

Safety Data Sheet (SDS)

Printing date 1/26/2015

Prepared on 1/26/2015

1. Product and Company Identification

This product is considered to meet the definition of an "article". This Safety Data Sheet includes the information and is written based on the encapsulated substance or mixture in this article.

- **Product identifier**
- **Trade name: Addition Pen**
- **Item Number/Size/"ink" Content:**
134-1/XLarge/6mL, 134-2/Medium/2mL, 134-4/Fine/1mL, 134-5/Superfine/1.2mL
- **Relevant identified uses of the substance or mixture and uses advised against**
Image Addition Pen for Lithographic Printing Plates
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Nikken Chemical Laboratory Co., Ltd.
Sakae 2-16-1, Naka-Ku, Nagoya, Aichi 460-0008, Japan
overseas@nikken-chemical.co.jp www.nikken-chemical.co.jp
- **Emergency telephone number:** Infotrac: 1-800-535-5053, 1-352-326-2510

2. Hazard(s) identification

This product is considered to meet the definition of an "article". This Safety Data Sheet includes the information and is written based on the encapsulated substance or mixture in this article.

EMERGENCY OVERVIEW (for the "ink" substances contained within this pen-type article)

An "Ink" less than 10mL contained in this article is pink color liquid with solvent odour. The substance is flammable and may produce toxic fumes in fire conditions. Wear equipment to protect eyes, skin and respiratory tract. Dike or absorb spills to keep the substance and run-off from entering sewer or waterways. Use water spray to cool and disperse vapors. Special handling & workplace: Avoid contact with skin & eyes. Do not smoke, eat or drink in the workplace. Wash hands thoroughly with soap and water after handling this article. Remove contaminated clothing immediately. Ventilation in work area should be sufficient. Do not take internally. For industrial use only. Keep out of the reach of children.

- **GHS classification and label elements of the product:** Not applicable
- This article is not classified as hazardous under the Globally Harmonized Systems of Classification and Labeling of Chemicals (GHS) as well as the OSHA Hazard Communication Standard and the Health Canada Workplace Hazardous Materials Information Standard. The reasons for the exemptions are published and contained in the GHS (ST/SG/AC.10/30/Rev.4), 29 CFR 1910.1200(b)(6)(ix) as amended Sept 14, 2009 per the Code of Federal Regulations and Canadian Hazardous Products Act part 12 section (f) as amended June 1, 2009.
- This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. Only if released or exposed due to use of the article in a manner not in accordance with the product's directions for use and handling precautions in the workplace it may present potential health and environmental risks.
- The information contained in this SDS is forwarded to you for your information, but is not meant to imply that the product is covered by nor is this SDS meant to comply with all requirements of the hazard communication standards.

3. Composition/information on ingredients

This product is considered to meet the definition of an "article". This Safety Data Sheet includes the information and is written based on the encapsulated substance or mixture in this article.

- **Substance/Preparation:** Ingredients contained within pen-type article for reference

Ingredient name	content(%)	CAS No.	ECNO
Methyl ethyl ketone	30 - 40	78-93-3	201-159-0
Xylene (Mixture of isomers)	10 - 20	1330-20-7	215-535-7
Toluene	< 5	108-88-3	203-625-9
Ethylbenzene	< 5	100-41-4	202-849-4
Ester solvents	30 - 40	--	--



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4. First-aid measures

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· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **IF INHALED:**

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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· **IF ON SKIN(or hair):**

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention.

· **IF IN EYES:**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

5. Fire-fighting measures

· **Suitable extinguishing media:**

Use appropriate extinguishing media suitable for surrounding facilities.

6. Accidental release measures

Sweep up, place in a bag and hold for waste disposal.

7. Handling and storage

· **Precautions for safe handling**

· **Preventive measures:**

(Exposure Control for handling personnel)

Avoid breathing dust/fume/gas/mist/vapours/spray.

(Protective measures against fire & explosion)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

· **Safety Measures/Incompatibility:**

Use only outdoors or in a well-ventilated area.

Wear protective gloves.

Wear protective gloves and face protection.

Wear eye protection/face protection.

· **Conditions for safe storage, including any incompatibilities**

· **Recommendation for storage:**

Store in well-ventilated place. Keep pen tightly capped and closed. Keep cool .

8. Exposure controls/personal protection

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Control parameters e.g. occupational exposure limit values or biological limit values

Adopted value

(Ethylbenzene)

ACGIH(2010) TWA: 20ppm

(URT irr; kidney dam; nephropathy; cochlear impair)

(Methyl ethyl ketone)

ACGIH(1992) TWA: 200ppm

STEL: 300ppm (URT irr; CNS & PNS impair)

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(Toluene)
ACGIH(2006) TWA: 20ppm (Visual impair; female repro; pregnancy loss)
(Xylene (Mixture of isomers))
ACGIH(1992) TWA: 100ppm
STEL: 150ppm (URT & eye irr; CNS impair)
OSHA-PEL
(Ethylbenzene)
TWA 100ppm, 435mg/m³
(Methyl ethyl ketone)
TWA 200ppm, 590mg/m³
(Toluene)
TWA 200ppm; STEL 300mg/m³
(Xylene (Mixture of isomers))
TWA 100ppm, 435mg/m³
NIOSH-REL
(Ethylbenzene)
TWA 100ppm, 435mg/m³; STEL 125ppm, 545mg/m³
(Toluene)
TWA 100ppm, 375mg/m³; STEL 150ppm, 560mg/m³
(Methyl ethyl ketone)
TWA 200ppm, 590mg/m³; STEL 300ppm, 885mg/m³
(Xylene (Mixture of isomers))
TWA 100ppm, 435mg/m³; STEL 150ppm, 655mg/m³
California proposition 65
cancer NSRL
(Ethylbenzene)
NSRL=(inhalation) 54µg/day ; (oral) 41µg/day
developmental MADL
(Toluene)
(female) MADL=7000µg/day
· **Safety and Health measures:**
Wash contaminated parts thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Take off contaminated clothing and wash before reuse.

9. Physical and chemical properties

· Physical properties

Appearance: Articles containing less than group II or III 10 ml of a packing no free visible flammable liquid absorbed into a solid material

10. Stability and reactivity

· **Stability:** Stable under normal storage/handling conditions.

11. Toxicological information

This product is considered to meet the definition of an "article". This Safety Data Sheet includes the information and is written based on the encapsulated substance or mixture in this article.

· Symptoms related to the physical, chemical and toxicological characteristics:

No Teratogenic effects data available

Carcinogenic effects

(Ethylbenzene)

IARC-Gr.2B : Possibly carcinogenic to humans.

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(Toluene)

IARC-Gr.3 : Not Classifiable as a Human Carcinogen.

(Xylene (Mixture of isomers))

IARC-Gr.3 : Not Classifiable as a Human Carcinogen.

(Ethylbenzene)

ACGIH-A3(2010) : Confirmed Animal Carcinogen with Unknown Relevance to Humans

(Toluene)

ACGIH-A4(2006) : Not Classifiable as a Human Carcinogen

(Xylene (Mixture of isomers))

ACGIH-A4(1992) : Not Classifiable as a Human Carcinogen

No Aspiration hazard data available

12. Ecological information

This product is considered to meet the definition of an "article". This Safety Data Sheet includes the information and is written based on the encapsulated substance or mixture in this article.

· Ecotoxicity

· Aquatic toxicity:

Harmful to aquatic life with long lasting effects

· Water solubility:

(Ethylbenzene)

0.015 g/100 ml (20 C) (ICSC, 2007)

(Toluene)

none (ICSC, 2002)

(Methyl ethyl ketone)

29 g/100 ml (20 C) (ICSC, 1998)

· Persistence and degradability:

(Ethylbenzene)

Easily degrade and rapidly vaporize (SIDS, 2005)

(Toluene)

BOD_Degradation : 123% (Registered chemicals data check & review, Japan)

(Xylene (Mixture of isomers))

BOD_Degradation : 39% (CERI hazard data book,2005)

· Bioaccumulative potential:

(Methyl ethyl ketone)

log Pow=0.29 (ICSC, 1998)

(Ethylbenzene)

log Kow=3.15 (PHYSPROP Database, 2005)

(Toluene)

log Kow=2.73 (PHYSPROP Database, 2008)

(Xylene (Mixture of isomers))

log Pow=3.16 (PHYSPROP Database, 2005)

· No Mobility in soil data available

· Ozone depleting chemical data not available

13. Disposal considerations

· Disposal methods:

Avoid release to the environment (- if this is not the intended use).

Dispose of contents/container in accordance with local/national regulation.

14. Transport information

· Regulatory information:

· UN No, UN CLASS : Not applicable in accordance with following special provisions

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Special provisions 216 designated on UN NO. 3175 (SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.) Mixtures of solids which are not subject to these Regulations and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the substance is loaded or at the time the packaging or cargo transport unit is closed. Each cargo transport unit shall be leak-proof when used as a bulk packaging. Sealed packets and articles containing less than group II or III 10 ml of a packing flammable liquid absorbed into a solid material are not subject to these Regulations provided there is no free liquid in the packet or article.

- DOT Hazard Classification: Not Regulated.
- IATA Classification: Not Regulated.
- ICAO Classification: Not Regulated.
- IMO Classification: Not Regulated.
- TDG hazard Classification: Not Regulated.

15. Regulatory information

This product is considered to meet the definition of an "article". This Safety Data Sheet includes the information and is written based on the encapsulated substance or mixture in this article.

- GHS classification and labeling: Not applicable
- US major regulations:
- TSCA

Methyl ethyl ketone; Ethyl lactate; Ethylbenzene; Toluene; Xylene (Mixture of isomers).

- California proposition 65:

cancer

Ethylbenzene

developmental

Toluene

16. Other information

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- Reference Book

Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN Classification, labelling and packaging of substances and mixtures (table 3-1 ECNO6182012) 2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT) 2014 TLVs and BEIs. (ACGIH) <http://monographs.iarc.fr/ENG/Classification/index.php> Supplier's data/information

Notice to reader

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The GHS classification data given here is based on current EU official data.