

1 Identification

- Product identifier
- Trade name: Epifanes Poly-urethane Spraythinner
- 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.
- 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
See section Manufacturer/supplier

2 Hazard(s) identification

- Classification of the substance or mixture



GHS02 Flame

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A 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.

- Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

(Contd. on page 2)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 1)

- Label elements
- GHS label elements
- The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms



GHS02 GHS07

- Signal word Danger
- Hazard-determining components of labeling:
butanone
n-butyl acetate
- Hazard statements
H225 Highly flammable liquid and vapor.
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/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 = 3
Reactivity = 0

- HMIS-ratings (scale 0 - 4)



Health = 1
Fire = 3
Reactivity = 0

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

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Solvent mixture

(Contd. on page 3)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 2)

· Dangerous components:		
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. 2A, 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.

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. If symptoms persist, 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:
Wear fully protective suit.

(Contd. on page 4)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 3)

Do not inhale explosion gases or combustion gases.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Wear protective clothing.
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
Prevent seepage into sewage system, workpits and cellars.
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
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.
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.
Store in a cool location.
- Information about storage in one common storage facility:
Store away from water.
- Further information about storage conditions:
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- 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

(Contd. on page 5)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 4)

Inhalative	(Tgg)time weighted average 8 hours / Exposure time	550 mg/m ³ (Algemene bevolking/ General population)
78-93-3 butanone		
Inhalative	(Tgg)time weighted average 15 min. / Exposure time	900 mg/m ³ (Algemene bevolking/ General population)
	(Tgg)time weighted average 8 hours / Exposure time	590 mg/m ³ (Algemene bevolking/ General population)
1330-20-7 xylene		
Inhalative	(Tgg)time weighted average 15 min. / Exposure time	442 mg/m ³ (Algemene bevolking/ General population)
	(Tgg)time weighted average 8 hours / Exposure time	210 mg/m ³ (Algemene bevolking/ General population)
108-65-6 2-methoxy-1-methylethyl acetate		
WEEL	Long-term value: 50 ppm	
78-93-3 butanone		
PEL	Long-term value: 590 mg/m ³ , 200 ppm	
REL	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm	
TLV	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm BEI	
1330-20-7 xylene		
PEL	Long-term value: 435 mg/m ³ , 100 ppm	
REL	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm	
TLV	Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm BEI	
123-86-4 n-butyl acetate		
PEL	Long-term value: 710 mg/m ³ , 150 ppm	
REL	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 710 mg/m ³ , 150 ppm	
TLV	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 713 mg/m ³ , 150 ppm	

(Contd. on page 6)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 5)

· Ingredients with biological limit values:	
78-93-3 butanone	
BEI	2 mg/L Medium: urine Time: end of shift Parameter: MEK
1330-20-7 xylene	
BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids

- 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.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- Breathing equipment:
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 respiratory protective device that is independent of circulating air.
Filter AX
- 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 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

(Contd. on page 7)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 6)

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	According to product specification
· Odor:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	79 °C (174 °F)
· Flash point:	-4 °C (25 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	315 °C (599 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	1.1 Vol %
Upper:	11.5 Vol %
· Vapor pressure at 20 °C (68 °F):	105 hPa (79 mm Hg)
· Density at 20 °C (68 °F):	0.88333 g/cm ³ (7.371 lbs/gal)
· 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 (68 °F):	11 s (DIN 53211/4)
· Solvent content:	
Organic solvents:	100.0 %
VOC content:	100.0 %
	VOC content:
	883.3 g/l / 7.37 lb/gl

(Contd. on page 8)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 7)

· 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 No dangerous reactions known.
- 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)
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 internally approved calculation methods for preparations:
Irritant

- Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
1330-20-7	xylene	3

- NTP (National Toxicology Program)
None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 8)

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)

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)

· Persistence and degradability No further relevant information available.

· Behavior in environmental systems:

· Bioaccumulative potential

1330-20-7 xylene

Log Kow 3 (not specified)

· Mobility in soil No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 2 (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.

· 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

· ADR 1263 Paint

· IMDG CONSUMER COMMODITY, ORM-D

PAINT

· IATA PAINT

(Contd. on page 10)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 9)

· Transport hazard class(es)

· DOT



· Class 3 Flammable liquids
· Label 3

· ADR



· Class 3 (F1) Flammable liquids
· Label 3

· IMDG, IATA



· Class 3 Flammable liquids
· Label 3

· Packing group

· DOT, ADR, IMDG, IATA II

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user

Warning: Flammable liquids

· Danger code (Kemler):

33

· EMS Number:

F-E, S-E

· 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: 5 L

On cargo aircraft only: 60 L

· Remarks:

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

· ADR

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging:

30 ml

Maximum net quantity per outer packaging:

500 ml

· IMDG

· Limited quantities (LQ)

5L

(Contd. on page 11)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 10)

- | | |
|----------------------------|---|
| · 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, 3, II |

15 Regulatory information

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

· Section 355 (extremely hazardous substances):
None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

78-93-3	butanone
1330-20-7	xylene

· TSCA (Toxic Substances Control Act):
All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

78-93-3	butanone	I
1330-20-7	xylene	I

· TLV (Threshold Limit Value established by ACGIH)

1330-20-7	xylene	A4
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· MAK (German Maximum Workplace Concentration)
None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

· GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 12)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 11)

- Hazard pictograms



GHS02 GHS07

- Signal word Danger
- Hazard-determining components of labeling:
butanone
n-butyl acetate

- Hazard statements
H225 Highly flammable liquid and vapor.
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/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.

- National regulations:

- Technical instructions (air):

Class	Share in %
NK	50-100

- Water hazard class:
Water hazard class 2 (Self-assessment): 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 04/01/2015 / 2
- 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)

(Contd. on page 13)

Trade name: Epifanes Poly-urethane Spraythinner

(Contd. of page 12)

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. 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. 2A: Serious eye damage/eye irritation, Hazard Category 2A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
* Data compared to the previous version altered.