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1 Identification of the substance/mixture and of the company/undertaking

- · Product details
- · Trade name: Yamaha Marine Blue
- · Article number: YMM-30400-MB-00
- · Application of the substance / the preparation Lacquer
- · Manufacturer/Supplier:

Yamaha Motor Europe NV Koolhovenlaan 101 1119 NC SCHIPHOL-RIJK The Netherlands

Tel.: +31 (0) 20 654 6000 Fax +31 (0) 20 654 6888

- · Further information obtainable from: QHSE Department
- · Information in case of emergency: Tel.: +31 (0) 20 654 6000

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

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



Xi; Irritant

Irritating to eyes.



F+; Extremely flammable

Extremely flammable.

R52/53-66-67: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Repeated exposure may cause skin dryness or cracking. 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.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent. Warning! Pressurized container.

Has a narcotizing effect.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature

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- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008
- · Hazard pictograms





GHS02 GHS05

· Signal word Danger

· Hazard-determining components of labelling:

butan-1-ol

· Hazard statements

H222 Extremely flammable aerosol.

H318+EUH066 Causes serious eye damage. Repeated exposure may cause skin dryness or cracking. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

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

P251 Pressurized container: Do not pierce or burn, even after use.
P211 Do not spray on an open flame or other ignition source.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:





Xi Irritant

F+ Extremely flammable

· Risk phrases:

- 12 Extremely flammable.
- 36 Irritating to eyes.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

· Safety phrases:

- 2 Keep out of the reach of children.
- 23 Do not breathe aerosol.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

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Trade name: Yamaha Marine Blue

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· Special labelling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children.

3 Composition/information on ingredients

- · Chemical characterization
- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous compone	ents:	
CAS: 115-10-6 EINECS: 204-065-8	dimethyl ether	12.5-20%
C1C (7 (1 1	acetone	12.5-20%
CAS: 67-64-1 EINECS: 200-662-2	★ Xi R36; F R11 R66-67	12.3-20%
	🊸 Flam. Liq. 2, H225; 🕚 Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 74-98-6	propane	5-10%
EINECS: 200-827-9	<i>F</i> + <i>R</i> 12	
	🏵 Flam. Gas 1, H220; � Press. Gas, H280	
CAS: 106-97-8	butane	5-10%
EINECS: 203-448-7	F+ R12	
	Flam. Gas 1, H220; � Press. Gas, H280	
CAS: 75-28-5	isobutane	5-10%
EINECS: 200-857-2	F+ R12	
	🄞 Flam. Gas 1, H220; ♦ Press. Gas, H280	
CAS: 78-93-3	butanone	5-10%
EINECS: 201-159-0	★ Xi R36; F R11 R66-67	
	爾 Flam. Liq. 2, H225; ♦ Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 1330-20-7	xvlene	5-10%
EINECS: 215-535-7	Xn R20/21; Xi R38 R10	
	♠ Flam. Liq. 3, H226; ♠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	
CAS: 108-65-6	2-methoxy-1-methylethyl acetate	5-10%
EINECS: 203-603-9		
	🚸 Flam. Liq. 3, H226; 🕚 Eye Irrit. 2, H319	
CAS: 141-78-6	ethyl acetate	2.5-5%
EINECS: 205-500-4	💥 Xi R36; 🔥 F R11	
	R66-67	
	🚸 Flam. Liq. 2, H225; 伙 Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom.	2.5-5%
EINECS: 265-199-0	Xn R65; Xi R37; N R51/53 R10-66-67	
	Carc. Cat. 2, Muta. Cat. 2	
	♦ Asp. Tox. 1, H304	1

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		(C	ontd. of page 3)
	CAS: 71-36-3	butan-1-ol	2.5-5%
	EINECS: 200-751-6	Xn R22; Xi R37/38-41 R10-67	
		♦ Flam. Liq. 3, H226; ♦ Eye Dam. 1, H318; ♦ Acute Tox. 4, H302; STOT SE 3, H335+H336; Skin Irrit. 2, H315	
	CAS: 123-86-4	n-butyl acetate	2.5-5%
	EINECS: 204-658-1	R10-66-67	
		♦ Flam. Liq. 3, H226; ♦ STOT SE 3, H336	
	CAS: 67-63-0	propan-2-ol	1-2.5%
	EINECS: 200-661-7	Xi R36; F R11	
		№ Flam. Lig. 2, H225;	
L		· · · · · · · · · · · · · · · · · · ·	
	· Additional informati	ion: For the wording of the listed risk phrases refer to section 16.	

4 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: Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Firefighting measures

- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Person-related safety precautions: Ensure adequate ventilation
- · Measures for environmental protection:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/surface or ground water.

· Measures for cleaning/collecting: Ensure adequate ventilation.

7 Handling and storage

- · Handling:
- · Information for safe handling:

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about fire - and explosion protection:

Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

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- Storage:
- Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Protect from heat and direct sunlight.

	nal information about design of technical facilities: No further data; see item 7.
	ients with limit values that require monitoring at the workplace:
	-6 dimethyl ether
WEL ()	Short-term value: 958 mg/m³, 500 ppm Long-term value: 766 mg/m³, 400 ppm
67-64-1	1 acetone
WEL ()	Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm
106-97	-8 butane
WEL ()	Short-term value: 1810 mg/m^3 , 750 ppm Long-term value: 1450 mg/m^3 , 600 ppm Carc (if more than 0.1% of buta- 1.3 -diene)
78-93-3	B butanone
WEL ()	Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm Sk
1330-2	0-7 xylene
WEL ()	Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV
108-65	-6 2-methoxy-1-methylethyl acetate
WEL ()	Short-term value: 548 mg/m³, 100 ppm Long-term value: 274 mg/m³, 50 ppm Sk
141-78	-6 ethyl acetate
WEL ()	Short-term value: 400 ppm Long-term value: 200 ppm
71-36-3	B butan-1-ol
WEL ()	Short-term value: 154 mg/m³, 50 ppm Sk
123-86·	-4 n-butyl acetate
WEL ()	Short-term value: 966 mg/m³, 200 ppm Long-term value: 724 mg/m³, 150 ppm

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Long-term value: 999 mg/m³, 400 ppm

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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.

- · Respiratory protection: Not required.
- · Protection of hands: Not required.
- · Material of gloves Not required.
- · Penetration time of glove material Not required.
- · Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· General Information

· Appearance:

Form: Aerosol

Colour: According to product specification

· Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Not applicable, as aerosol.

• Flash point: < 0°C (< 32°F)

Not applicable, as aerosol.

· Ignition temperature: 235°C (455°F)

· Self-igniting: Product is not selfigniting.

• Danger of explosion: Product is not explosive. However, formation of explosive air/vapour

mixtures are possible.

· Explosion limits:

Lower: 2.6 Vol % Upper: 18.6 Vol %

· Vapour pressure at 20°C (68°F): 4000 hPa (3000 mm Hg)

• **Density at 20°C (68°F):** 0.754 g/cm³ (6.292 lbs/gal)

· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Solvent content:

 Organic solvents:
 88.2 %

 • EU-VOC:
 665.3 g/l

 • EU-VOC in %:
 88.24 %

 • Solids content:
 11.8 %

10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Materials to be avoided:
- · Dangerous reactions No dangerous reactions known.

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· Dangerous decomposition products: No dangerous decomposition products known.

11 Toxico	logical in	formation	
· Acute to	•	longuet fou placeifications	
	LD/LC50 values relevant for classification: 115-10-6 dimethyl ether		
113-10-	<u> </u>		
(7 (4 1	acetone	308 mg/m3 (rat)	
0/-04-1 Oral		5000 // (t)	
	LD50	5800 mg/kg (rat)	
Dermal		20000 mg/kg (rabbit)	
107.07		39 mg/m3 (rat)	
100-9/-	8 butane	(50 / 2 (4)	
70.02.2		658 mg/m3 (rat)	
	butanone		
Oral	LD50	2737 mg/kg (rat)	
Dermal		6480 mg/kg (rabbit)	
1220.20		34 mg/m3 (rat)	
	-7 xylene	(1200 // // //	
Oral Dermal	LD50	4300 mg/kg (rat)	
Dermai		2000 mg/kg (rabbit)	
100 (5		22.1 mg/m3 (rat)	
		y-1-methylethyl acetate	
Oral	LD50	8532 mg/kg (rat)	
Dermal		>5000 mg/kg (rabbit)	
141.70		35.7 mg/m3 (rat)	
	6 ethyl aceto		
Oral	LD50	5620 mg/kg (rabbit)	
Dermal		>18000 mg/kg (rabbit)	
(17.12.0		1600 mg/m3 (rat)	
		naphtha (petroleum), light arom.	
Oral	LD50	>5000 mg/kg (rat)	
Dermal		>3000 mg/kg (rab)	
71.26.2	butan-1-ol	>15 mg/m3 (rat)	
		4400 // ()	
Oral	LD50	4400 mg/kg (rat)	
Dermal		4200 mg/kg (rabbit)	
122.07	LC50 / 4 h		
	4 n-butyl ac		
Oral	LD50	10770 mg/kg (rat)	
Dermal		>17600 mg/kg (rabbit)	
(7 (2 0		>21.0 mg/m3 (rat)	
	67-63-0 propan-2-ol		
Oral	LD50	5045 mg/kg (rat)	
Dermal		12800 mg/kg (rabbit)	
	LC30/4h	30 mg/m3 (rat) (Contd on page 8)	
		(Contd. on page 8)	

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- · 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 the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

12 Ecological information

· Ecotoxical effects:

Ecotoxical effects:			
Acquatic toxicity:			
115-10-6 dimethyl ether			
EC50 / 48 h	>4000 mg/l (daphnia magna)		
67-64-1 acetone			
EC50 / 48 h	39 mg/l (daphnia magna)		
LC50 / 48 h	2262 mg/l (daphnia magna)		
LC50 / 96 h (static)	5540 mg/l (fish)		
1330-20-7 xylene			
EC50 / 48 h	7.4 mg/l (daphnia magna)		
LC50 / 96 h	13.5 mg/l (fish)		
108-65-6 2-methoxy-1-methylethyl acetate			
EC50	408 mg/l (daphnia magna)		
141-78-6 ethyl acetat	141-78-6 ethyl acetate		
EC50 / 24 h	2500 mg/l (daphnia magna)		
64742-95-6 Solvent n	64742-95-6 Solvent naphtha (petroleum), light arom.		
EC50 / 24 h	150 mg/l (daphnia magna)		
EC50 / 48 h	7.4 mg/l (daphnia magna)		
LC50 / 96 h	3.77 mg/l (fish)		
71-36-3 butan-1-ol			
EC50 / 48 h	1983 mg/l (daphnia magna)		
EC50 / 72 h	8500 mg/l (algae)		
123-86-4 n-butyl acetate			
EC50 / 96 h	320 mg/l (algae)		
LC50 / 24 h	205 mg/l (daphnia magna)		
67-63-0 propan-2-ol			
EC50 / 48 h	13299 mg/l (daphnia magna)		
LC50 / 96 h (dynamic	e) 4200 mg/l (fish)		
n			

- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (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.

Harmful to aquatic organisms

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13 Disposal considerations

- · Product:
- · Recommendation

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

· European waste catalogue

08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

15 01 04 metallic packaging

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

14 Transport information

· Land transport ADR/RID (cross-border)



· ADR/RID class: 2 5F Gases.

Danger code (Kemler): UN-Number: 1950
Packaging group: Hazard label 2.1

· Description of goods: 1950 AEROSOLS

Limited quantities (LQ) LQ2
 Transport category 2
 Tunnel restriction code D

· Maritime transport IMDG:



· IMDG Class: 2.1 · UN Number: 1950 · Label 2.1 · Packaging group:

• EMS Number: F-D,S-U
• Marine pollutant: No

· Proper shipping name: AEROSOLS

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 2.1 · UN/ID Number: 1950 · Label 2.1

· Packaging group: -

· Proper shipping name: AEROSOLS, flammable

· UN "Model Regulation": UN1950, AEROSOLS, 2.1

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15 Regulatory information

- · Labelling according to Regulation (EC) No 1272/2008
- · Hazard pictograms





GHS02 GHS05

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

butan-1-ol

· Hazard statements

H222 Extremely flammable aerosol.

H318+EUH066 Causes serious eye damage. Repeated exposure may cause skin dryness or cracking. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

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

P251 Pressurized container: Do not pierce or burn, even after use.
P211 Do not spray on an open flame or other ignition source.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:





Xi Irritant

F+ Extremely flammable

· Risk phrases:

- 12 Extremely flammable.
- *36 Irritating to eyes.*
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

· Safety phrases:

- 2 Keep out of the reach of children.
- 23 Do not breathe aerosol.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

(Contd. on page 11)

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Special labelling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children.

· 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.

· Relevant phrases

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- R10 Flammable.
- R11 Highly flammable.
- R12 Extremely flammable.
- R20/21 Harmful by inhalation and in contact with skin.
- R22 Harmful if swallowed.
- R36 Irritating to eyes.
- R37 Irritating to respiratory system.
- R37/38 Irritating to respiratory system and skin.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 Harmful: may cause lung damage if swallowed.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

· Department issuing MSDS: QHSE Department

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

 ${\it IATA: International Air Transport Association}$

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

* Data compared to the previous version altered.

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