

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

- 1.1 Product identifier
- Trade name: Epifanes Poly-urethane Spraythinner
- 1.2 Relevant identified uses of the substance or mixture and uses advised against  
No further relevant information available.
- Application of the substance / the mixture  
Thinner for spray application of poly-urethane paints and varnishes
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:  
W.Heeren & Zoon bv.  
P.O. box 166  
1430 AD Aalsmeer  
Netherlands  
tel.+31-(0)297-360366  
fax +31-(0)297-342078  
email: r&d@epifanes.nl
- Further information obtainable from: environment protection department
- 1.4 Emergency telephone number:  
W.Heeren & Zoon bv. tel: +31 297 360678, E-mail: r&d@epifanes.nl  
Phone the National Poisons Information: Tel. +31 30 2748888  
See manufacturer

**SECTION 2: Hazards identification**

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36: Irritating to eyes.



F; Highly flammable

R11: Highly flammable.

R67: Vapours may cause drowsiness and dizziness.

- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
Has a narcotizing effect.

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Trade name: Epifanes Poly-urethane Spraythinner

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- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008  
The product is classified and labelled according to the CLP regulation.
- Hazard pictograms



GHS02



GHS07

- Signal word Danger
- Hazard-determining components of labelling:  
butanone
- Hazard statements  
H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.
- Precautionary statements  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P260 Do not breathe 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.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

\* **SECTION 3: Composition/information on ingredients**

- 3.2 Chemical characterization: Mixtures
- Description:  
Solvent mixture  
Mixture of organic solvents.

- Dangerous components:

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Trade name: Epifanes Poly-urethane Spraythinner

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CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate ❌ Xi R36 R10 ⚠ Flam. Liq. 3, H226	25-50%
CAS: 78-93-3 EINECS: 201-159-0 Index number: 606-002-00-3 Reg.nr.: 01-2119457290-43	butanone ❌ Xi R36 🔥 F R11 R66-67 ⚠ Flam. Liq. 2, H225 ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32	xylene ❌ Xn R20/21 ❌ Xi R38 R10 ⚠ Flam. Liq. 3, H226 ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	2.5-10%
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29	n-butyl acetate R10-66-67 ⚠ Flam. Liq. 3, H226 ⚠ STOT SE 3, H336	2.5-10%

• Additional information:

For the wording of the listed risk phrases refer to section 16.

**SECTION 4: First aid measures**

- 4.1 Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed  
No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed  
No further relevant information available.

**SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture  
No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment:  
Wear fully protective suit.  
Do not inhale explosion gases or combustion gases.

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**SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures  
Wear protective clothing.  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions:  
Prevent seepage into sewage system, workpits and cellars.  
Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- 6.4 Reference to other sections  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling  
Work only in fume cupboard.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- Information about fire - and explosion protection:  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:  
Requirements to be met by storerooms and receptacles:  
Store only in the original receptacle.  
Store in a cool location.
- Information about storage in one common storage facility:  
Store away from water.
- Further information about storage conditions:  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.
- 7.3 Specific end use(s) No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

- Additional information about design of technical facilities:  
No further data; see item 7.
- 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

108-65-6 2-methoxy-1-methylethyl acetate

Inhalative	Tijd gewogen gemiddelde over 8 uur / Exposure time	550 mg/m <sup>3</sup> (Algemene bevolking/ General population)
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Safety data sheet  
according to 1907/2006/EC, Article 31

Printing date 30.07.2014

Version number 16

Revision: 30.07.2014

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78-93-3 butanone		
Inhalative	Tijd gewogen gemiddelde over 15 min/Exposure time	900 mg/m <sup>3</sup> (Algemene bevolking/ General population)
	Tijd gewogen gemiddelde over 8 uur / Exposure time	590 mg/m <sup>3</sup> (Algemene bevolking/ General population)
1330-20-7 xylene		
Inhalative	Tijd gewogen gemiddelde over 15 min/Exposure time	442 mg/m <sup>3</sup> (Algemene bevolking/ General population)
	Tijd gewogen gemiddelde over 8 uur / Exposure time	210 mg/m <sup>3</sup> (Algemene bevolking/ General population)
108-65-6 2-methoxy-1-methylethyl acetate		
WEL	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm Long-term value: 274 mg/m <sup>3</sup> , 50 ppm Sk	
78-93-3 butanone		
WEL	Short-term value: 899 mg/m <sup>3</sup> , 300 ppm Long-term value: 600 mg/m <sup>3</sup> , 200 ppm Sk, BMGV	
1330-20-7 xylene		
WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV	
123-86-4 n-butyl acetate		
WEL	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm	
· DNELs		
1330-20-7 xylene		
Dermal	Long-term - local effects, worker	180 --- (Werker/Worker)
Inhalative	Acute - systemic effects, worker	289 mg/m <sup>3</sup> (Werker/Worker)
	Acute-local effects, worker	289 mg/m <sup>3</sup> (Werker/Worker)
	Long-term - local effects, worker	77 mg/m <sup>3</sup> (Werker/Worker)
· PNECs		
1330-20-7 xylene		
Aquatic compartment - freshwater		0.327 mg/L (not specified)
Aquatic compartment - marine water		0.327 mg/L (not specified)

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Aquatic compartment - sediment in freshwater	12.46 mg/kg sed dw (not specified)
Aquatic compartment - sediment in marine water	12.46 mg/kg sed dw (not specified)
Aquatic compartment - water, intermittent releases	0.327 mg/L (not specified)
Sewage treatment plant	6.58 mg/L (not specified)
Terrestrial compartment - soil	2.31 mg/kg dw (not specified)

· Ingredients with biological limit values:

78-93-3 butanone

BMGV	70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one
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1330-20-7 xylene

BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
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· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.

· Respiratory protection:

Filter A/P2

Suitable respiratory protective device recommended.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

**SECTION 9: Physical and chemical properties**

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid  
Colour: According to product specification

· Odour: Characteristic

· Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 79 °C

· Flash point: -4 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 315 °C

· Decomposition temperature: Not determined.

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits:

Lower: 1.1 Vol %  
Upper: 11.5 Vol %

· Vapour pressure at 20 °C: 105 hPa

· Density at 20 °C: 0.88333 g/cm<sup>3</sup>

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water):

Not determined.

· Viscosity:

Dynamic: Not determined.  
Kinematic at 20 °C: 11 s (DIN 53211/4)

· Solvent content:

Organic solvents: 100.0 %  
VOC content: 100.0 %  
VOC content: 883.3 g/l / 7.37 lb/gal

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- 9.2 Other information No further relevant information available.

**SECTION 10: Stability and reactivity**

- 10.1 Reactivity
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:  
No dangerous decomposition products known.

**SECTION 11: Toxicological information**

- 11.1 Information on toxicological effects
- Acute toxicity:

- LD/LC50 values relevant for classification:

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	8532 mg/kg bw (rat)
Inhalative	LC50/4 h	35.7 mg/l (rat)

78-93-3 butanone

Oral	LD50	3300 mg/kg bw (rat)
Dermal	LD50	5000 mg/kg bw (rabbit)

1330-20-7 xylene

Oral	LD50	4300 mg/kg bw (rat)
Dermal	LD50	2000 mg/kg bw (rabbit)

123-86-4 n-butyl acetate

Oral	LD50	13100 mg/kg bw (rat)
Dermal	LD50	>5000 mg/kg bw (rabbit)
Inhalative	LC50/4 h	>21.0 mg/l (rat)

- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

**SECTION 12: Ecological information**

- 12.1 Toxicity

- Aquatic toxicity:

108-65-6 2-methoxy-1-methylethyl acetate

EC50	408-500 mg/l (daphnia magna) (48 uur/hour)
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IC 50	>1000 mg/l (Algae, Growth inhibition test) (72 uur/hour)
LC50	100-180 mg/l (Fish Acute Toxicity Study) (96 uur/hour)
1330-20-7 xylene	
EC50	1 mg/l (daphnia magna) (48 uur/hour)
LC50	13.5-2.6 mg/l (Fish Acute Toxicity Study) (96 uur/hour)
<ul style="list-style-type: none"> <li>12.2 Persistence and degradability No further relevant information available.</li> </ul>	
<ul style="list-style-type: none"> <li>12.3 Bioaccumulative potential</li> </ul>	
1330-20-7 xylene	
Log Kow	3 (not specified)
<ul style="list-style-type: none"> <li>12.4 Mobility in soil No further relevant information available.</li> <li>Additional ecological information:</li> <li>General notes:            Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water            Do not allow product to reach ground water, water course or sewage system.            Danger to drinking water if even small quantities leak into the ground.</li> <li>12.5 Results of PBT and vPvB assessment</li> <li>PBT: Not applicable.</li> <li>vPvB: Not applicable.</li> <li>12.6 Other adverse effects No further relevant information available.</li> </ul>	

**SECTION 13: Disposal considerations**

- 13.1 Waste treatment methods
- Recommendation  
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- 14.1 UN-Number
- ADR, IMDG, IATA UN1263
- 14.2 UN proper shipping name
- ADR 1263 PAINT (vapour pressure at 50 °C not more than 110 kPa)
- IMDG, IATA PAINT

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· 14.3 Transport hazard class(es)

· ADR



· Class 3 (F1) Flammable liquids.  
· Label 3

· IMDG, IATA



· Class 3 Flammable liquids.  
· Label 3

· 14.4 Packing group

· ADR, IMDG, IATA II

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Warning: Flammable liquids.

· Danger code (Kemler): 33

· EMS Number: F-E, S-E

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ) 5L  
· Excepted quantities (EQ) Code: E2  
Maximum net quantity per inner packaging:  
30 ml  
Maximum net quantity per outer packaging:  
500 ml

· Transport category 2  
· Tunnel restriction code D/E

· IMDG

· Limited quantities (LQ) 5L  
· Excepted quantities (EQ) Code: E2  
Maximum net quantity per inner packaging:  
30 ml  
Maximum net quantity per outer packaging:  
500 ml

· UN "Model Regulation":

UN1263, PAINT (vapour pressure at 50 °C not more than 110 kPa), 3, II

Trade name: Epifanes Poly-urethane Spraythinner

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**SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Technical instructions (air):

Class	Share in %
NK	50-100

- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- 15.2 Chemical safety assessment:  
A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H226 Flammable liquid and vapour.
  - H312 Harmful in contact with skin.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.
  - H336 May cause drowsiness or dizziness.
  - R10 Flammable.
  - R11 Highly flammable.
  - R20/21 Harmful by inhalation and in contact with skin.
  - R36 Irritating to eyes.
  - R38 Irritating to skin.
  - R66 Repeated exposure may cause skin dryness or cracking.
  - R67 Vapours may cause drowsiness and dizziness.
- Abbreviations and acronyms:
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organization
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - DNEL: Derived No-Effect Level (REACH)
  - PNEC: Predicted No-Effect Concentration (REACH)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - Flam. Liq. 2: Flammable liquids, Hazard Category 2
  - Flam. Liq. 3: Flammable liquids, Hazard Category 3
  - Acute Tox. 4: Acute toxicity, Hazard Category 4
  - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  - Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
  - STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- \* Data compared to the previous version altered.