of mist/vapour, all spraying must be done wearing adequate respirator. Remove all sources of ignition. Evacuate danger area. Spark- and explosionproof appliances and lighting equipment.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Do not allow product to spread into the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Avoid all eye and skin contact and do not breathe vapour and mist. Keep away from sources of ignition - No smoking. Take precautionary measures to prevent the formation of static electricity.
Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Store in a well-ventilated place. Keep container tightly closed.
Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-PICOLINE (D7, 98%) (93951-93-0)		
USA OSHA	OSHA PEL (TWA) (ppm)	2 USA. Workplace Environmental Exposure Levels (WEEL); Remarks:Skin
USA OSHA	OSHA PEL (STEL) (ppm)	5 ppm USA. Workplace Environmental Exposure Levels (WEEL); Value: Skin

8.2. Exposure controls

- Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



- Materials for protective clothing : Wear suitable protective clothing and gloves.
Hand protection : Wear suitable protective clothing and gloves.
Eye protection : Chemical goggles or safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
Appearance : Liquid.
Molecular mass : 100.17 g/mol (Labeled)

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Colour	: Light yellow.
Odour	: Unpleasant.
Odour threshold	: No data available
pH	: 8.5 at 100 g/l at 20 °C (68 °F)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -70 °C (- 94 °F) - lit
Freezing point	: No data available
Boiling point	: 128 - 129 °C (262 - 264 °F) - lit.
Flash point	: 29 °C (84 °F) - closed cup
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 14.9 hPa (11.2 mmHg) at 25 °C (77 °F);13 hPa (10 mmHg) at 24.4 °C (75.9 °F)
Relative vapour density at 20 °C	: 3.22 - (Air = 1.0)
Relative density	: No data available
Density	: 0.943 g/cm ³ at 25 °C (77 °F)
Solubility	: Water: Completely miscible
Log Pow	: 1.11
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 1.4 - 8.6 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Nitrogen oxides. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Toxic in contact with skin. Inhalation: Harmful if inhaled.

2-PICOLINE (D7, 98%) (93951-93-0)	
LD50 oral rat	790 mg/kg
LD50 dermal rabbit	387 mg/kg
ATE CLP (oral)	790.000 mg/kg bodyweight
ATE CLP (dermal)	387.000 mg/kg bodyweight
ATE CLP (gases)	4500.000 ppmv/4h
ATE CLP (vapours)	11.000 mg/l/4h
ATE CLP (dust,mist)	1.500 mg/l/4h

Skin corrosion/irritation : Not classified
Skin - rabbit - Open irritation test
pH: 8.5 at 100 g/l at 20 °C (68 °F)

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Serious eye damage/irritation	: Causes serious eye irritation. No data available pH: 8.5 at 100 g/l at 20 °C (68 °F)
Respiratory or skin sensitisation	: Not available No data available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not classified
Reproductive toxicity	: Not available
STOT-single exposure	: May cause respiratory irritation. May cause respiratory irritation.
STOT-repeated exposure	: Not classified No data available
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Liver injury may occur. Kidney injury may occur. Cough. Shortness of breath. Headache. Nausea. Vomiting. Gastrointestinal disturbance. Stomach - Irregularities - Based on Human Evidence. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/injuries after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

2-PICOLINE (D7, 98%) (93951-93-0)

LC50 fish 1	897 mg/l Pimephales promelas (fathead minnow) - 96 h
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12.2. Persistence and degradability

2-PICOLINE (D7, 98%) (93951-93-0)

Persistence and degradability	Not available.
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12.3. Bioaccumulative potential

2-PICOLINE (D7, 98%) (93951-93-0)

Log Pow	1.11
Bioaccumulative potential	Not available.

12.4. Mobility in soil

2-PICOLINE (D7, 98%) (93951-93-0)

Ecology - soil	Not available.
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.
Product/Packaging disposal recommendations:	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT)	: 2313
DOT NA no.	UN2313

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14.2. UN proper shipping name

Proper Shipping Name (DOT) : Picolines
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger
DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT RQ : 5000 lbs
Marine pollutant : No

14.3. Additional information

Emergency Response Guide (ERG) Number : 129
Other information : No supplementary information available.

Overland transport

Packing group (ADR) : III
Class (ADR) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 30
Classification code (ADR) : F1
Danger labels (ADR) : 3 - Flammable liquids



Orange plates :

Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"
MFAG-No : 129

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Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L
(49 CFR 173.27)
DOT Quantity Limitations Cargo aircraft only (49 : 220 L
CFR 175.75)
Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

2-PICOLINE (D7, 98%) (93951-93-0)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313

15.2. International regulations

CANADA

No additional information available

15.2.1. National regulations

2-PICOLINE (D7, 98%) (93951-93-0)
Listed on the Canadian NDSL (Non-Domestic Substances List)

15.3. US State regulations

2-PICOLINE (D7, 98%)(93951-93-0)	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

2-PICOLINE (D7, 98%)

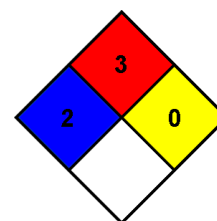
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H226	Flammable liquid and vapour
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
R10	Flammable
R20/22	Harmful by inhalation and if swallowed
R24	Toxic in contact with skin
R36/37	Irritating to eyes and respiratory system
T	Toxic
Xi	Irritant
Xn	Harmful

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS III Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 3 Serious Hazard
- Physical : 0 Minimal Hazard

CIL Multi-Solvent Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product