

**PA 400 R**

Version 2.0

Revision Date 09/15/2011

Ref. 130000024716

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : PA 400 R  
MSDS Number : 130000024716

Product Use : Solvent, Electrical/electronic industries

Manufacturer : HD MicroSystems™  
250 Cheesequake Road  
Parlin, New Jersey 08859

Product Information : 800-346-5656  
Transport Emergency : CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

**SECTION 2. HAZARDS IDENTIFICATION**

## Potential Health Effects

## Skin

1-Methoxy-2-propyl acetate : Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering.

## Eyes

1-Methoxy-2-propyl acetate : May cause eye irritation. tearing, Discomfort, Blurred vision.

## Inhalation

1-Methoxy-2-propyl acetate : Respiratory irritation Cough, Discomfort.

## Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

**PA 400 R**

Version 2.0

Revision Date 09/15/2011

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No.	Concentration
1-Methoxy-2-propyl acetate	108-65-6	60 - 100 %

**SECTION 4. FIRST AID MEASURES**

- Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water.
- Eye contact : Rinse immediately with plenty of water and seek medical advice.
- Inhalation : Move to fresh air. Consult a physician.
- Ingestion : Immediately give plenty of water (if possible charcoal slurry). Call a physician immediately.
- General advice : Never give anything by mouth to an unconscious person.

**SECTION 5. FIREFIGHTING MEASURES**

- Flammable Properties
- Flash point : 43 °C (109 °F) closed cup
- Ignition temperature : 354 °C (669 °F)
- Lower explosion limit : 1.3 vol%
- Upper explosion limit : 10.8 vol%
- Suitable extinguishing media : Water spray, Dry chemical, Carbon dioxide (CO<sub>2</sub>), Foam
- Unsuitable extinguishing media : High volume water jet, (contamination risk)

**PA 400 R**

Version 2.0

Revision Date 09/15/2011

Ref. 130000024716

Firefighting Instructions : In the event of fire, wear self-contained breathing apparatus. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : Wear personal protective equipment. Avoid contact with skin, eyes and clothing.

Spill Cleanup : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Shovel into suitable container for disposal.

Accidental Release Measures : Do not contaminate water.

**SECTION 7. HANDLING AND STORAGE**

Handling (Personnel) : Provide adequate ventilation. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke.

Handling (Physical Aspects) : Keep away from open flames, hot surfaces and sources of ignition.

Storage : Keep containers tightly closed in a cool, well-ventilated place. Keep away from: Strong oxidizing agents

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering controls : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment  
Respiratory protection : When workers are facing concentrations above the exposure limit they must

**PA 400 R**

Version 2.0

Revision Date 09/15/2011

Ref. 130000024716

use appropriate certified respirators. Mask with gas filter, type A (EN 141)

- Hand protection : Material: butyl-rubber  
 Break through time: 60 min  
 Permeation rate: 480 min  
 Glove thickness: 0.7 mm  
 Additional protection: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough., Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact)., The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove.
- Eye protection : Safety glasses with side-shields
- Skin and body protection : Solvent-resistant apron
- Protective measures : All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated.

## Exposure Guidelines

## Exposure Limit Values

1-Methoxy-2-propyl acetate

AEL *	(DUPONT)	100 ppm	15 minute TWA
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\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Form : liquid  
 Color : colourless  
 Odor : solvent-like  
 pH : no data available  
 Freezing point : < -10 °C (< 14 °F)  
 : 145 - 146 °C (293 - 295 °F)  
 Vapour Pressure : 4.93 hPa at 20 °C (68 °F)

**PA 400 R**

Version 2.0

Revision Date 09/15/2011

Ref. 130000024716

Specific gravity : 0.968  
Water solubility : > 100 g/l  
Partition coefficient: n-  
octanol/water : POW: 0.36 at 25 °C (77 °F)

**SECTION 10. STABILITY AND REACTIVITY**

Stability : Stable at normal temperatures and storage conditions.

Conditions to avoid : Heat, flames and sparks.

Incompatibility : Strong acids and strong bases Strong oxidizing agents

Hazardous decomposition products : Hazardous decomposition products: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide

Hazardous reactions : With exposure to air, product may slowly degrade, forming peroxides which can be unstable.  
Hazardous polymerisation does not occur.

**SECTION 11. TOXICOLOGICAL INFORMATION**

PA 400 R  
Further information : Solvents may degrease the skin.High concentration of vapours may cause irritation to eyes and respiratory system and produce narcotic effects.No data is available on the product itself.

1-Methoxy-2-propyl acetate  
Dermal LD50 : > 5,000 mg/kg , rabbit

Oral LD50 : 8,532 mg/kg , rat

Skin irritation : No skin irritation, rabbit

Eye irritation : Mild eye irritation, rabbit

Skin sensitization : Did not cause sensitization on laboratory animals., guinea pig

Repeated dose toxicity : Inhalation  
multiple species

**PA 400 R**

Version 2.0

Revision Date 09/15/2011

Ref. 130000024716

Respiratory irritation

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Reproductive toxicity : Animal testing showed no reproductive toxicity.

Teratogenicity : Animal testing showed no developmental toxicity.

**SECTION 12. ECOLOGICAL INFORMATION**

## Aquatic Toxicity

1-Methoxy-2-propyl acetate

96 h LC50 : *Oryzias latipes* (medaka) > 100 mg/l

96 h LC50 : *Oncorhynchus mykiss* (rainbow trout) 134 mg/l

96 h LC50 : *Pimephales promelas* (fathead minnow) 161 mg/l

72 h EC50 : *Scenedesmus capricornutum* (fresh water algae) > 1,000 mg/l

48 h EC50 : *Daphnia magna* (Water flea) 380 mg/l

## Environmental Fate

1-Methoxy-2-propyl acetate

Biodegradability : Readily biodegradable.

Additional ecological information : No data is available on the product itself.

**SECTION 13. DISPOSAL CONSIDERATIONS**

Waste Disposal : In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

Environmental Hazards : Empty containers should be taken to an approved waste handling site for

**PA 400 R**

Version 2.0

Revision Date 09/15/2011

Ref. 130000024716

recycling or disposal.

**SECTION 14. TRANSPORT INFORMATION**

DOT	UN number	: 3272
	Proper shipping name	: Esters, n.o.s. (1-Methoxy-2-propyl acetate)
	Class	: 3
	Packing group	: III
	Labelling No.	: 3
IATA_C	UN number	: 3272
	Proper shipping name	: Esters, n.o.s. (1-Methoxy-2-propyl acetate)
	Class	: 3
	Packing group	: III
	Labelling No.	: 3
IMDG	UN number	: 3272
	Proper shipping name	: Esters, n.o.s. (1-Methoxy-2-propyl acetate)
	Class	: 3
	Packing group	: III
	Labelling No.	: 3

**SECTION 15. REGULATORY INFORMATION**

TSCA Status	: On the inventory, or in compliance with the inventory
SARA 313 Regulated Chemical(s)	: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
California Prop. 65	: Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known

**SECTION 16. OTHER INFORMATION**

**PA 400 R**

Version 2.0

Revision Date 09/15/2011

Ref. 130000024716

Contact person : HD Microsystems™, Customer Service, 800-346-5656

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Significant change from previous version is denoted with a double bar.