

Sicrys[™] I60PM-116

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Complying with 1907/2006/EEC Regulation of 18 December 2006 ("REACH Regulation") and REGULATION (EC) No 1272/2008 (CLP)

Section 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: Sicrys™ I60PM-116 Trade name: Sicrys™ I60PM-116

Product type: Silver ink

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

Ink.

1.3 Details of the supplier of the safety data sheet

P.V. Nano Cell Ltd.

P.O.Box 236, Migdal Ha'Emek, Israel 23100

Phone: +972-4-6546881 Fax: +972-4-6546880

E-mail address of person responsible for this SDS: N/A

1.4 Emergency telephone number

Emergency telephone number (with hours of operation):

National Information & Response Center: in Israel *6911 or 08-9253321

Outside Israel: +972 8 925 3321

infocenter@sviva.gov.il

Section 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Directive 67/548/EEC (DSD) or 1999/45/EC

Flammable liquids (Category 3), H226

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Product name	EU Classification	
Sicrys™ I60PM-116	R10, R67, Flam. Liq.3, STOT SE 3, H226, H336	

For the full text of the H-Statements and R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling in accordance with 1999/45 (DPD) Hazard symbol(s):







Warning

Risk phrase(s):

Xn: Harmful R10: Flammable

R63: Possible risk/harm to unborn child



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R67: Vapors may cause drowsiness and dizziness.

Hazard statement(s):

H226: Flammable liquid and vapor

H336: May cause drowsiness or dizziness

H361d: Suspected of damaging the unborn child

Precautionary statement(s):

P261: Avoid breathing vapors.

P281: Use personal protective equipment as required

2.3 Other hazard

None

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation:

Product/ Ingredient name	Identifiers	%	EU Classification
Silver	CAS number: 7440-22-4 EC number: 231-131-3	55-65	Not classified
Propylene Glycol Monomethyl Ether	CAS number: 107-98-2 EC number: 203-539-1	10-20	R10, R67, Flam. Liq.3, STOT SE 3, H226, H336
Propylene Glycol Monomethyl Ether Acetate	CAS number: 108-65-6 EC number: 203-603-9	4-12	Flam. Liq. 3, H226
Diethylene Glycol Monomethyl Ether	CAS number: 111-77-3 EC number: 203-906-6	5-10	Xn; R63; Repr.Cat.3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8. See section 16 for the full text of the R-phrases declared above.

Section 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

Eyes contact: In case of contact with eyes, rinse thoroughly with plenty of water for at least 15

minutes and consult a physician.

Skin contact: Wash off with soap and plenty of water. Consult a physician.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.



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4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

Section 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Not suitable: N/A

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Flash back possible over considerarable distance. Container explosion may occur under fire conditions. Vapors may form explosive mixture with air. May form peroxides of unknown stability.

5.3 Advice for firefighters

Special protective equipment for firefighters: Wear self contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Large spill: As for small spill

Personal Protection in Case of Large Spill: Safety glasses. Full suit. Suitable respirator. Boots. Gloves. A self- contained breathing apparatus should be used to avoid inhalation of the product.

6.4 Reference to other sections

See Section 13 for disposal information.

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling: Avoid exposure – obtain special instructions before use. Avoid inhalation of vapour or mist. Avoid contact with skin and eyes. Wash thoroughly after handling. Handle in accordance with good



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industrial hygiene and safety practice. Keep away from sources of ignition – No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

Hygiene Measures: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Air sensitive. Forms explosive peroxides on prolonged storage. May form peroxides on contact with air. Storage class (TRGS 510): Flammable liquids

7.3 Specific end use(s): A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values:

Ingredient name	Occupational exposure limits
Silver	ACGIH-TLV 0.1 mg/m³ (TWA), (dust, fume)

8.2 Exposure controls

Enginnering Measures

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Person Protective measures

<u>Respiratory protection:</u> Wear a suitable respirator. Be sure to use approved/certified or equivalent equipment. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye/face protection: Wear protective safety glasses, goggles.

<u>Skin protection:</u> Use impervious clothing. Use flame retardant antistatic protective clothing. Wear appropriate long-sleeved flame retardant antistatic protective clothing to minimize skin contact. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance.

<u>Hand protection:</u> Wear protective disposable gloves to prevent skin exposure. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/86/EEC and the standard EN 374 derived from it.



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Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3mm Break through time: > 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647)

Splash contact

Material: Nature latex/chloroprene Minimum layer thickness: 0.6mm Break through time: 37 min

Material tested: Lapren® (KCL 706 / Aldrich Z677558)

This recommendation is advisory only.

Environmental exposure controls

Prevent further leakage or apillage if safe to do so. Do not let product enter drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Opaque greenish/grey liquid

Odour: ester-like Odour threshold: N/A

pH: N/A

Melting point/Freezing point: N/A Initial boiling point/boiling range: N/A

Flash point: N/A

Evaporation rate (butyl acetate=1): N/A

Flammability: N/A

Upper/lower flammability or explosive limits: LEL: N/A

Vapor pressure: N/A
Vapor density (Air=1): N/A
Relative Density(H₂O=1): N/A

Solubility(ies): N/A

Partition coefficient Octanol/Water: N/A

Auto-ignition temperature: N/A Decomposition temperature: N/A

Viscosity: N/A

Explosive properties: N/A Oxidizing properties: N/A

9.2 Other information

N/A

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available



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10.2 Chemical stability

May form peroxides on prolonged storage. Stable under normal handling and storage conditions described in Section 7.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents, strong acids and strong bases.

10.6 Hazardous Decomposition products

Not available

In the event of fire: see section 5

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Product/ingredient name	Test	Species	Dose
Propylene Glycol Monomethyl Ether	LD50, Oral	Mouse	11.700 mg/kg
Propylene Glycol Monomethyl Ether Acetate	LD50, Oral	Rat	5,155 mg/kg
Diethylene Glycol Monomethyl ether	LD50, Oral	Rat	>7.000 mg/kg
Silver	Oral	Mouse	100 mg/kg

Irritation: N/A

Corrosivity: N/A

Sensitization: N/A

Repeated dose toxicity: N/A

Carcinogenicity: N/A

Mutagenicity: N/A

Toxicity for reproduction: N/A

Other information: May cause drowsiness or dizziness

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity

N/A



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12.2 Persistence and Degradability

N/A

12.3 Bioaccumulative potential

N/A

12.4 Mobility in soil

N/A

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects

N/A

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Packing

Dispose of as unused product.

Section 14: TRANSPORT INFORMATION

14.1 Un number

ADR/RID: - 1993 IMDG: - 1993 IATA: - 1993

14.2 Proper shipping name

ADR/RID: Flammable liquid, n.o.s.

IMDG: Flammable liquid, n.o.s.

IATA: Flammable liquid, n.o.s.

14.3 Transport hazard class(es)

<u>ADR/RID:</u> - 3 <u>IMDG:</u> - 3 <u>IATA:</u> - 3

14.4 Packaging group

<u>ADR/RID:</u> - III <u>IMDG:</u> - III <u>IATA:</u> - III

14.5 Environmental hazard

ADR/RID: - no IMDG: - no IATA: - no

14.6 Special precautions for user

Not available



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Additional information

ADR/RID: - IMDG: - IATA: -

14.7 Transport to bulk according to Annex II of MARPOL 79/78 and the IBC Code

Not available

Section 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Directives 67/548/EEC and 1999/45/EC (including amendments)

EU Regulation(EC) No.1907/2006 (REACH)

15.2 Chemical safety assessment

N/A

Section 16: OTHER INFORMATION

Full text H-statements referred to under sections 2 and 3.

Eye Dam. Serious eye damage Flam. Liq. Flammable liquids

H226 Flammable liquid and vapor

H315 Causes skin irritation

H318 Causes serious eye damage
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
H360D May damage the unborn child

Repr. Reproductive toxicity

Skin Irrit. Skin irritation

STOT SE Specific target organ toxicity – single exposure

Full text of R-phrases referred to under sections 2 and 3.

T Toxic R10 Flammable

R37/38 Irritating to respiratory system and skin

R41 Risk of serious damage to eyes
R61 May cause harm to the unborn child

R67 Vapors may cause drowsiness and dizziness

Repr.Cat.2 Toxic to Reproduction Category 2

Training advice: Before using/handling the product one must read carefully present MSDS.

Recommended restriction: N/A

Key Legend Information:

ACGIH- American Conference of Governmental Industrial Hygienists

OSHA- Occupational Safety and Health Administration

NTP- National Toxicology program

IARC- International Agency for Research on Cancer

ND- Not Determined

N/A- Not available

R-phrases- Risk phrases



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S-phrases- Safety phrases

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