



1 Identification

- **Product identifier**
 - *Product number* HBR1
 - *Trade name:* **Waterbased primer 2k**
 - *Application of the substance / the mixture* For professional use
- **Details of the supplier of the safety data sheet**
 - *Manufacturer/Supplier:*
IVM Chemicals srl
Viale della Stazione 3 - 27020 Parona (PV) Italy tel +39 038425441
 - *Information department:*
Environmental Health and safety office
hseoffice@ivmchemicals.com
 - *Emergency telephone number:*
ChemTel Expert Assistance Hotline/SDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

2 Hazard(s) identification

- **Classification of the substance or mixture**
Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.
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- **Label elements**
 - *GHS label elements*
The product is classified and labeled according to the Globally Harmonized System (GHS).
 - *Hazard pictograms*
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GHS08
- *Signal word* Warning
 - *Hazard-determining components of labeling:*
propylidynetrimehanol
 - *Hazard statements*
H361 Suspected of damaging fertility or the unborn child.
 - *Precautionary statements*
 - P201 Obtain special instructions before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P308+P313 IF exposed or concerned: Get medical advice/attention.
 - P405 Store locked up.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
 - *NFPA ratings (scale 0 - 4)*
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Health = 0

Fire = 1

Reactivity = 0

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 · **HMIS-ratings (scale 0 - 4)**












HEALTH	0	Health = 0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

 · **Chemical characterization: Mixtures**

 · **Description:** Mixture: consisting of the following components.

 · **Dangerous components:**

111-76-2	2-butoxyethanol  Acute Toxicity - Oral 4, H302; Acute Toxicity - Inhalation 4, H332; Skin Irritation 2, H315; Eye Irritation 2A, H319 Flammable Liquids 4, H227	1-2.49%
112-34-5	2-(2-butoxyethoxy)ethanol  Eye Irritation 2A, H319	1-2.49%
57-55-6	propane-1,2-diol	0.5-1%
121-44-8	triethylamine  Flammable Liquids 2, H225  Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331  Skin Corrosion 1A, H314  Acute Toxicity - Oral 4, H302	<0.5%
77-99-6	propylidynetrimethanol  Toxic to Reproduction 2, H361	≥0.1-<0.5%
55965-84-9	a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)  Acute Toxicity - Oral 3, H301; Acute Toxicity - Dermal 2, H310; Acute Toxicity - Inhalation 2, H330  Skin Corrosion 1B, H314  Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100)  Sensitization - Skin 1A, H317	≥0.00025-<0.0015%

4 First-aid measures

 · **Description of first aid measures**

 · **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

personal protective equipment for first aid responders is recommended. (please see section 8)

 · **After inhalation:** Supply fresh air; consult doctor in case of complaints.

 · **After skin contact:** Generally the product does not irritate the skin.

 · **After eye contact:** Rinse opened eye for several minutes under running water.

 · **After swallowing:** Do not induce vomiting; immediately call for medical help.

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- **Information for doctor:**
 - *Most important symptoms and effects, both acute and delayed*
 - *For symptoms and effects caused by substances, refer to Section 11.*
 - *Indication of any immediate medical attention and special treatment needed*
- *No further relevant information available.*

5 Fire-fighting measures

- **Extinguishing media**
 - *Suitable extinguishing agents:*
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
 - *For safety reasons unsuitable extinguishing agents:*
Do not use a jet water stream as it may scatter and spread fire.
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Carbon monoxide (CO)
- **Advice for firefighters**
Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.
 - **Protective equipment:**
Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Keep away from ignition sources
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to Section 13.
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-I:		
471-34-1	calcium carbonate	45 mg/m ³
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	30 mg/m ³
111-76-2	2-butoxyethanol	60 ppm
112-34-5	2-(2-butoxyethoxy)ethanol	30 ppm
57-55-6	propane-1,2-diol	30 mg/m ³

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121-44-8	triethylamine	1 ppm
· PAC-2:		
471-34-1	calcium carbonate	210 mg/m ³
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	330 mg/m ³
111-76-2	2-butoxyethanol	120 ppm
112-34-5	2-(2-butoxyethoxy)ethanol	33 ppm
57-55-6	propane-1,2-diol	1,300 mg/m ³
121-44-8	triethylamine	170 ppm
· PAC-3:		
471-34-1	calcium carbonate	1,300 mg/m ³
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	2,000 mg/m ³
111-76-2	2-butoxyethanol	700 ppm
112-34-5	2-(2-butoxyethoxy)ethanol	200 ppm
57-55-6	propane-1,2-diol	7,900 mg/m ³
121-44-8	triethylamine	1,000 ppm

7 Handling and storage

· Handling:

· Precautions for safe handling

Open and handle receptacle with care.

Keep respiratory protective device available.

· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Observe the label precautions, the expiration date for the use, if not indicated, is from delivery date of goods.

In cases where there is no reported expiration date, it means that the product must be used within 8 months.

Take on temperature greater than 5 ° C

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** Those typical of the product and the instructions in the data sheet if required.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

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111-76-2 2-butoxyethanol

PEL	Long-term value: 240 mg/m ³ , 50 ppm Skin
REL	Long-term value: 24 mg/m ³ , 5 ppm Skin
TLV	Long-term value: 20 ppm BEI, A3

112-34-5 2-(2-butoxyethoxy)ethanol

TLV	Long-term value: 10* ppm *Inhalable fraction and vapor
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57-55-6 propane-1,2-diol

WEEL	Long-term value: 10 mg/m ³
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121-44-8 triethylamine

PEL	Long-term value: 100 mg/m ³ , 25 ppm
TLV	Short-term value: 1 ppm Long-term value: 0.5 ppm Skin, A4

· Ingredients with biological limit values:**111-76-2 2-butoxyethanol**

BEI	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid (BAA) (with hydrolysis)
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· **Additional information:** The lists that were valid during the creation were used as basis.

· Exposure controls**· Personal protective equipment:****· General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Pregnant women should strictly avoid inhalation or skin contact.

· Breathing equipment:

Not required.



Suitable respiratory protective device recommended.

Filter A

· Protection of hands:

Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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The glove material has to be impermeable and resistant to the product .

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- **Form:**

Fluid

- **Color:**

According to product specification

- **Odor:**

Characteristic

- **Odor threshold:**

Not determined.

- **pH-value:**

Mixture is non-polar/aprotic.
Range: 7 - 9

- **Change in condition**

- **Melting point/Melting range:**

Undetermined.

- **Boiling point/Boiling range:**

100 °C (212 °F)

- **Flash point:**

100 °C (212 °F)

- **Flammability (solid, gaseous):**

Not applicable.

- **Ignition temperature:**

225 °C (437 °F)

- **Decomposition temperature:**

Not determined.

- **Auto igniting:**

Product is not selfigniting.

- **Danger of explosion:**

Product does not present an explosion hazard.

- **Explosion limits:**

- **Lower:**

0.9 Vol %

- **Upper:**

30 Vol %

- **Vapor pressure at 20 °C (68 °F):**

1.2 hPa (0.9 mm Hg)

- **Density (+/- 0,03) at 20 °C (68 °F):**

1.333 g/cm³ (11.124 lbs/gal)

- **Relative density**

Not determined.

- **Vapor density**

Not determined.

- **Evaporation rate**

Not determined.

- **Solubility in / Miscibility with**

- **Water:**

Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

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- **Viscosity:**
 - **Dynamic:** Not determined.
 - **Kinematic at 20 °C (68 °F):** 60 s (ISO 6 mm)
- **Oxidising properties:** N.A.
- **Solvent content:**
 - **Water:** 40.3 %
 - **VOC content:** 5.20 %
69.4 g/l / 0.58 lb/gal
- **Solids content:** 54.4 %

- **Other information (HAPS)**

112-34-5	2-(2-butoxyethoxy)ethanol	1-2.49%
121-44-8	triethylamine	<0.5%

- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** typical of the product as indicated in the data sheet
- **Chemical stability** The product is stable in normal conditions of storage and use recommended
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Acids, alkalis and oxidizing agents
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

Oral	LD50	58,016 mg/kg (ATE)
Dermal	LD50	427,729 mg/kg
Inhalative	LC50/4 h	499 mg/l (mouse)

111-76-2 2-butoxyethanol

Oral	LD50	1,200 mg/kg (ATE) 1,414 mg/kg (mouse)
Dermal	LD50	2,001 mg/kg (rab)
Inhalative	LC50/4 h	11 mg/l (mouse)

112-34-5 2-(2-butoxyethoxy)ethanol

Oral	LD50	6,600 mg/kg (mouse)
Dermal	LD50	2,764 mg/kg (rabbit)

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57-55-6 propane-1,2-diol

Oral	LD50	20,000 mg/kg (mouse)
Dermal	LD50	2,001 mg/kg (mouse)

121-44-8 triethylamine

Oral	LD50	730 mg/kg (mouse)
Dermal	LD50	580 mg/kg (rabbit)
Inhalative	LC50/4 h	10.9 mg/l (mouse)

77-99-6 propylidynetrimethanol

Oral	LD50	14,700 mg/kg (mouse)
Dermal	LD50	10,001 mg/kg (mouse)

55965-84-9 a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)

Oral	LD50	64 mg/kg (mouse)
Dermal	LD50	87.12 mg/kg (mouse)

· **Primary irritant effect:**

- *on the skin:* No irritant effect.
- *on the eye:* No irritating effect.

· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**

Suspected of damaging fertility or the unborn child.

Safety data sheet available on request.

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

· **Carcinogenic categories**

Titanium dioxide

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

· **IARC (International Agency for Research on Cancer - Cl. 1 and 2)**

13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	2B - DUST
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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information· **Toxicity**· **Aquatic toxicity:****111-76-2 2-butoxyethanol**

EC50	1,840 mg/l (algae) (72h)
	1,550 mg/l (daphnia) (48h)

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LC50 (96h)	1,474 mg/l (Fish)
112-34-5 2-(2-butoxyethoxy)ethanol	
EC50	1,001 mg/l (daphnia) (48 h)
LC50 (96h)	1,300 mg/l (Leuciscus idus melanotus)
57-55-6 propane-1,2-diol	
EC50	19,000 mg/l (algae) (48 h)
	18,340 mg/l (daphnia) (48 h)
LC50 (96h)	40,613 mg/l (Fish)
121-44-8 triethylamine	
EC50	8 mg/l (algae) (72 h)
	17 mg/l (daphnia) (48 h)
LC50 (96h)	36 mg/l (Fish)
77-99-6 propylidynetrimethanol	
EC50	1,001 mg/l (algae) (72h)
	13,000 mg/l (daphnia) (48h)
LC50 (96h)	1,001 mg/l (Fish)
55965-84-9 a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)	
EC50	0.027 mg/l (algae) (72 h)
	0.16 mg/l (daphnia) (48 h)
LC50 (96h)	0.19 mg/l (Fish)

· **Persistence and degradability** No further relevant information available.

· **Substances Easily biodegradable**

111-76-2	2-butoxyethanol	.
112-34-5	2-(2-butoxyethoxy)ethanol	.
57-55-6	propane-1,2-diol	.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Smaller quantities can be disposed of with household waste.

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

Hand over to hazardous waste disposers.

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Dispose of contents and container in accordance with local state and federal regulations.

- **Uncleaned packagings:**
 - *Recommendation:* Disposal must be made according to official regulations.
 - *Recommended cleansing agent:* Water, if necessary with cleansing agents.

14 Transport information

· UN-Number	
· DOT, ADN, IMDG, IATA	Not applicable
· Note	Check viscosity and flash point at section 9
· UN proper shipping name	
· DOT, ADN, IMDG, IATA	Not applicable
· Transport hazard class(es)	
· DOT, ADR/RID, ADN, IMDG, IATA	
· Class	Not applicable
· Packing group	
· DOT, IMDG, IATA	Not applicable
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Not applicable

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
Requirements of Federal Register

- Various regulations
- SARA

· Section 355 (extremely hazardous substances):
None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings) :		
111-76-2	2-butoxyethanol	1-2.49%
112-34-5	2-(2-butoxyethoxy)ethanol	1-2.49%
121-44-8	triethylamine	<0.5%
1336-21-6	ammonia	<0.1%

· TSCA (Toxic Substances Control Act):
All components have the value ACTIVE.

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· Hazardous Air Pollutants			
121-44-8	triethylamine		
· Proposition 65			
· Chemicals known to cause cancer: Titanium dioxide only in bound form			
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	only for Dust	10-12.49%
· Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.			
· Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.			
· Chemicals known to cause developmental toxicity: None of the ingredients is listed.			
· Carcinogenic categories			
· EPA (Environmental Protection Agency)			
111-76-2	2-butoxyethanol	NL	1-2.49%
· TLV (Threshold Limit Value)			
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6		A4
14807-96-6	Talc (Mg3H2(SiO3)4)		A4
111-76-2	2-butoxyethanol		A3
121-44-8	triethylamine		A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)			
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6		10-12.49%

· National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· 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.

· Department issuing SDS: IVM Chemicals Srl

· Contact: See emergency phone

· Date of preparation / last revision 11/10/2022

· Abbreviations and acronyms:

- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- NIOSH: National Institute for Occupational Safety

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OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Flammable Liquids 4: Flammable liquids – Category 4

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Acute Toxicity - Dermal 2: Acute toxicity – Category 2

Acute Toxicity - Dermal 3: Acute toxicity – Category 3

Skin Corrosion 1A: Skin corrosion/irritation – Category 1A

Skin Corrosion 1B: Skin corrosion/irritation – Category 1B

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1A: Skin sensitisation – Category 1A

Toxic to Reproduction 2: Reproductive toxicity – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Sources

**REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
and following amendments**

Agency ECHA web site

INRS Fiche Toxicologique

IARC International agency for research on cancer

* **Data compared to the previous version altered.**