

1 Identification

- Product identifier
- Trade name: Epifanes Poly-urethane Brushthinner
- CAS Number:
108-65-6
- EC number:
203-603-9
- Index number:
607-195-00-7
- Relevant identified uses of the substance or mixture and uses advised against
- Product category PC9a Coatings and paints, thinners, paint removers
- Process category PROC10 Roller application or brushing
- Environmental release category ERC2 Formulation of preparations
- Application of the substance / the mixture
See our technical datasheet for application of this product.
Kwastverduunning
- 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
- Information department: environment protection department
- Emergency telephone number:
Emergency Phone Number (24 hours) CHEMTREC (800-424-9300)
Outside US: 703-527-3887
Zie rubriek Fabrikant/leverancier

2 Hazard(s) identification

- Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

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



Xi; Irritant

R37: Irritating to respiratory system.

R10: Flammable.

- Information concerning particular hazards for human and environment:
Not applicable.

- Label elements

- GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS02

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- Signal word Warning
- Hazard statements
H226 Flammable liquid and vapour.
- Precautionary statements
P102 Keep out of reach of children.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260 Do not breathe dust/fume/gas/mist/vapors/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): 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.
- Classification system:
- NFPA ratings (scale 0 - 4)



Health = 1
Fire = 2
Reactivity = 0

- HMIS-ratings (scale 0 - 4)



Health = 1
Fire = 2
Reactivity = 0

- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: 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 EINECS: 274-724-2 Index number: 607-251-00-0 Reg.nr.: C&L Inventory	2-methoxypropyl acetate T Repr. Cat. 2 R61 Xi R37 R10 <hr style="border-top: 1px dashed black;"/> Flam. Liq. 3, H226 Repr. 1B, H360 STOT SE 3, H335	$\leq 0.3\%$
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 <hr style="border-top: 1px dashed black;"/> Flam. Liq. 3, H226	50-100%

USA

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* **4 First-aid measures**

- 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. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
Most important symptoms and effects, both acute and delayed
No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
No further relevant information available.

* **5 Fire-fighting measures**

- Extinguishing media
- Suitable extinguishing agents:
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture
No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

* **6 Accidental release measures**

- Personal precautions, protective equipment and emergency procedures
Keep away from ignition sources
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- 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.

* **7 Handling and storage**

- Handling:
- Precautions for safe handling
Keep away from heat and direct sunlight.
Work only in fume cabinet.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.

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Protect against electrostatic charges.

- 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 receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

· Components 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		
WEEL	Long-term value: 50 ppm	

- Additional information:
The lists that were valid during the creation were used as basis.
- 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.
- Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
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.

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- Penetration time of glove material
The exact break trough 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

- Body protection: Use protective suit.

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
- Appearance:

Form:	Fluid
Color:	Colorless
- Odor: Ester-like
- Odour threshold: Not determined.
- pH-value at 20 °C (68 °F): 4
- Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	146.4/1013mbar °C (296/1855mbar °F)
- Flash point: 44 °C (111 °F)
- Flammability (solid, gaseous): Not applicable.
- Ignition temperature: 315 °C (599 °F)
- Decomposition temperature: Not determined.
- Auto igniting: Not determined.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- Explosion limits:

Lower:	1.5 Vol %
Upper:	10.8 Vol %
- Vapor pressure at 20 °C (68 °F): 3.37 hPa (3 mm Hg)
- Density at 20 °C (68 °F): 0.97 g/cm³ (8.095 lbs/gal)
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.

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- Solubility in / Miscibility with Water at 20 °C (68 °F): 220 g/l
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
 - Dynamic at 20 °C (68 °F): 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
- Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: Contact with acids releases flammable gases.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

LD/LC50 values that are relevant for classification:

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

Oral	LD50	8532 mg/kg bw (rat)
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Inhalative	LC50/4 h	35.7 mg/l (rat)
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- Primary irritant effect:
 - on the skin: No irritant effect.
 - on the eye: No irritating effect.
- Sensitization: Sensitizing effect through inhalation is possible with prolonged exposure.
- Additional toxicological information:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

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12 Ecological information

· 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)

· Persistence and degradability No further relevant information available.

· Behavior in environmental systems:

· Bioaccumulative potential

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

· Mobility in soil No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 1 (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.

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number

· DOT, ADR, IMDG, IATA UN1263

· UN proper shipping name

· DOT CONSUMER COMMODITY, ORM-D

Paint related material

· ADR

1263 Paint related material

· IMDG

CONSUMER COMMODITY, ORM-D

PAINT RELATED MATERIAL

· IATA

PAINT RELATED MATERIAL

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Trade name: Epifanes Poly-urethane Brushthinner

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· Transport hazard class(es)

· DOT



· Class 3 Flammable liquids
· Label 3

· ADR, IMDG, IATA



· Class 3 Flammable liquids
· Label 3

· Packing group

· DOT, ADR, IMDG, IATA III

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user

Warning: Flammable liquids

· Danger code (Kemler):

30

· EMS Number:

F-E, S-D

· Transport in bulk according to Annex

II of MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· DOT

· Quantity limitations

On passenger aircraft/rail: 60 L

On cargo aircraft only: 220 L

· Remarks:

CERCLA/DOT RQ: 617gal./4786 lbs.

· ADR

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging:

30 ml

Maximum net quantity per outer packaging:

1000 ml

· 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":

UN1263, Paint related material, 3, III

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15 Regulatory information

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

· Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

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

· Proposition 65

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· MAK (German Maximum Workplace Concentration)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS02

· Signal word Warning

· Hazard statements

H226 Flammable liquid and vapour.

· Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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Trade name: Epifanes Poly-urethane Brushthinner

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P301+P310 If swallowed: Immediately call a poison center/doctor.
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.

- National regulations:
- Technical instructions (air):

Class	Share in %
NK	50-100

- Water hazard class:
Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

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.

- Date of preparation / last revision 01/22/2015 / 20
- 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
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Repr. 1B: Reproductive toxicity, Hazard Category 1B
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- * Data compared to the previous version altered.