

## Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

#### 1.1. Product identifier

Code: B66  
 Product name: BRAVA VG 66 PREMIUM VARNISH  
 UFI: Y1A5-R01M-900S-1RN8

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

Intended use: TRANSPARENT PAINT FOR WOOD

Identified Uses	Industrial	Professional	Consumer
Wood protection	-	✓	✓

#### 1.3. Details of the supplier of the safety data sheet

Name: B.R.A.V.A. SRL  
 Full address: Via B. Parodi 284 a  
 District and Country: 16010 Ceranesi (GE)  
 Italia  
 Tel. +39 010 782864  
 Fax +39 010 783091

e-mail address of the competent person

responsible for the Safety Data Sheet: francesco@brava.it

#### 1.4. Emergency telephone number

For urgent inquiries refer to

Informazioni: B.R.A.V.A. S.r.l. +39 010 782864 (lu-ve 8.30-12.30; 14.00-18.00)  
 CAV Osp. Pediat. Bambino Gesù, P.zza Sant' Onofrio 4, Roma. Tel. 06 68593726  
 Az. Osp. Univ. Foggia, V.le Luigi Pinto 1, Foggia. Tel. 800 183459  
 Az. Osp. A. Cardarelli, Via A. Cardarelli 9, Napoli. Tel. 081 5453333  
 CAV Policlinico Umberto I, V.le del Policlinico 155, Roma. Tel. 06 49978000  
 CAV Policlinico A. Gemelli, Largo Agostino Gemelli 8, Roma. Tel. 06 3054343  
 Az. Osp. Careggi U.O. Toss. Medica, Largo Brambilla 3, Firenze. Tel. 055 7947819  
 CAV C.N.I.T., Via Salvatore Maugeri 10, Pavia. Tel. 0382 24444  
 Osp. Niguarda Ca' Granda, Piazza Ospedale Maggiore 3, Milano. Tel. 02 66101029  
 Azienda Ospedaliera Papa Giovanni XXII, Piazza OMS 1, Bergamo. Tel. 800 883300  
 Az. Ospedaliera Integrata Verona, Piazzale Aristide Stefani 1, Verona. Tel. 800 011858

### 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 (EU) Regulation 2020/878. 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  
 Skin sensitization, category 1

H226  
 H317

Flammable liquid and vapour.  
 May cause an allergic skin reaction.

**B66 - BRAVA VG 66 PREMIUM VARNISH**

Specific target organ toxicity - single exposure, category 3 H336

May cause drowsiness or dizziness.

**2.2. Label elements**

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

Hazard pictograms:



Signal words: Warning

Hazard statements:

**H226** Flammable liquid and vapour.  
**H317** May cause an allergic skin reaction.  
**H336** May cause drowsiness or dizziness.  
**EUH066** Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**P280** Wear protective gloves/ protective clothing / eye protection / face protection.  
**P370+P378** In case of fire: use . . . to extinguish.  
**P261** Avoid breathing dust / fume / gas / mist / vapours / spray.  
**P312** Call a POISON CENTRE / doctor / . . . if you feel unwell.  
**P403+P233** Store in a well-ventilated place. Keep container tightly closed.

**Contains:**

TURPENTINE  
 HYDROCARBONS, C9-C11, N-ALCANIUMS, ISOALCANS, CYCLICS, <2% AROMATIC  
 Cobalt neodecanoate

VOC (Directive 2004/42/EC) :

Interior / exterior trim varnishes and woodstains.

VOC given in g/litre of product in a ready-to-use condition : 353,16

Limit value: 400,00

**2.3. Other hazards**On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

## B66 - BRAVA VG 66 PREMIUM VARNISH

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>HYDROCARBONS, C9-C11, N-ALCANIUMS, ISOALCANS, CYCLICS, &lt;2% AROMATIC</b> INDEX 649-327-00-6	30 ≤ x < 50	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066, Classification note according to Annex VI to the CLP Regulation: P
EC 265-150-3 CAS 64742-48-9		
<b>XYLENE (MIXTURE OF ISOMERS)</b> INDEX 601-022-00-9	1 ≤ x < 5	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP Regulation: C STA Dermal: 1100 mg/kg, STA Inhalation vapours: 11 mg/l
EC 215-535-7 CAS 1330-20-7		
<b>TURPENTINE</b> INDEX 650-002-00-6	1 ≤ x < 2,5	Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411 STA Oral: 500 mg/kg, STA Dermal: 1100 mg/kg, STA Inhalation mists/powders: 1,5 mg/l, STA Inhalation vapours: 11 mg/l
EC 232-350-7 CAS 8006-64-2		
<b>2-METHOXY-1-METHYLETHYL ACETATE</b> INDEX 607-195-00-7	0,5 ≤ x < 1	Flam. Liq. 3 H226
EC 203-603-9 CAS 108-65-6		
<b>1-METHOXY-2-PROPANOL</b> INDEX 603-064-00-3	0,5 ≤ x < 1	Flam. Liq. 3 H226, STOT SE 3 H336
EC 203-539-1 CAS 107-98-2		
<b>Cobalt neodecanoate</b> INDEX	0 ≤ x < 0,1	Acute Tox. 4 H302, STOT RE 1 H372, Skin Sens. 1A H317, Aquatic Chronic 3 H412 LD50 Oral: 1098 mg/kg
EC - CAS 27253-31-2		
<b>METHANOL</b> INDEX 603-001-00-X	0 ≤ x < 0,1	Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370 STOT SE 2 H371: ≥ 3% STA Oral: 100 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation mists/powders: 0,501 mg/l, STA Inhalation vapours: 3 mg/l
EC 200-659-6 CAS 67-56-1		
<b>2-BUTOXYETHANOL</b> INDEX 603-014-00-0	0 ≤ x < 0,1	Acute Tox. 3 H331, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315 LD50 Oral: 1200 mg/kg, LC50 Inhalation vapours: 3 mg/l/4h
EC 203-905-0 CAS 111-76-2		

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

## 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 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

#### **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**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

#### **UNSUITABLE EXTINGUISHING EQUIPMENT**

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

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

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

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

### **5.3. Advice for firefighters**

#### **GENERAL INFORMATION**

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. Use explosion-proof equipment. 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.

**B66 - BRAVA VG 66 PREMIUM VARNISH****6.3. Methods and material for containment and cleaning up**

Collect the leaked product into a suitable container. 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. 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. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

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

Store only in the original container. Store in a cool and 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.

**7.3. Specific end use(s)**

Information not available

**SECTION 8. Exposure controls/personal protection****8.1. Control parameters**

Regulatory References:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2022

**XYLENE (MIXTURE OF ISOMERS)****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		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

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VLEP	FRA	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH			20			

**TURPENTINE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	113	20			
VLEP	FRA	560	100			
WEL	GBR	566	100	850	150	
TLV-ACGIH		111	20			

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

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		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
VLEP	ITA	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	SKIN
OEL	EU	275	50	550	100	SKIN

**METHANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	200	1080	800	SKIN
MAK	DEU	130	100	260	200	SKIN
VLA	ESP	266	200			SKIN
VLEP	FRA	260	200	1300	1000	SKIN 11
VLEP	ITA	260	200			SKIN
WEL	GBR	266	200	333	250	SKIN
OEL	EU	260	200			
TLV-ACGIH		262	200	328	250	SKIN

**2-BUTOXYETHANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	49	10	98 (C)	20 (C)	SKIN
MAK	DEU	49	10	98	20	SKIN Hinweis

**B66 - BRAVA VG 66 PREMIUM VARNISH**

VLA	ESP	98	20	245	50	SKIN
VLEP	FRA	49	10	246	50	SKIN
VLEP	ITA	98	20	246	50	SKIN
WEL	GBR	123	25	246	50	SKIN
OEL	EU	98	20	246	50	SKIN
TLV-ACGIH		97	20			

**1-METHOXY-2-PROPANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	
VLA	ESP	375	100	568	150	SKIN
VLEP	FRA	188	50	375	100	SKIN
VLEP	ITA	375	100	568	150	SKIN
WEL	GBR	375	100	560	150	SKIN
OEL	EU	375	100	568	150	SKIN
TLV-ACGIH		184	50	368	100	

**HYDROCARBONS, C9-C11, N-ALCANIUMS, ISOALCANS, CYCLICS, <2% AROMATIC****Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral								0,871 mg/kg/d
Skin				125000 mg/kg/d				208000 mg/kg/d

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 ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

**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.

**HAND PROTECTION**

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): 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.

**B66 - BRAVA VG 66 PREMIUM VARNISH****SKIN PROTECTION**

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 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**

Properties	Value	Information
Appearance	viscous liquid	
Colour	transparent	
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	flammable liquid	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 42 °C	
Auto-ignition temperature	200 °C	
Decomposition temperature	not available	
pH	not applicable	Reason for missing data: substance/mixture is non-soluble (in water)
Kinematic viscosity	163 sec. FORD 4 a 20°C	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	0,9	
Relative vapour density	not available	
Particle characteristics	not applicable	

**9.2. Other information**

## 9.2.1. Information with regard to physical hazard classes



**B66 - BRAVA VG 66 PREMIUM VARNISH**

Information not available

#### 9.2.2. Other safety characteristics

VOC (Directive 2004/42/EC) : 39,24 % - 353,15 g/litre

VOC (volatile carbon) 33,01 % - 306,13 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.

#### TURPENTINE

Dissolves rubber.

#### 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.

#### 2-BUTOXYETHANOL

Decomposes under the effect of heat.

#### 1-METHOXY-2-PROPANOL

Dissolves various plastic materials. Stable in normal conditions of use and storage.

Absorbs and dissolves in water and in organic solvents. With air it may slowly form explosive peroxides.

### 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)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

#### TURPENTINE

**B66 - BRAVA VG 66 PREMIUM VARNISH**

Reacts violently with: strong oxidising agents, chlorine. On contact with: tin chloride. Fire hazard. Dissolves rubber. Develops heat on contact with: calcium hypochlorite, chromium trioxide, chromium oxychloride, tin (IV) chloride. Risk of explosion on contact with: nitric acid, fluorine.

In oxygen atmospheres it generates explosive peroxides.

**2-METHOXY-1-METHYLETHYL ACETATE**

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

**2-BUTOXYETHANOL**

May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

**1-METHOXY-2-PROPANOL**

May react dangerously with: strong oxidising agents, strong acids.

**10.4. Conditions to avoid**

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

**2-BUTOXYETHANOL**

Avoid exposure to: sources of heat, naked flames.

**1-METHOXY-2-PROPANOL**

Avoid exposure to: air.

**HYDROCARBONS, C9-C11, N-ALCANIUMS, ISOALCANS, CYCLICS, <2% AROMATIC**

Avoid exposure to: naked flames, ignition sources.

**10.5. Incompatible materials****2-METHOXY-1-METHYLETHYL ACETATE**

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

**1-METHOXY-2-PROPANOL**

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

**HYDROCARBONS, C9-C11, N-ALCANIUMS, ISOALCANS, CYCLICS, <2% AROMATIC**

Incompatible with: oxidising agents.

**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.

**TURPENTINE**

## B66 - BRAVA VG 66 PREMIUM VARNISH

May develop: acyclic terpenes, monocyclic terpenes, hydroterpenes, pyrones, cymenes.

2-BUTOXYETHANOL

May develop: hydrogen.

## 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.

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### 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

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

2-METHOXY-1-METHYLETHYL ACETATE

WORKERS: inhalation; contact with the skin.

METHANOL

WORKERS: inhalation; contact with the skin.

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

1-METHOXY-2-PROPANOL

WORKERS: inhalation; contact with the skin.

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

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

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

**B66 - BRAVA VG 66 PREMIUM VARNISH****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).

**METHANOL**

The minimum lethal dose for humans by ingestion is considered to be in the range from 300 to 1000 mg/kg. Ingestion of 4-10 ml of the substance may cause permanent blindness in adult humans (IPCS).

**1-METHOXY-2-PROPANOL**

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

Interactive effects**XYLENE (MIXTURE OF ISOMERS)**

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	> 5 mg/l
ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

**XYLENE (MIXTURE OF ISOMERS)**

LD50 (Dermal):	4350 mg/kg Rabbit
STA (Dermal):	1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LD50 (Oral):	3523 mg/kg Rat
LC50 (Inhalation vapours):	26 mg/l/4h Rat
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

**TURPENTINE**

STA (Dermal):	1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LD50 (Oral):	5760 mg/kg Rat
STA (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

**2-METHOXY-1-METHYLETHYL ACETATE**

**B66 - BRAVA VG 66 PREMIUM VARNISH**

LD50 (Dermal): > 5000 mg/kg Rat  
LD50 (Oral): 8530 mg/kg Rat

**2-BUTOXYETHANOL**

LD50 (Oral): 1200 mg/kg Guinea pig  
LC50 (Inhalation vapours): 3 mg/l/4h Rat

**1-METHOXY-2-PROPANOL**

LD50 (Dermal): 13000 mg/kg Rabbit  
LD50 (Oral): 5300 mg/kg Rat  
LC50 (Inhalation vapours): 54,6 mg/l/4h Rat

**HYDROCARBONS, C9-C11, N-ALCANIUMS, ISOALCANS, CYCLICS, <2% AROMATIC**

LD50 (Dermal): > 2000 mg/kg rabbit  
LD50 (Oral): > 5000 mg/kg ratto

**Cobalt neodecanoate**

LD50 (Dermal): 2000 mg/kg rat  
LD50 (Oral): 1098 mg/kg rat

**SKIN CORROSION / IRRITATION**

Repeated exposure may cause skin dryness or cracking.

**SERIOUS EYE DAMAGE / IRRITATION**

Does not meet the classification criteria for this hazard class

**RESPIRATORY OR SKIN SENSITISATION**

Sensitising for the skin

**GERM CELL MUTAGENICITY**

Does not meet the classification criteria for this hazard class

**CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

**B66 - BRAVA VG 66 PREMIUM VARNISH****XYLENE (MIXTURE OF ISOMERS)**

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

**REPRODUCTIVE TOXICITY**

Does not meet the classification criteria for this hazard class

**STOT - SINGLE EXPOSURE**

May cause drowsiness or dizziness

**STOT - REPEATED EXPOSURE**

Does not meet the classification criteria for this hazard class

**ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class Viscosity: 163 sec. FORD 4 a 20°C

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**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**

HYDROCARBONS, C9-C11, N-  
ALCANIUMS, ISOALCANS, CYCLICS, <2%  
AROMATIC

LC50 - for Fish

8,2 mg/l/96h Pimephales promelas

EC50 - for Crustacea

4,5 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants

3,1 mg/l/72h Pseudokirchnerella subcapitata

**12.2. Persistence and degradability**

TURPENTINE

**B66 - BRAVA VG 66 PREMIUM VARNISH**

Oil distillates, coal, plant extracts: they are blends of parafin hydrocarbons, naphthenes, diterpenes and aromatics. Their behaviour in the environment depends on their composition. In any case they should be used according to good working practice, avoiding discharge into the environment.

**XYLENE (MIXTURE OF ISOMERS)**

Solubility in water 100 - 1000 mg/l

Rapidly degradable  
TURPENTINE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable  
2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable  
METHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable  
2-BUTOXYETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable  
1-METHOXY-2-PROPANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable  
HYDROCARBONS, C9-C11, N-  
ALCANIUMS, ISOALCANS, CYCLICS, <2%  
AROMATIC

Rapidly degradable

**12.3. Bioaccumulative potential****XYLENE (MIXTURE OF ISOMERS)**

Partition coefficient: n-octanol/water 3,12

BCF 25,9

**2-METHOXY-1-METHYLETHYL ACETATE**

Partition coefficient: n-octanol/water 1,2

**METHANOL**

Partition coefficient: n-octanol/water -0,77

BCF 0,2

**2-BUTOXYETHANOL**

Partition coefficient: n-octanol/water 0,81

**1-METHOXY-2-PROPANOL**

Partition coefficient: n-octanol/water < 1

**12.4. Mobility in soil****XYLENE (MIXTURE OF ISOMERS)**

Partition coefficient: soil/water 2,73

HYDROCARBONS, C9-C11, N-  
ALCANIUMS, ISOALCANS, CYCLICS, <2%

**B66 - BRAVA VG 66 PREMIUM VARNISH**

## AROMATIC

Partition coefficient: soil/water 1,78

**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  $\geq$  than 0,1%.

**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7. 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.

**SECTION 14. Transport information****14.1. UN number or ID number**

ADR / RID, IMDG, IATA: 1263

**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**



**B66 - BRAVA VG 66 PREMIUM VARNISH**

ADR / RID, IMDG, IATA: III

**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
	Passengers:	Maximum quantity: 60 L	Packaging instructions: 355
	Special provision:	A3, A72, A192	

**14.7. Maritime transport in bulk according to IMO instruments**

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/EU: P5c

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

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

**B66 - BRAVA VG 66 PREMIUM VARNISH**Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 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.

VOC (Directive 2004/42/EC) :

Interior / exterior trim varnishes and woodstains.

**15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

**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. 3</b>	Acute toxicity, category 3
<b>STOT SE 1</b>	Specific target organ toxicity - single exposure, category 1
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>STOT RE 1</b>	Specific target organ toxicity - repeated exposure, category 1
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1A</b>	Skin sensitization, category 1A
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H225</b>	Highly flammable liquid and vapour.

**B66 - BRAVA VG 66 PREMIUM VARNISH**

<b>H226</b>	Flammable liquid and vapour.
<b>H301</b>	Toxic if swallowed.
<b>H311</b>	Toxic in contact with skin.
<b>H331</b>	Toxic if inhaled.
<b>H370</b>	Causes damage to organs.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H372</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

## LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: 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: Regulation (EC) 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: Time-weighted average exposure limit
- TWA STEL: Short-term 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 (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament

**B66 - BRAVA VG 66 PREMIUM VARNISH**

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
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

- 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.

**CALCULATION METHODS FOR CLASSIFICATION**

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

**Changes to previous review:**

The following sections were modified:

03 / 08 / 09 / 11 / 16.