



## Safety data sheet

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name

NAUTILUS TWO PACK VARNISH GLOSS COMP.B

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

INDURENTE PER VERNICI

Identified Uses	Industrial	Professional	Consumer
Prodotto verniciante per nautica - marina	-	☑	-
Prodotto verniciante per usi industriali	☑	-	-
Prodotto verniciante per uso professionale	-	☑	-

#### Uses Advised Against

CONSUMATORE: FAI-DA-TE

#### 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier:

Cecchi Gustavo & C. srl - Via M. Coppino 253,  
55049 Viareggio (LU) ITALY www.cecchi.it - [info@cecchi.it](mailto:info@cecchi.it)

#### 1.4 Emergency telephone number:

+39 0584/383694 - info@cecchi.it

From monday to friday office hours 8:30 - 12:30, 14:00 - 18:30

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

#### Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Acute toxicity, category 4	H332	Harmful if inhaled.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

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Signal words:

Danger

Hazard statements:

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH208	Contains: 4-TOLUENSOLFONILISOCIANATO, HEXAMETHYLENE-DI-ISOCYANATE
	May produce an allergic reaction.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P280	Wear protective gloves / eye protection / face protection.
P301+P310	IF SWALLOWED: immediately call a POISON CENTER / doctor / . . .
P331	Do NOT induce vomiting.
P370+P378	In case of fire: use . . . to extinguish.

<b>Contains:</b>	XYLENE (MIXTURE OF ISOMERS) ESAMETILEN, 1,6-DIISOCIANATO, OMOPOLIMERO ETHYLBENZENE 4-TOLUENSOLFONILISOCIANATO
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Product not intended for uses provided for by Dir. 2004/42/CE.

### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

## SECTION 3. Composition/information on ingredients

### 3.1. Substances

Information not relevant

### 3.2. Mixtures

Contains:

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The full wording of hazard (H) phrases is given in section 16 of the sheet.

<b>Identification</b>	<b>x = Conc. %</b>	<b>Classification 1272/2008 (CLP)</b>
<b>ESAMETILEN, 1,6-DIISOCIANATO, OMOPOLIMERO</b>		
CAS 28182-81-2	50 ≤ x < 70	Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1 H317
EC 500-060-2		
INDEX -		
Reg. no. 01-2119488934-20-0000		
<b>XYLENE (MIXTURE OF ISOMERS)</b>		
CAS 1330-20-7	20 ≤ x < 30	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Note C
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
<b>N-BUTYL ACETATE</b>		
CAS 123-86-4	10 ≤ x < 20	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC 204-658-1		
INDEX 607-025-00-1		
Reg. no. 01-2119485493-29-XXXX		
<b>2-METHOXY-1-METHYLETHYL ACETATE</b>		
CAS 108-65-6	7,5 ≤ x < 10	Flam. Liq. 3 H226
EC 203-603-9		
INDEX 607-195-00-7		
Reg. no. 01-2119475791-29-XXXX		
<b>ETHYLBENZENE</b>		
CAS 100-41-4	2,5 ≤ x < 5	Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373
EC 202-849-4		
INDEX 601-023-00-4		
<b>HEXAMETHYLENE-DI-ISOCYANATE</b>		
CAS 822-06-0	0,2 ≤ x < 0,25	Acute Tox. 1 H330, Acute Tox. 4 H302, Skin Corr. 1C H314, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Note 2
EC 212-485-8		
INDEX 615-011-00-1		
Reg. no. 01-2119457571-37-0000		
<b>4-TOLUENSOLFONILISOCIANATO</b>		
CAS 4083-64-1	0,2 ≤ x < 0,25	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, EUH014
EC 223-810-8		
INDEX 615-012-00-7		



## SECTION 4. First aid measures

### 4.1. Description of first aid measures

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

**INGESTION:** Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

**INHALATION:** Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

### 4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

### 4.3. Indication of any immediate medical attention and special treatment needed

Information not available

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

**SUITABLE EXTINGUISHING EQUIPMENT**

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

**UNSUITABLE EXTINGUISHING EQUIPMENT**

None in particular.

### 5.2. Special hazards arising from the substance or mixture

**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

### 5.3. Advice for firefighters

GENERAL INFORMATION

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Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

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### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):

3

### 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diaro da Republica I 26; 2012-02-06
EU	OEL EU	Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2016

### XYLENE (MIXTURE OF ISOMERS)

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	

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VLEP	ITA	221	50	442	100	SKIN
OEL	NLD	210		442		SKIN
NDS	POL	100				
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg

**N-BUTYL ACETATE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	480	100	960	200	
VLA	ESP	724	150	965	200	
VLEP	FRA	710	150	940	200	
WEL	GBR	724	150	966	200	
OEL	NLD	150				
NDS	POL	200		950		
TLV-ACGIH			50		150	

**2-METHOXY-1-METHYLETHYL ACETATE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	
VLEP	ITA	275	50	550	100	SKIN
OEL	NLD	550				
NDS	POL	260		520		
VLE	PRT	275	50	550	100	SKIN
OEL	EU	275	50	550	100	SKIN

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,635	mg/l
Normal value in marine water	0,0635	mg/l
Normal value for fresh water sediment	3,29	mg/kg
Normal value for marine water sediment	0,329	mg/kg
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0,29	mg/kg

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Chronic systemic	Effects on workers		
	Acute local	Acute systemic	Chronic local		Acute local	Acute systemic	Chronic local
Oral			VND	1,67 mg/kg			
Inhalation			VND	33 mg/m3		VND	275 mg/m3

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Skin VND 54,8 mg/kg VND 153,5 mg/kg

**ETHYLBENZENE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	88	20	176	40	SKIN
VLA	ESP	441	100	884	200	SKIN
VLEP	FRA	88,4	20	442	100	SKIN
WEL	GBR	441	100	552	125	SKIN
VLEP	ITA	442	100	884	200	SKIN
OEL	NLD	215		430		SKIN
NDS	POL	200		400		
VLE	PRT	442	100	884	200	SKIN
OEL	EU	442	100	884	200	SKIN
TLV-ACGIH		87	20			

**HEXAMETHYLENE-DI-ISOCYANATE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	0,035	0,005	0,035	0,005
MAK	DEU	0,035	0,005	0,035	0,005
VLA	ESP	0,035	0,005		
VLEP	FRA	0,075	0,01	0,15	0,02
WEL	GBR	0,02		0,07	
NDS	POL	0,04		0,08	
TLV-ACGIH		0,034	0,005		

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

**8.2. Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

**HAND PROTECTION**





Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	colourless
Odour	characteristic of solvent
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	23 ≤ T ≤ 60 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,00
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	100 cPs
Explosive properties	Not available
Oxidising properties	Not available

### 9.2. Other information

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Total solids (250°C / 482°F)	51,40 %		
VOC (Directive 2010/75/EC) :	48,60 %	-	484,96 g/litre
VOC (volatile carbon) :	36,39 %	-	363,24 g/litre

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

#### N-BUTYL ACETATE

Decomposes on contact with: water.

#### 2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

#### HEXAMETHYLENE-DI-ISOCYANATE

Decomposes at 255°C/491°F. Polymerises at temperatures above 200°C/392°F.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

#### XYLENE (MIXTURE OF ISOMERS)

XYLENE (MIXTURE OF ISOMERS): stable, but may develop violent reactions in the presence of strong oxidising agents such as sulphuric and nitric acids and perchlorates. May form explosive mixtures with the air.

#### N-BUTYL ACETATE

Risk of explosion on contact with: strong oxidising agents. May react dangerously with: alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with: air.

#### 2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances, strong acids, alkaline metals.

#### ETHYLBENZENE

Reacts violently with: strong oxidants. Attacks various types of plastic materials. May form explosive mixtures with: air.

#### HEXAMETHYLENE-DI-ISOCYANATE

May form explosive mixtures with: alcohols, bases. May react violently with: alcohols, amines, strong bases, oxidising agents, strong acids, water.

### 10.4. Conditions to avoid

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Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

### N-BUTYL ACETATE

Avoid exposure to: moisture, sources of heat, naked flames.

### HEXAMETHYLENE-DI-ISOCYANATE

Avoid exposure to: high temperatures, moisture.

## 10.5. Incompatible materials

### N-BUTYL ACETATE

Incompatible with: water, nitrates, strong oxidants, acids, alkalis, zinc.

### 2-METHOXY-1-METHYLETHYL ACETATE

Incompatible with: oxidising substances, strong acids, alkaline metals.

### HEXAMETHYLENE-DI-ISOCYANATE

Incompatible with: alcohols, carboxylic acids, amines, strong bases.

## 10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

### ETHYLBENZENE

May develop: methane, styrene, hydrogen, ethane.

### HEXAMETHYLENE-DI-ISOCYANATE

May develop: nitric oxide, hydrogen cyanide.

## SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

### 4-TOLUENSOLFONILISOCIANATO

TOSSICITA' ACUTA PER OCCHI E PELLE.

## 11.1. Information on toxicological effects

### XYLENE (MIXTURE OF ISOMERS)

XYLENE (MIXTURE OF ISOMERS): has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

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### Metabolism, toxicokinetics, mechanism of action and other information

#### 2-METHOXY-1-METHYLETHYL ACETATE

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

### Information on likely routes of exposure

#### 2-METHOXY-1-METHYLETHYL ACETATE

WORKERS: inhalation; contact with the skin.

#### ETHYLBENZENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

#### N-BUTYL ACETATE

WORKERS: inhalation; contact with the skin.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### 2-METHOXY-1-METHYLETHYL ACETATE

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

#### ETHYLBENZENE

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (IspeSI). Is irritating for skin, conjunctiva and respiratory tract.

#### N-BUTYL ACETATE

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

### Interactive effects

#### N-BUTYL ACETATE

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

### ACUTE TOXICITY

LC50 (Inhalation - vapours) of the mixture: 19,86 mg/l

LC50 (Inhalation - mists / powders) of the mixture: 2,1 mg/l

LD50 (Oral) of the mixture: Not classified (no significant component)

LD50 (Dermal) of the mixture: >2000 mg/kg

#### 2-METHOXY-1-METHYLETHYL ACETATE

8530 mg/kg Rat

LD50 (Oral)

> 5000 mg/kg Rat

LD50 (Dermal)

23,88 mg/l Ratto

LC50 (Inhalation)

#### ETHYLBENZENE

3500 mg/kg Rat

LD50 (Oral)

15354 mg/kg Rabbit

LD50 (Dermal)

17,2 mg/l/4h Rat

LC50 (Inhalation)

#### N-BUTYL ACETATE

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> 6400 mg/kg Rat  
LD50 (Oral)  
> 5000 mg/kg Rabbit  
LD50 (Dermal)  
21,1 mg/l/4h Rat  
LC50 (Inhalation)

HEXAMETHYLENE-DI-ISOCYANATE  
0,124 mg/l/4h Rat  
LC50 (Inhalation)

XYLENE (MIXTURE OF ISOMERS)  
3523 mg/kg Rat  
LD50 (Oral)  
4350 mg/kg Rabbit  
LD50 (Dermal)  
26 mg/l/4h Rat  
LC50 (Inhalation)

4-TOLUENSOLFONILISOCIANATO  
> 2600 mg/kg Ratto  
LD50 (Oral)

### SKIN CORROSION / IRRITATION

Causes skin irritation

### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

### RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin May produce an allergic reaction. Contains: 4-TOLUENSOLFONILISOCIANATO  
HEXAMETHYLENE-DI-ISOCYANATE

### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

### ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).

Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

### STOT - SINGLE EXPOSURE

May cause respiratory irritation

### STOT - REPEATED EXPOSURE

May cause damage to organs

### ASPIRATION HAZARD

Toxic for aspiration

## SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity

#### 2-METHOXY-1-

#### METHYLETHYL ACETATE

LC50 - for Fish > 100 mg/l/96h Oncorhynchus mykiss

EC50 - for Crustacea > 408 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic > 100 mg/l/72h

#### Plants

Chronic NOEC for Fish 47,5 mg/l Oncorhynchus mykiss

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Chronic NOEC for Crustacea	> 99 mg/l Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	> 999 mg/l Selenastrum capricornutum

XYLENE (MIXTURE OF ISOMERS)	
LC50 - for Fish	> 4,2 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	> 2,93 mg/l/48h Daphnia Magna

### 12.2. Persistence and degradability

2-METHOXY-1-METHYLETHYL ACETATE	
Solubility in water	> 10000 mg/l
Rapidly degradable	

ETHYLBENZENE	
Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

N-BUTYL ACETATE	
Solubility in water	1000 - 10000 mg/l

HEXAMETHYLENE-DI-ISOCYANATE	
NOT rapidly degradable	

XYLENE (MIXTURE OF ISOMERS)	
Solubility in water	100 - 1000 mg/l
Degradability: information not available	

### 12.3. Bioaccumulative potential

2-METHOXY-1-METHYLETHYL ACETATE	
Partition coefficient: n-octanol/water	1,2

ETHYLBENZENE	
Partition coefficient: n-octanol/water	3,6

N-BUTYL ACETATE	
Partition coefficient: n-octanol/water	2,3

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NAUTILUS TWO PACK VARNISH GLOSS Component B - SAFETY DATA SHEET - june 2017 - n°batch 193-AG - rev. 1/2017

BCF 15,3

HEXAMETHYLENE-DI-  
ISOCYANATE

Partition coefficient: n-  
octanol/water 3,2

BCF 3,2

XYLENE (MIXTURE OF  
ISOMERS)

Partition coefficient: n-  
octanol/water 3,12

BCF 25,9

### 12.4. Mobility in soil

N-BUTYL ACETATE

Partition coefficient: < 3  
soil/water

XYLENE (MIXTURE OF  
ISOMERS)

Partition coefficient: 2,73  
soil/water

### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### 12.6. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

2-METHOXY-1-METHYLETHYL ACETATE

Manca la traduzione TT220 => (CSS AGG A). <=====(\*)

## SECTION 14. Transport information

### 14.1. UN number

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ADR / RID, IMDG, 1263  
IATA:

### 14.2. UN proper shipping name

ADR / RID: PAINT or PAINT  
RELATED  
MATERIAL  
IMDG: PAINT or PAINT  
RELATED  
MATERIAL  
IATA: PAINT or PAINT  
RELATED  
MATERIAL

### 14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



### 14.4. Packing group

ADR / RID, IMDG, III  
IATA:

### 14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO

### 14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
IMDG:	Special Provision: - EMS: F-E, <u>S-E</u>	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special Instructions:	A3, A72, A192	

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code



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Information not relevant

### SECTION 15. Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EC: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3 - 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (VwVwS 2005)

WGK 2: Hazard to waters

#### 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

XYLENE (MIXTURE OF ISOMERS)

N-BUTYL ACETATE



2-METHOXY-1-METHYLETHYL ACETATE

**SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Acute Tox. 1</b>	Acute toxicity, category 1
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Skin Corr. 1C</b>	Skin corrosion, category 1C
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Resp. Sens. 1</b>	Respiratory sensitization, category 1
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H330</b>	Fatal if inhaled.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H334</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>EUH014</b>	Reacts violently with water.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.
<b>EUH204</b>	Contains isocyanates. May produce an allergic reaction.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESI (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%

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**NAUTILUS TWO PACK VARNISH GLOSS Component B - SAFETY DATA SHEET - june 2017 - n°batch 193-AG - rev. 1/2017**

- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

### GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

### Changes to previous review:

The following sections were modified:

02 / 03 / 05 / 09 / 11 / 15 / 16.