

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

- 1.1 Product identifier
- Trade name: Epifanes Poly-urethane Brushthinner
- CAS Number:
108-65-6
- EC number:
203-603-9
- Index number:
607-195-00-7
- Registration number 01-2119475791-29
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Product category
PC35 Washing and cleaning products (including solvent based products)
PC0 Other
- Process category PROC10 Roller application or brushing
- Environmental release category ERC2 Formulation into mixture
- Application of the substance / the mixture
See our technical datasheet for application of this product.
Thinner for brush- and roller 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: Research & Development.
- 1.4 Emergency telephone number:
W.Heeren & Zoon bv. tel: +31 297 360678, E-mail: rend@epifanes.nl
Office hours: weekdays from 08:00 to 17:00.
The National Poisons Information Service; dial 111
Solely intended to inform professionals in acute poisoning!
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. 3 H226 Flammable liquid and vapour.

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



GHS02

- Signal word Warning

(Contd. on page 2)

Trade name: Epifanes Poly-urethane Brushthinner




(Contd. of page 1)

- Hazard statements
H226 Flammable liquid and vapour.
- Precautionary statements
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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/ doctor.
P303+P361+P353 IF ON SKIN (or hair): 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

- 3.1 Chemical characterisation: Substances
- CAS No. Description
108-65-6 2-methoxy-1-methylethyl acetate
- Identification number(s)
- EC number: 203-603-9
- Index number: 607-195-00-7

- Dangerous components:

CAS: 70657-70-4	2-methoxypropyl acetate	≤0.5%
EINECS: 274-724-2	 Flam. Liq. 3, H226	
Index number: 607-251-00-0	 Repr. 1B, H360D	
Reg.nr.: C&L Inventory	 STOT SE 3, H335	

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water.
- 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:
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet

(Contd. on page 3)

Trade name: Epifanes Poly-urethane Brushthinner

(Contd. of page 2)

- 5.2 Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
Keep away from ignition sources.
Ensure adequate ventilation
Mount respiratory protective device.
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).
Dispose contaminated material as waste according to item 13.
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
Keep away from heat and direct sunlight.
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.
Keep respiratory protective device available.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
Requirements to be met by storerooms and receptacles:
Store only in the original receptacle.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- 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.

(Contd. on page 4)

Trade name: Epifanes Poly-urethane Brushthinner

(Contd. of page 3)

· 8.1 Control parameters

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

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

Inhalative	(Tgg)time weighted average 8 hours / Exposure time	550 mg/m ³ (Algemene bevolking/ General population)
------------	--	--

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

WEL	Short-term value: 548 mg/m ³ , 100 ppm Long-term value: 274 mg/m ³ , 50 ppm Sk
-----	--

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· Respiratory protection:

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.

Filter AX

· Protection of hands:



Protective gloves

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

Butyl rubber, BR

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.

· 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.

· For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, glove thickness 0.7 mm, > 480 min breakthrough time / permeation to EN374.

· As protection from splashes gloves made of the following materials are suitable:

(recommended: at least protection index 2, corresponding > 30 minutes permeability time / Permeation according to EN 374)

chloroprene rubber (CR) - 0.5 mm thickness

nitrile rubber (NBR) - 0.4 mm thickness

· Eye protection:



Tightly sealed goggles

(Contd. on page 5)

Trade name: Epifanes Poly-urethane Brushthinner

(Contd. of page 4)

- Body protection: Use protective suit.

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:
 - Form: Fluid
 - Colour: Colourless
- Odour: Ester-like
- Odour threshold: Not determined.
- pH-value: 4
- Change in condition
 - Melting point/freezing point: Undetermined.
 - Initial boiling point and boiling range: 146.4 °C
- Flash point: 44 °C
- Flammability (solid, gas): Not applicable.
- Ignition temperature: 315 °C
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Not determined.
- Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- Explosion limits:
 - Lower: 1.5 Vol %
 - Upper: 10.8 Vol %
- Vapour pressure at 20 °C: 3.37 hPa
- Density at 20 °C: 0.97 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with water at 20 °C: 220 g/l
- Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
 - Dynamic at 20 °C: 1.2 mPas
 - Kinematic: Not determined.
- Solvent content:
 - Organic solvents: 99.6 %
 - VOC content: 99.6 %
 - VOC content: 966.1 g/l / 8.06 lb/gl

(Contd. on page 6)

Trade name: Epifanes Poly-urethane Brushthinner

(Contd. of page 5)

- 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions
Contact with acids releases flammable gases.
- 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
Based on available data, the classification criteria are not met.
- 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)
- Primary irritant effect:
- Skin corrosion/irritation
Based on available data, the classification criteria are not met.
- Serious eye damage/irritation
Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity
Based on available data, the classification criteria are not met.
- Carcinogenicity
Based on available data, the classification criteria are not met.
- Reproductive toxicity
Based on available data, the classification criteria are not met.
- STOT-single exposure
Based on available data, the classification criteria are not met.
- STOT-repeated exposure
Based on available data, the classification criteria are not met.
- Aspiration hazard
Based on available data, the classification criteria are not met.

GB

(Contd. on page 7)

Trade name: Epifanes Poly-urethane Brushthinner

(Contd. of page 6)

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)

IC 50 >1000 mg/l (Algae, Growth inhibition test) (72 uur/hour)

LC50 100-180 mg/l (Fish Acute Toxicity Study) (96 uur/hour)

· 12.2 Persistence and degradability No further relevant information available.

· 12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

· 12.4 Mobility in soil No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· 12.5 Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· 12.6 Other adverse effects No further relevant information available.

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 hazardous 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 RELATED MATERIAL

· IMDG, IATA PAINT RELATED MATERIAL

(Contd. on page 8)

Trade name: Epifanes Poly-urethane Brushthinner

(Contd. of page 7)

· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class 3 Flammable liquids.
· Label 3

· 14.4 Packing group

· ADR, IMDG, IATA III

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Warning: Flammable liquids.
· Danger code (Kemler): 30
· EMS Number: F-E, S-D
· Stowage Category A

· 14.7 Transport in bulk according to

Annex II of Marpol and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ) 5L
· Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging:
30 ml
Maximum net quantity per outer packaging:
1000 ml
· Transport category 3
· Tunnel restriction code D/E

· IMDG

· Limited quantities (LQ) 5L
· Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging:
30 ml
Maximum net quantity per outer packaging:
1000 ml

· UN "Model Regulation": UN 1263 PAINT RELATED MATERIAL, 3, III

SECTION 15: Regulatory information

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I Substance is not listed.

· Seveso category P5c FLAMMABLE LIQUIDS

· Qualifying quantity (tonnes) for the application of lower-tier requirements
5,000 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements
50,000 t

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 30

(Contd. on page 9)

Trade name: Epifanes Poly-urethane Brushthinner

(Contd. of page 8)

- National regulations:
- Technical instructions (air):

Class	Share in %
NK	50-100

- Waterhazard class:
Water hazard class 1 (Self-assessment): slightly 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
H226 Flammable liquid and vapour.
H335 May cause respiratory irritation.
H360D May damage the unborn child.
- 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 Organisation
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 Harmonised 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids - Category 3
Repr. 1B: Reproductive toxicity - Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) - Category 3
- * Data compared to the previous version altered.