

Safety Data Sheet

WB ANTI-YELLOWING HARDENER FOR WB PRODUCTS PROMETEA

Safety Data Sheet dated 18/01/2023 version 7



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

1.1. Product identifier

Mixture identification:

Trade name: WB ANTI-YELLOWING HARDENER FOR WB PRODUCTS PROMETEA

Trade code: CA550FR

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

Recommended use: Paint product for professional/industrial use

Uses advised against: Uses not foreseen by the recommended uses

1.3. Details of the supplier of the safety data sheet

Company: INDUSTRIA CHIMICA ADRIATICA S.P.A.

Via S. Pertini, 52

62012 Civitanova Marche (MC) Italy

tel: +39 0733 8080

fax: +39 0733 808140

Responsible: regulatoryaffairs@icaspa.com - INDUSTRIA CHIMICA ADRIATICA S.p.A.

1.4. Emergency telephone number

Anti-poison centre - Hospital of Florence (24/24 hours)

Telephone +39 055 794 7819

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 3	Flammable liquid and vapour.
Acute Tox. 4	Harmful if inhaled.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1	May cause an allergic skin reaction.
STOT SE 3	May cause respiratory irritation.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words



Warning

Hazard statements

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

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.

P273	Avoid release to the environment.
P280	Wear protective gloves/clothing and eye/face protection.
P370+P378	In case of fire, use a dry powder fire extinguisher to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

Contains

Hydrophilic aliphatic polyisocyanate

Dir. 2004/42/EC (VOC directive)

This product contains max 342 g/l VOC.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: WB ANTI-YELLOWING HARDENER FOR WB PRODUCTS PROMETEA

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
50-75 %	Hydrophilic aliphatic polyisocyanate	CAS:160994-68-3	Skin Sens. 1, H317; Acute Tox. 4, H332; STOT SE 3, H335; Aquatic Chronic 3, H412	
15-25 %	1-methoxy-2-propanol acetate	CAS:108-65-6 EC:203-603-9 Index:607-195-00-7	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29-XXXX
10-15 %	Propylene carbonate	CAS:108-32-7 EC:203-572-1 Index:607-194-00-1	Eye Irrit. 2, H319	01-2119537232-48-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

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.

In case of Ingestion:

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

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

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

Eye irritation

Eye damages

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.

For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapors and protect those trying to stem the leak.

Extinguishing media which must not be used for safety reasons:

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

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Excess pressure may form in containers exposed to fire at a risk of explosion.

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

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

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.

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.

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 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)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour	Notes
1-methoxy-2-propanol acetate	EU		C	275	50	550	100		
	NATIONAL	BARBADOS	C	270	50				
	NATIONAL	ANTIGUA AND BARBUDA	C	275	50	550	100		
	NATIONAL	ANTARCTICA	C	275	50	550	100		
	NATIONAL	POLAND	C	260,000		520,000			

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
1-methoxy-2-propanol acetate	108-65-6	0,29 mg/kg	Soil (agricultural)		
		0,635 mg/l	Water		
		6,35 mg/l	WATER, INTERMITTING RELEASE		
		0,064 mg/l	Water		
		3,29 mg/kg	Air		
		0,329 mg/kg	Marine water sediments		
		100 mg/l	Microorganisms in sewage treatments		
Propylene carbonate	108-32-7	0,81 mg/kg	Soil (agricultural)		
		0,9 mg/l	Water		
		0,09 mg/l	Water		

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
1-methoxy-2-propanol acetate	108-65-6			500 mg/kg	Human Oral	Short Term, systemic effects	
		796 mg/kg		320 mg/kg	Human Dermal	Long Term, systemic effects	
		550 mg/m ³		33 mg/m ³	Human Inhalation	Long Term, local effects	
		275 mg/m ³		33 mg/m ³	Human Inhalation	Long Term, systemic effects	
				36 mg/kg	Human Oral	Long Term, systemic effects	
Propylene carbonate	108-32-7	50 mg/kg		25 mg/kg	Human Dermal	Long Term, systemic effects	
		20 mg/m ³		10 mg/m ³	Human Inhalation	Long Term, local effects	
		176 mg/m ³		43,5 mg/m ³	Human Inhalation	Long Term, systemic effects	
				25 mg/kg	Human Oral	Long Term, systemic effects	

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Wear airtight protective goggles (see standard EN 166).

Protection for skin:

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.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

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.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

N.A.

Environmental exposure controls:

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

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Liquid

Color: Not available

Odour: N.A.

pH: N.A.

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: $23^{\circ}\text{C} \leq T \leq 60^{\circ}\text{C}$

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.14 g/ml

Solubility in water: N.A.

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Nanoforms dispersion stability

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: The product is classified Flam. Liq. 3 H226

VOC content (g/L) in the product (2010/75/UE) 225.72

VOC content % in the product (2010/75/UE) 19.80

Particle characteristics:

Particle size: N.A.

9.2. Other information

Miscibility: N.A.

Conductivity: N.A.

Evaporation rate: N.A.

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

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

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.

10.4. Conditions to avoid

Stable under normal conditions.

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

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

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.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	The product is classified: Acute Tox. 4(H332)
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: STOT SE 3(H335)
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Hydrophilic aliphatic polyisocyanate	a) acute toxicity	LD50 Oral 2000 mg/kg
	b) skin corrosion/irritation	LD50 Skin 2000 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour 0,39 mg/l 4h
1-methoxy-2-propanol acetate	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit > 5000 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat > 10,6 mg/l 6h
Propylene carbonate	a) acute toxicity	LD50 Oral Rat > 20000 mg/kg
	b) skin corrosion/irritation	LD50 Skin Rabbit 23800 mg/kg
	j) aspiration hazard	LC50 Inhalation Vapour Rat > 5000 mg/l

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
1-methoxy-2-propanol acetate	CAS: 108-65-6 - EINECS: 203- 603-9 - INDEX: 607-195-00-7	a) Aquatic acute toxicity : EC50 Daphnia > 500 mg/L 48h - Daphnia Magna
		b) Aquatic chronic toxicity : IC50 Algae > 1000 mg/L 72h - Selenastrum capricornutum
		a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96h - Fish
		b) Aquatic chronic toxicity : NOEC Fish 475 mg/L - Oryzias latipes
Propylene carbonate	CAS: 108-32-7	b) Aquatic chronic toxicity : IC50 Algae > 900 mg/L 72h - Algae

a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96h - Fish

12.2. Persistence and degradability

Component	Persistence/Degradability:	Value
Propylene carbonate	Readily biodegradable	0

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT Ingredients are present

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration \geq 0.1%

12.7 Other adverse effects

N.A.

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

1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT

IATA-Technical name: PAINT

IMDG-Technical name: PAINT

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Toxic Ingredients Qty: 0.00

High Toxicity Ingredients Qty: 0.00

Marine pollutant: No

Environmental Pollutant: No

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR exempt:

ADR-Label: 3

ADR - Hazard identification number: 30

ADR-Special Provisions: 163 367 650

ADR-Transport category (Tunnel restriction code): 3 (D/E)

Air (IATA) :

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisioning: A3 A72 A192

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 163 223 367 955

N/A

IMDG-EMS: F-E, S-E

IMDG-MFAG: N/A

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: 74, 75

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
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Product belongs to category: P5c	5000	50000
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Regulation (EC) No 649/2012 (PIC regulation) - Regulation (EC) 2022/643

No substances listed

German Water Hazard Class.

Class 2: hazardous for water.

SVHC Substances:

The product does not contain any SVHC in percentage greater than 0,1%.

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 30.00 %

Volatile Organic compounds - VOCs = 342.00 g/L

Dir. 2010/75/EC (VOC directive)

Volatile Organic compounds - VOCs = 19.80 %

Volatile Organic compounds - VOCs = 225.72 g/L

Content of Water (%)

0.00

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
2.6/3	On basis of test data
3.1/4/Inhal	Calculation method
3.3/2	Calculation method
3.4.2/1	Calculation method
3.8/3	Calculation method
4.1/C3	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand
COV: Volatile Organic Compound
CSA: Chemical Safety Assessment
CSR: Chemical Safety Report
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level.
DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.



EXPOSURE SCENARIO : 1-METHOXY-2-PROPANOL ACETATE

Exposure scenario number : 14

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **1-methoxy-2-propanol acetate**

CAS: 108-65-6 , EC: 203-603-9 , INDEX: 607-195-00-7 e Nr. REACH: 01-2119475791-29-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	145.8°C (1.013 hPa)
Vapour pressure	3.56 hPa (20°C)
Biodegradation	Readily biodegradable (Method OECD 301F)

Company data

Annual amount per site	182905 Kg
Daily amount per site	778.32 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Emission or release factor in water	0%
Emission or release factor in soil	0%
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.

Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

SU22: Professional uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario 2: Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC5: Use at industrial site leading to inclusion into/onto article

4 - Short title of exposure scenario: Use in paints and related products

Main user groups

SU22: Professional uses

Process Categories

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

PROC15: Use as laboratory reagent

PROC19: Manual activities involving hand contact

Environmental Release Categories

ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

Key

SU Sector of use category

PROC Process Categories

ERC Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

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Version 1



EXPOSURE SCENARIO: PROPYLENE CARBONATE

Exposure scenario number: 25

Attachment to safety data sheet as per Article 31 (section 7) of (EC) 1907/2006 - REACH regulation

Identified uses of the component **Propylene carbonate**

CAS: 108-32-7, EC: 203-572-1, INDEX: 607-194-00-1 e Nr. REACH: 01-2119537232-48-XXXX

Product for industrial or professional use in the formulation of thinners, paints, additives, hardeners and pastes for painting products.

Data of substance

Physical state at 20°C	Liquid
Boiling point	242°C (1.013 hPa)
Vapour pressure	0.03 hPa (20°C)
Biodegradation	Readily biodegradable (Method OECD 301B)

Company data

Annual amount per site	3230 Kg
Daily amount per site	13.74 Kg
Yearly days of use	235 days
Duration and frequency of activity	480 min 5 days per week
Average temperature of use	20 °C
Process pressure	Ambient pressure
Local exhaust ventilation	Effectiveness: 70 %
Ventilation rate per hour	7
Wear chemically resistant gloves	Effectiveness: 80 %
Use of substance	Indoor use
Concentration of the substance in the products	Covers percentage substance in the product up to 100 % (unless stated differently).

Environment factors

Dimensions of receiving river	18000 m ³ /day
Dilution factor river	10
Dilution factor coast	100

Sewage treatment plant

Type of plant	Municipal sewage treatment plant
Flow rate of sewage treatment plant	2000 m ³ /day
Sludge Treatment	Disposal or recovery

General exposure

Adopt good general ventilation norms, both natural by opening doors and windows, and forced ventilation using an electrically powered ventilation system.

Ensure that transfers of material are subject to restraining measures or suction ventilation.

Use suitable eye protection. In case of repeated exposure of the skin to the substance, wear protective gloves as per EN 374 norms.

1 - Short title of Exposure Scenario: Distribution of substance

Main User Groups

SU3: Industrial uses

Process categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental release categories

ERC1: Manufacture of the substance

2 - Short title of Exposure Scenario : Formulation & (re)packing of substances and mixtures

Main user groups

SU3: Industrial uses

Sector of end-use

SU10: Formulation

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4: Chemical production where opportunity for exposure arises

PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15: Use as laboratory reagent

Environmental Release Categories

ERC2: Formulation into mixture

3 - Short title of exposure scenario: Use in paints and related products

Main users groups

SU3: Industrial uses

Process Categories

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC4: Chemical production where opportunity for exposure arises

PROC7: Industrial spraying

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

Environmental Release Categories

ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

Key

SU	Sector of use category
PROC	Process Categories
ERC	Environmental Release Categories

Note: it is strongly advised against uses not covered in the exposure scenario

ICA S.p.A. - Regulatory affairs

Data elaboration: 16/10/2019

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