

Printing date 03/31/2015

Reviewed on 03/31/2015

1	Identification
•	Product identifier
•	Trade name: Epifanes Multiforte (1-comp.) Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
•	Product category PC9a Coatings and paints, thinners, paint removers Process category PROC10 Roller application or brushing
	Environmental release category ERC10b Wide dispersive outdoor use of long-life articles and materials with high or intended release (including abrasive processing) 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
2	Hazard(s) identification

· Classification of the substance or mixture GHS02 Flame Flam. Liq. 3 H226 Flammable liquid and vapour. GHS08 Health hazard Carc. 2 H351 Suspected of causing cancer. GHS07 Skin Sens. 1 H317 May cause an allergic skin reaction. · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Flammable. Repeated exposure may cause skin dryness or cracking. R10-66: 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. At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent. · 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)

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Trade name: Epifanes Multiforte (1-comp.) (Contd. of page 1) · Label elements · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms GHS07 GHS02 · Signal word Warning · Hazard-determining components of labeling: titanium dioxide Talc (Mg3H2(SiO3)4) 2-butanone oxime · Hazard statements H226 Flammable liquid and vapour. H317 May cause an allergic skin reaction. H351 Suspected of causing cancer. Precautionary statements Keep away from heat/sparks/open flames/hot surfaces. - No P210 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. · Classification system: NFPA ratings (scale 0 - 4) Health = 0Fire = 2Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH 0 Health = 0FIRE 2 Fire = 2Reactivity = 0REACTIVITY 0 · Other hazards · Results of PBT and vPvB assessment · PBT: Not applicable. vPvB: Not applicable.

## 3 Composition/information on ingredients

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    Chemical characterization: Mixtures
    Description:
Resin mixture
Solvent mixture with pigment additives
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Dangerous components:		
CAS: 13463-67-7	titanium dioxide	10-25%
EINECS: 236-675-5	🚯 Carc. 2, H351	
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	10-25%
EINECS: 265-150-3	(Note-p)	
Reg.nr.: 01-2119463258-33	Xn R65 R10-66	
	<ul> <li>Flam. Liq. 3, H226</li> <li>Asp. Tox. 1, H304</li> </ul>	
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom.	10-25%
EINECS: 265-199-0	(Note-P)	
Reg.nr.: 01-2119486773-24	🗙 Xn R65	
	🗙 Xi R37	
	¥2 N R51/53 R10-66-67	
	🚸 Flam. Liq. 3, H226	
	🚯 Asp. Tox. 1, H304	
	♦ STOT SE 3, H335-H336	
CAS: 14807-96-6	Talc (Mg3H2(SiO3)4)	2.5-10
EINECS: 238-877-9	🚸 Carc. 2, H351	
CAS: 546-93-0	Magnesite	2.5-10
EINECS: 208-915-9		
Reg.nr.: 01-2119523999-20		
CAS: 96-29-7	2-butanone oxime	<u>≤</u> 0.5%
EINECS: 202-496-6	🗙 Xn R21-40	
Index number: 616-014-00-0	🗙 Xi R41-43	
Reg.nr.: 01-2119539477-28	Carc. Cat. 3	
	🚯 Carc. 2, H351	
	♦ Eye Dam. 1, H318	
	Acute Tox. 4, H312; Skin Sens. 1, H317	
	Flam. Liq. 4, H227	

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. For the wording of the listed risk phrases refer to section 16.

## 4 First-aid measures

· Description of first aid measures

- $\cdot$  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: Seek medical treatment.
- 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.

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Safety Data Sheet acc. to OSHA HCS

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## 5 Fire-fighting measures

- $\cdot$  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:

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.
   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.
- 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.

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*Markt Coatings Yacht Coatings* acc. to OSHA HCS

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Trade name: Epifanes Multiforte (1-comp.) (Contd. of page 4) · Control parameters · Components with limit values that require monitoring at the workplace: 14807-96-6 Talc (Mg3H2(SiO3)4) Inhalative (Tgg)time weighted average 8 hours / Exposure time 0.25 mg/m<sup>3</sup> (Algemene bevolking/ General population) 546-93-0 Magnesite Inhalative (Tgg) time weighted average 8 hours / Exposure time  $10 \text{ mg/m}^3$ (general population) 546-93-0 Magnesite PEL Long-term value: 15\* 5\*\* mg/m<sup>3</sup> \*total dust \*\*respirable fraction Long-term value: 10\* 5\*\* mg/m<sup>3</sup> REL \*total dust \*\*respirable fraction TLV TLV withdrawn Additional information: The lists that were valid during the creation were used as basis. · Exposure controls · Personal protective equipment: General protective and hygienic measures: Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. · Breathing equipment: Suitable respiratory protective device recommended. Not necessarily with good ventilation, however, use a filter AX when ventilation is inadequate! · 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. 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.

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Safety Data Sheet acc. to OSHA HCS

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Trade name: Epifanes Multiforte (1-comp.)

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• 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:
Nitrile
Glove thickness> 0.45 mm, breakthrough time> 30 min. to EN374
• Eye protection:



Tightly sealed goggles

# 9 Physical and chemical properties

<ul> <li>Information on basic physical and</li> <li>General Information</li> </ul>	chemical properties
· 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:	> 100 °C (> 212 °F)
· Flash point:	> 42 °C (> 108 °F)
• Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	210 °C (410 °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:	0.6 Vol %
Upper:	7.0 Vol %
· Vapor pressure at 20 °C (68 °F):	1 hPa (1 mm Hg)
• Density at 20 °C (68 °F):	1.23 g/cm <sup>3</sup> (10.264 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
•	
<ul> <li>Solubility in / Miscibility with Water:</li> </ul>	Not miscible or difficult to mix.
HALEL.	NOU MISCIPLE OF GITTIGUIC CO MIX.
$\cdot$ Partition coefficient (n-octanol/	

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**Uacht** Coatings

**Epifanes**:

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	(Contd. of page (
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C (68 °F):	45 s (ISO 6 mm)
· Solvent content:	
Organic solvents:	33.3 %
VOC content:	33.3 %
	VOC content:
	410.2 g/l / 3.42 lb/gl
Solids content:	66.4 % (VB% 1h150 C)
<ul> <li>Other information</li> </ul>	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.
- $\cdot$  Conditions to avoid No further relevant information available.
- $\cdot$  Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## 11 Toxicological information

$\cdot$ LD/LC50 val	ues that are re	levant for classification:	
13463-67-7 titanium dioxide           Oral         LD50         >20000 mg/kg bw (rat)			
			Dermal
Inhalative	LC50/4 h	>6.82 mg/l (rat)	
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 <sup>3</sup> (vapour) (rat) ((8h))	
64742-95-6	64742-95-6 Solvent naphtha (petroleum), light arom. (Note-P)		
Oral	LD50	3592 mg/kg (rat)	
Dermal         LD50 (Konijn)         3160 mg/kg (rabbit)           Inhalative         LC50 (rat)         >6193 mg/m³ (rat)		3160 mg/kg (rabbit)	
		>6193 mg/m³ (rat)	
96-29-7 2-b	96-29-7 2-butanone oxime		
Oral         LD50         3700 mg/kg bw (rat)           Dermal         LD50         200-2000 mg/kg bw (rat)		3700 mg/kg bw (rat)	
		200-2000 mg/kg bw (rat)	
Inhalative	LC50/4 h	20 mg/l (rat)	
· Primary irritant effect:			

· Sensitization: No sensitizing effects known.

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•	Additional	toxicological	.nformation:
	Carcinogen	ic categories	

• Carcinogeni	c categories		
• IARC (Inter	national Agency for Research on Cancer)		
13463-67-7	titanium dioxide	25	3
14807-96-6	Talc (Mg3H2(SiO3)4)	25	3
136-52-7	cobalt bis(2-ethylhexanoate)	25	3
14808-60-7	Quartz (SiO2)	1	
· NTP (Nation	al Toxicology Program)		
14808-60-7	Quartz (SiO2)	K	2
	cupational Safety & Health Administration)		
None of the	ingredients is listed.		

Name tin tout site			
<ul> <li>Aquatic toxicity: 64742-48-9 Naphtha (petroleum), hydrotreated heavy (Note-p) EL50 (48h) &gt;1000 mg/l ((Daphnia magna-OECD 202)) EbL50 (72h) &gt;1000 mg/l (Pseudokirchneriella subcapitata-OECD 201) ErL (72h) &gt;1000 mg/l (Pseudokirchneriella subcapitata-OECD 201)</li> </ul>			
		LL50 (96h)	>1000 mg/l ((Onorhynchus mykiss OECD 203))
		NOELR (72h)	3 mg/l ((Pseudo. subcapitata-biomass-OECD 201))
			100 mg/l ((Pseudo. subcap. growth rate OECD 201))
		96-29-7 2-butanc	ne oxime
EC50	630 mg/l (other waterspecies 1) (BACTERIA; TOXICITEITSTEST)		
EC50 (48 hours)	500 mg/l (daphnia magna)		
	750 mg/l (Daphnia similis Acute Toxicity Study) (DAPHNIA MAGNA)		
EC50 (72 hours)	83 mg/l (other waterspecies 2) (SCENEDESMUS SUBSPICATUS)		
LC50 (48 hours)	750 mg/l (other waterspecies 1)		
LC50 (96 hours)	320-1000 mg/l (fish 1) (LEUCISCUS IDUS; STATISCH SYSTEM)		
	48 mg/l (fish 2) (LEPOSMIS MACEOCHIRUS; STATISCH SYSTEM)		
Behavior in envi Bioaccumulative Mobility in soil Additional ecolo General notes: Water hazard cla Do not allow und water course or	nd vPvB assessment ble.		

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## 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:

 $\cdot$  Recommendation: Disposal must be made according to official regulations.

UN-Number DOT, ADR, IMDG, IATA	UN1263
UN proper shipping name DOT	CONSUMER COMMODITY, ORM-D Paint 1263 Paint
ADR IMDG	CONSUMER COMMODITY, ORM-D PAINT
IATA	PAINT
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):	33
EMS Number:	F-E, <u>S-E</u>
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
	(Contd. on page





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Trade name: Epifanes Multiforte (1-comp.)

	(Contd. of page
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
Remarks:	Packaging <450L: exemption viscous
	substances according to 2.2.3.1.5
	Vrijgesteld in verpakkingen tot 450 liter
	volgens ADR 2.2.3.1.5
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: El
	Maximum net quantity per inner packaging:
	30 ml
	Maximum net quantity per outer packaging:
	1000 ml
UN "Model Regulation":	UN1263, Paint, 3, III

15 Regulatory information

\*

<ul> <li>Safety, hea substance o</li> <li>Sara</li> </ul>	lth and environmental regulations/legislation specific for the r mixture			
· Section 355 (extremely hazardous substances):				
None of the ingredient is listed.				
· Section 313	(Specific toxic chemical listings):			
136-52-7 c	obalt bis(2-ethylhexanoate)			
· TSCA (Toxic Substances Control Act):				
	titanium dioxide			
64742-48-9	Naphtha (petroleum), hydrotreated heavy (Note-p)			
64742-95-6	Solvent naphtha (petroleum), light arom. (Note-P)			
14807-96-6	Talc (Mg3H2(SiO3)4)			
546-93-0	Magnesite			
40008-96-6	Acrylaat polymeer			
68953-58-2	Ditallowdimethylammonium			
8002-43-5	Soyalecithine			
96-29-7	2-butanone oxime			
68409-80-3	Isomers of fatty acid calcium salts, C6-C19			
22464-99-9	Zirconiumoctoate, 12 % Zr			
136-52-7	cobalt bis(2-ethylhexanoate)			
97-88-1	n-butyl methacrylate			
112-34-5	- (			
14808-60-7				
• Proposition				
	nown to cause cancer:			
13463-67-7	titanium dioxide			
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14808-60-7	Quartz (SiO2)				
· Chemicals k	$\cdot$ Chemicals known to cause reproductive toxicity for females:				
None of the	None of the ingredients is listed.				
• Chemicals known to cause reproductive toxicity for males:					
None of the	None of the ingredients is listed.				
· Chemicals known to cause developmental toxicity:					
None of the ingredients is listed.					
· Cancerogenity categories					
· EPA (Environmental Protection Agency)					
None of the ingredients is listed.					
• TLV (Threshold Limit Value established by ACGIH)					
13463-67-7	titanium dioxide		i	A4	
14807-96-6	Talc (Mg3H2(SiO3)4)		1	A4	
14808-60-7	Quartz (SiO2)		i	A2	
MAK (German Maximum Workplace Concentration)					
13463-67-7	titanium dioxide			3A	
14807-96-6	Talc (Mg3H2(SiO3)4)			3в	
96-29-7	2-butanone oxime		:	2	
14808-60-7	Quartz (SiO2)			1	
NIOSH-Ca (National Institute for Occupational Safety and Health)					
13463-67-7	titanium dioxide				
14808-60-7	Quartz (SiO2)				
$\cdot$ GHS label e	· GHS label elements				

· GHS label elements The product is class

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

Hazard pictograms



· Signal word Warning

· Hazard-determining components of labeling: titanium dioxide Talc (Mg3H2(SiO3)4) 2-butanone oxime · Hazard statements H226 Flammable liquid and vapour. H317 May cause an allergic skin reaction. H351 Suspected of causing cancer. 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. (Contd. on page 12)



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(Contd. of page 11) 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 %
I NK	≤0.5 25-50

- · 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 03/31/2015 / 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) IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organisation ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO) 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 Flam. Liq. 4: Flammable liquids, Hazard Category 4 Acute Tox. 4: Acute toxicity, Hazard Category 4 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Carc. 2: Carcinogenicity, Hazard Category 2 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 Asp. Tox. 1: Aspiration hazard, Hazard Category 1 • \* Data compared to the previous version altered. US