

## 1 Identification

- **Product identifier**
  - Product number HUM5AC44
  - Trade name: **CLEAR WB UV TOP-C 20SH**
    - 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**  
Sensitization - Skin 1 H317 May cause an allergic skin reaction.  
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **Label elements**
  - **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**  
2 propenoic acid, reaction products with dipentaerythritol  
PHENYL ETHYL PHOSPHATE
- **Hazard statements**  
H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
  - P261 Avoid breathing dust/fume/gas/mist/vapors/spray
  - P273 Avoid release to the environment.
  - P280 Wear protective gloves.
  - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
  - P363 Wash contaminated clothing before reuse.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 1  
Reactivity = 0

**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 1)

· **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:**

1384855-91-7	2 propenoic acid, reaction products with dipentaerythritol ⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319; Sensitization - Skin 1A, H317 Aquatic Acute 3, H402; Aquatic Chronic 3, H412	2.5-4.99%
112-34-5	2-(2-butoxyethoxy)ethanol ⚠ Eye Irritation 2A, H319	1-2.49%
84434-11-7	PHENYL ETHYL PHOSPHATE ⚠ Aquatic Chronic 2, H411 ⚠ Sensitization - Skin 1B, H317	1-2.49%
5131-66-8	3-butoxypropan-2-ol ⚠ Skin Irritation 2, H315; Eye Irritation 2A, H319 Flammable Liquids 4, H227	0.5-1%
108-01-0	2-dimethylaminoethanol ⚠ Flammable Liquids 3, H226 ⚠ Acute Toxicity - Inhalation 3, H331 ⚠ Skin Corrosion 1B, H314 ⚠ Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312	<0.5%
34590-94-8	(2-methoxymethylethoxy)propanol Flammable Liquids 4, H227	<1%
68439-49-6	c16-18 alcohols ethoxylated ⚠ Acute Toxicity - Oral 3, H301 ⚠ Eye Damage 1, H318	<0.5%
36443-68-2	Ethylenebis(oxyethylene) bis[3-(5-tert-butyl-4-hydroxy-m-tolyl) propionate] ⚠ Aquatic Chronic 1, H410 (M=10)	≥0.025-<0.1%

### 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 and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

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

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

(Contd. on page 3)

**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 2)

- **Information for doctor:**
  - **Most important symptoms and effects, both acute and delayed**  
Allergic reactions  
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:**  
CO<sub>2</sub>, 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<sub>x</sub>)  
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:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
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.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-I:		
112-34-5	2-(2-butoxyethoxy)ethanol	30 ppm
7631-86-9	silicon dioxide, chemically prepared	18 mg/m
108-01-0	2-dimethylaminoethanol	3.7 ppm
34590-94-8	(2-methoxymethylethoxy)propanol	150 ppm
68439-49-6	c16-18 alcohols ethoxylated	3.8 mg/m

(Contd. on page 4)

**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 3)

68439-49-6	c16-18 alcohols ethoxylated	3.8 mg/m
· PAC-2:		
112-34-5	2-(2-butoxyethoxy)ethanol	33 ppm
7631-86-9	silicon dioxide, chemically prepared	740 mg/m
108-01-0	2-dimethylaminoethanol	40 ppm
34590-94-8	(2-methoxymethylethoxy)propanol	1700* ppm
68439-49-6	c16-18 alcohols ethoxylated	42 mg/m
68439-49-6	c16-18 alcohols ethoxylated	42 mg/m
· PAC-3:		
112-34-5	2-(2-butoxyethoxy)ethanol	200 ppm
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m
108-01-0	2-dimethylaminoethanol	72 ppm
34590-94-8	(2-methoxymethylethoxy)propanol	9900** ppm
68439-49-6	c16-18 alcohols ethoxylated	250 mg/m
68439-49-6	c16-18 alcohols ethoxylated	250 mg/m

## 7 Handling and storage

### · Handling:

#### · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.  
 Prevent formation of aerosols.

#### · Information about protection against explosions and fires: No special measures required.

### · 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: None.

### · 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.

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

TLV	Long-term value: 10* ppm *Inhalable fraction and vapor
-----	---

(Contd. on page 5)

**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 4)

**34590-94-8 (2-methoxymethylethoxy)propanol**

PEL	Long-term value: 600 mg/m <sup>3</sup> , 100 ppm Skin
REL	Short-term value: 900 mg/m <sup>3</sup> , 150 ppm Long-term value: 600 mg/m <sup>3</sup> , 100 ppm Skin
TLV	Long-term value: 50 ppm

· **Regulatory information**

TLV: Guide to Occupational Exposure Values (TLV)

PEL: Guide to Occupational Exposure Values (OSHA PELs)

REL: Guide to Occupational Exposure Values (NIOSH RELs)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· **Breathing equipment:**

Short term filter device:



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

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**

· **Color:**

According to product specification

· **Odor:**

Characteristic

(Contd. on page 6)

**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 5)

· <b>Odor threshold:</b>	Not determined.	
· <b>pH-value:</b>	Mixture is non-polar/aprotic. Range: 7 - 9	
· <b>Change in condition</b>		
· <b>Melting point/Melting range:</b>	Undetermined.	
· <b>Boiling point/Boiling range:</b>	100 °C (212 °F)	
· <b>Flash point:</b>	100 °C (212 °F)	
· <b>Flammability (solid, gaseous):</b>	Not applicable.	
· <b>Auto igniting:</b>	225 °C (437 °F)	
· <b>Decomposition temperature:</b>	Not determined.	
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.	
· <b>Explosion limits:</b>		
· <b>Lower:</b>	0.9 Vol %	
· <b>Upper:</b>	8.4 Vol %	
· <b>Vapor pressure at 20 °C (68 °F):</b>	1.3 hPa (1 mm Hg)	
· <b>Density (+/- 0,03) at 20 °C (68 °F):</b>	1.03 g/cm (8.595 lbs/gal)	
· <b>Relative density</b>	Not determined.	
· <b>Vapor density</b>	Not determined.	
· <b>Evaporation rate</b>	Not determined.	
· <b>Solubility in / Miscibility with</b>		
· <b>Water:</b>	Fully miscible.	
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.	
· <b>Viscosity:</b>		
· <b>Dynamic:</b>	Not determined.	
· <b>Kinematic at 20 °C (68 °F):</b>	60 s (ISO 6 mm)	
· <b>Oxidising properties:</b>	N.A.	
· <b>Solvent content:</b>		
· <b>Water:</b>	62.4 %	
· <b>VOC content:</b>	2.93 % 30.2 g/l / 0.25 lb/gal	
· <b>Solids content:</b>	34.6 %	
· <b>Other information (HAPS)</b>		
112-34-5	2-(2-butoxyethoxy)ethanol	1-2.49%
121-44-8	triethylamine	<0.1%

## 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

(Contd. on page 7)

US



**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 6)

· **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	85,570 mg/kg
Inhalative	LC50/4 h	1,968 mg/l (mouse)

**1384855-91-7 2 propenoic acid, reaction products with dipentaerythritol**

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

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

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

**5131-66-8 3-butoxypropan-2-ol**

Oral	LD50	3,300 mg/kg (mouse)
Dermal	LD50	8,001 mg/kg (mouse)

**108-01-0 2-dimethylaminoethanol**

Oral	LD50	1,183 mg/kg (mouse)
Dermal	LD50	1,219 mg/kg (rabbit)
Inhalative	LC50/4 h	6.1 mg/l (mouse)

**34590-94-8 (2-methoxymethylethoxy)propanol**

Oral	LD50	5,135 mg/kg (mouse)
Dermal	LD50	19,020 mg/kg (rabbit)

**169117-72-0 2,5,8,11 Tetramethyl 6 dodecyn-Produktname : 5,8 Diol Ethoxylate**

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

**36443-68-2 Ethylenebis(oxyethylene) bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionate]**

Oral	LD50	3,001 mg/kg (mouse)
Dermal	LD50	2,001 mg/kg (mouse)

· **Primary irritant effect:**

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

· **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

Irritant

May cause an allergic skin reaction.

· **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

(Contd. on page 8)

**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 7)

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

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity** Harmful to aquatic life with long lasting effects.

· **Aquatic toxicity:**

### 1384855-91-7 2 propenoic acid, reaction products with dipentaerythritol

EC50	101 mg/l (algae) (72 h)
	35 mg/l (daphnia) (48 h)
LC50 (96h)	13 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)

### 5131-66-8 3-butoxypropan-2-ol

EC50	1,001 mg/l (algae) (96 h)
	1,001 mg/l (daphnia) (48 h)
LC50 (96h)	1,000 mg/l (Fish)

### 108-01-0 2-dimethylaminoethanol

EC50	66.1 mg/l (algae) (72 h)
	98.4 mg/l (daphnia) (48 h)

### 34590-94-8 (2-methoxymethylethoxy)propanol

EC50	970 mg/l (algae) (72 h)
	1,919 mg/l (daphnia) (48 h)
LC50 (96h)	1,001 mg/l (Fish)

### 36443-68-2 Ethylenebis(oxyethylene) bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionate]

EC50	100 mg/l (algae) (72h)
	101 mg/l (daphnia) (48h)
LC50 (96h)	43 mg/l (Fish)

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

· **Substances Easily biodegradable**

112-34-5	2-(2-butoxyethoxy)ethanol	.
5131-66-8	3-butoxypropan-2-ol	.

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **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.

Harmful to aquatic organisms

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

US

(Contd. on page 9)



**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 8)

### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Hand over to hazardous waste disposers.  
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, IMDG, IATA Not applicable
  - Note Check viscosity and flash point at section 9
- **UN proper shipping name**
  - DOT, 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**
  - Various regulations
  - SARA

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

· <b>Section 313 (Specific toxic chemical listings) :</b>		
112-34-5	2-(2-butoxyethoxy)ethanol	1-2.49%
121-44-8	triethylamine	<0.1%

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

(Contd. on page 10)

**Product number HUM5AC44**  
**Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 9)

· **Hazardous Air Pollutants**

121-44-8	triethylamine
----------	---------------

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

1589-47-5	2-methoxypropanol	<0.01%
-----------	-------------------	--------

· **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)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

121-44-8	triethylamine	A4
----------	---------------	----

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **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** 04/12/2023
  - **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
    - OSHA: Occupational Safety & Health
    - TLV: Threshold Limit Value
    - PEL: Permissible Exposure Limit
    - REL: Recommended Exposure Limit
    - Flammable Liquids 3: Flammable liquids . Category 3
    - Flammable Liquids 4: Flammable liquids . Category 4
    - Acute Toxicity - Oral 4: Acute toxicity . Category 4
    - Acute Toxicity - Inhalation 3: Acute toxicity . Category 3
    - Skin Corrosion 1B: Skin corrosion/irritation . Category 1B
    - Skin Irritation 2: Skin corrosion/irritation . Category 2
    - Eye Damage 1: Serious eye damage/eye irritation . Category 1

(Contd. on page 11)

## Safety Data Sheet

### acc. to OSHA HCS

Printing date 04/12/2023

Version number 2

Reviewed on 04/12/2023

**Product number HUM5AC44****Trade name: CLEAR WB UV TOP-C 20SH**

(Contd. of page 10)

*Eye Irritation 2A: Serious eye damage/eye irritation . Category 2A**Sensitization - Skin 1: Skin sensitisation . Category 1**Sensitization - Skin 1A: Skin sensitisation . Category 1A**Sensitization - Skin 1B: Skin sensitisation . Category 1B**Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard . Category 3**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard . Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard . Category 2**Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard . Category 3***• 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.**

US