Printing date 01/22/2015 Reviewed on 01/22/2015

#### 1 Identification

- · Product identifier
- · Trade name: Epifanes Thinner for PP Varnish Extra
- · CAS Number:
  - 67-64-1
- · EC number:
  - 200-662-2
- · Index number:
  - 606-001-00-8
- · Relevant identified uses of the substance or mixture and uses advised against
- $\cdot$  Product category PC9a Coatings and paints, thinners, paint removers
- · Process category PROC10 Roller application or brushing
- Environmental release category ERC2 Formulation of preparations
- $\cdot$  Application of the substance / the mixture

See our technical datasheet for application of this product.

Verdunning voor Epifanes PP Vernis Extra

- · 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. 2 H225 Highly flammable liquid and vapor.



GHS07

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.

R66-67: Repeated exposure may cause skin dryness or cracking. Vapours may

cause drowsiness and dizziness.

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- Information concerning particular hazards for human and environment:
   At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

   Has a narcotizing effect.
- · Label elements
- · GHS label elements

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

· Hazard pictograms





GHS02 GHS07

- · Signal word Danger
- Hazard-determining components of labeling: acetone
- · Hazard statements
  - H225 Highly flammable liquid and vapor.
  - H319 Causes serious eye irritation.
  - H336 May cause drowsiness or dizziness.
- · 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.
  - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
  - 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: Substances
- · CAS No. Description 67-64-1 acetone

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· Identification number(s)

· EC number: 200-662-2

· Index number: 606-001-00-8

## 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: Call a doctor immediately.
- · 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.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear fully protective suit.

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

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.

Ensure good ventilation/exhaustion at the workplace.

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Prevent formation of aerosols.

Information about protection against explosions and fires:
 Fumes can combine with air to form an explosive mixture.
 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: Not required.
- · 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

67-64-1 acetone					
Inhalative (Tgg)time weighted average 15 min. / Expo	osure time 2420 mg/m³ (Algemene bevolking/ General population)				
(Tgg)time weighted average 8 hours / Expo	osure time 1210 mg/m³ (Algemene bevolking/ General population)				

## 67-64-1 acetone

PEL	Long-term value: 2400 mg/m³, 1000 ppm
REL	Long-term value: 590 mg/m³, 250 ppm
TLV	Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm
	Long-term value: (1188) NIC-594 mg/m³, (500) NIC-250 ppm
	BEI

## · Ingredients with biological limit values:

## 67-64-1 acetone

BEI 50 mg/L

Medium: urine Time: end of shift

Parameter: Acetone (nonspecific)

· Additional information:

The lists that were valid during the creation were used as basis.

- · Exposure controls
- · Personal protective equipment:
- $\cdot$  General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

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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:

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

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 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: Nitrile rubber, PVC, Viton.

glove thickness:> 0.35mm. permeability / permeation:> 480min. to EN374.

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

Nitrile rubber, PVC, Viton.

glove thickness:> 0.35mm. permeability / permeation:> 480min. to EN374.

· Eye protection:



Tightly sealed goggles

## 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid
Color: Colorless
Odor: Characteristic

· Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: 94.7 °C (202 °F)

Boiling point/Boiling range: 55.8-56.6 °C (132-134 °F)

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	(Contd. of page
· Flash point:	-19 °C (-2 °F) (DIN 51755)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	465 °C (869 °F) (DIN 51794)
· 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:	2.6 Vol %
Upper:	13 Vol %
$\cdot$ Vapor pressure at 20 °C (68 °F):	233 hPa (175 mm Hg)
· Density at 20 °C (68 °F):	0.791 g/cm <sup>3</sup> (6.601 lbs/gal) (DIN 51757)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
$\cdot$ Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/	
water):	Not determined.
· Viscosity:	
Dynamic at 25 °C (77 °F):	32 mPas
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	100.0 %
VOC content:	VOC content:
· 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.

- $\cdot$  Possibility of hazardous reactions No dangerous reactions known.
- $\cdot$  Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- $\cdot$  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:					
67-64-1	67-64-1 acetone				
Oral	LD50	5800 mg/kg bw (rat)			
Dermal	LD50	20000 mg/kg bw (rabbit)			

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- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.
- · Sensitization:

Sensitizing effect through inhalation is possible with prolonged exposure.

- Sensitizing effect by skin contact 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.

## 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Assessment by list): 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.
- $\cdot$  Recommended cleansing agent: Water, if necessary with cleansing agents.

## 14 Transport information

- · UN-Number
- · DOT, ADR, IMDG, IATA UN1090
- · UN proper shipping name
- · DOT CONSUMER COMMODITY, ORM-D Acetone

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	(Contd. of page 7)
· ADR · IMDG	1090 Acetone CONSUMER COMMODITY, ORM-D
· IATA	ACETONE ACETONE
· Transport hazard class(es)	
· DOT	
· Class · Label	3 Flammable liquids 3
· ADR	
· Class · Label	<pre>3 (F1) Flammable liquids 3</pre>
· IMDG, IATA	
· Class · Label	3 Flammable liquids 3
<ul><li>Packing group</li><li>DOT, ADR, IMDG, IATA</li></ul>	II
<ul><li>Environmental hazards:</li><li>Marine pollutant:</li></ul>	No
<ul><li>Special precautions for user</li><li>Danger code (Kemler):</li><li>EMS Number:</li></ul>	Warning: Flammable liquids 33 F-E,S-D
<ul> <li>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>	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

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· IMDG

· Limited quantities (LQ) 1L

· Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging:

30 m]

Maximum net quantity per outer packaging:

500 ml

· UN "Model Regulation": UN1090, Acetone, 3, II

## 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):

Substance is listed.

- · 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)

67-64-1 acetone

Ι

· TLV (Threshold Limit Value established by ACGIH)

67-64-1 acetone

**A4** 

· 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).

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· Hazard pictograms





GHS02 GHS07

- · Signal word Danger
- Hazard-determining components of labeling:
   acetone
- · Hazard statements
  - H225 Highly flammable liquid and vapor.
  - H319 Causes serious eye irritation.
  - H336 May cause drowsiness or dizziness.
- · 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.
  - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
  - 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 (Assessment by list): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has 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.

- $\cdot$  Date of preparation / last revision 01/22/2015 / 16
- · 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

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. 2: Flammable liquids, Hazard Category 2

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Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

 $\cdot$  \* Data compared to the previous version altered.

USA -