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

1 Identification

· Product identifier

· Trade name: Epifanes Brushthinner for Paint & Varnish

• CAS Number: 64742-48-9
• EC number: 265-150-3

· Index number: 649-327-00-6

· 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.

Thinner for brush and roller application of one-component paints and varnishes

· 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 manufacturer/supplier

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

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



Xn; Harmful

R65: Harmful: may cause lung damage if swallowed.

R10-66: Flammable. Repeated exposure may cause skin dryness or cracking.

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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.
- · Label elements
- · GHS label elements

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

· Hazard pictograms







GHS02

2 GHS07 GHS

- · Signal word Danger
- · Hazard-determining components of labeling:

Naphtha (petroleum), hydrotreated heavy (Note-p)

· Hazard statements

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

· 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 = 0
Fire = 2
Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0
Fire = 2
Reactivity = 0

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

USA





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3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

Note -P

64742-48-9 Naphtha (petroleum), hydrotreated heavy (Note-p)

- Identification number(s)
- · EC number: 265-150-3
- · Index number: 649-327-00-6
- · Additional information:

Note P: The substance does not have to be classified as a carcinogen or mutagen as can be shown that the substance contains less than 0.1% (w / w) benzene (EINECS No 200-753-7.). This note applies only to certain complex oil-derived substances in Part 3.

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.
- · 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.

6 Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: No special measures required.
- · 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.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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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.

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.
- \cdot 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:
 Not required.

Not required.

· 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.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· 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:



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

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· 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.

 \cdot 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;

recommended glove thickness> 0.45mm. permeability / permeation time:> 480 min. according to EN 374.

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

chloropene; glove thickness> 0.7mm, breakthrough time> 60min. according to EN 374.

nitrile rubber; glove thickness> 0.3 mm, breakthrough time> 60min.volgens EN 374.

· Eye protection:



Tightly sealed goggles

		l prope	

· Density at 20 °C (68 °F):

Relative density

· Information on basic physical and	chemical properties
· General Information	
· Appearance:	
Form:	Fluid
Color:	Clear
· Odor:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	45 °C (113 °F) (NFEN ISO2719)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
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:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.

 0.77 g/cm^3 (6.426 lbs/gal)

Not determined.

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(Contd. of page 5) · Vapour density Not determined. · Evaporation rate Not determined. · Solubility in / Miscibility with Not miscible or difficult to mix. Water: · Partition coefficient (n-octanol/ water): Not determined. · Viscosity: Dynamic: Not determined. Not determined. Kinematic: · Solvent content: Organic solvents: 100.0 % VOC content: 100.0 % VOC content: 770.0 g/l / 6.43 lb/gl · Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- \cdot 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 val	· LD/LC50 values that are relevant for classification:				
64742-48-9	64742-48-9 Naphtha (petroleum), hydrotreated heavy (Note-p)				
Oral	LD50	>5000 mg/kg bw (rat)			
Dermal	LD50	>5000 mg/kg bw (rabbit) ((24h))			
Inhalative	LC50	>5000 mg/m ³ (vapour) (rat) ((8h))			
. Drimary impitant offort:					

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

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.

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· OSHA-Ca (Occupational Safety & Health Administration)
Substance is not listed.

12 Ecological information

· Toxicity

· Aquatic toxi	· Aquatic toxicity:					
64742-48-9 N	<pre>Japhtha (petroleum), hydrotreated heavy (Note-p)</pre>					
EL50 (48h)	>1000 mg/l ((Daphnia magna-OECD 202))					
EbL50 (72h)	>1000 mg/l (Pseudokirchneriella subcapitata-OECD 201)					
ErL (72h)	>1000 mg/l (Pseudokirchneriella subcapitata-OECD 201)					
LL50 (96h)	>1000 mg/l ((Onorhynchus mykiss OECD 203))					
NOELR (72h)	NOELR (72h) 3 mg/l ((Pseudo. subcapitata-biomass-OECD 201))					
	100 mg/l ((Pseudo. subcap. growth rate OECD 201))					

- · 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: Generally not hazardous for water
- · 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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(Contd. of page 7) · Transport hazard class(es) · DOT 3 Flammable liquids Class Label · ADR Class 3 (FIII) Flammable liquids Label 3 IMDG Class 3 Flammable liquids · Label · IATA · Label 3 · Packing group · DOT, ADR, IMDG, IATA III · Environmental hazards: · Marine pollutant: No · Special precautions for user Warning: Flammable liquids · Danger code (Kemler): 36 · EMS Number: F-E,S-E \cdot Transport in bulk according to Annex Not applicable. II of MARPOL73/78 and the IBC Code · Transport/Additional information: Quantity limitations On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L CERCLA/DOT RQ: 617gal./4786 lbs. · Remarks: · ADR (Contd. on page 9)



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· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging:

30 ml

Maximum net quantity per outer packaging:

1000 ml

· Remarks: Packaging <450L: exemption viscous

substances according to 2.2.3.1.5

· 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

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)

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 $System \ (GHS)$.

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· Hazard pictograms







GHS02

GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

Naphtha (petroleum), hydrotreated heavy (Note-p)

· Hazard statements

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

Keep out of reach of children. P102

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

smoking.

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

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

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Flam. Liq. 3: Flammable liquids, Hazard Category 3

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

 \cdot * Data compared to the previous version altered.

USA