Safety Data Sheet

Compliant with Annex II of REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **38526032200007**
Name **METAL PROT GRAY S. 150**

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

Description / Use **Antirust Fund.**

1.3. Information on the supplier of the safety data sheet

Business name **Colorificio A. & B. Casati SpA Via**
Address **Valpantena 59 / B - Poiano**
Location and State **37142 VERONA (VR)**
ITALY
tel. 045 550 244
fax 045 550 414

e-mail of the competent person responsible for the safety data sheet **tintotec@casati.it**

1.4. Emergency telephone number

For urgent information contact **Ca 'Granda Niguarda Major Hospital (MI) Tel. 0266101029 A. Gemelli Polyclinic (ROME) Tel. 063054343**
CAV "Bambinio Gesù Pediatric Hospital" Department of Emergency and Acceptance DEA (ROME) Tel. 0668593726
CAV Policlinico "Umberto I" (ROME) Tel. 0649978000
Cardarelli Hospital (NA) Tel. 0817472901
Univ. Foggia Hospital (FG) Tel. 800183459 Papa Giovanni XXII Hospital (BG) Tel. 800883300
CAV National Toxicological Information Center (PV) Tel. 038224444
Careggi Hospital Medical Toxicology Unit (FI) Tel. 0557947819

SECTION 2. Hazards identification

2.1. Substance or mixture classification

The product is classified as dangerous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). The product therefore requires a safety data sheet compliant with the provisions of Regulation (EU) 2015/830. Any additional information regarding risks to health and / or the environment are given in sections. 11 and 12 of this sheet.

Hazard classification and indications:

Flammable liquid, category 3 Hazardous to the aquatic environment, chronic toxicity, category 2	H226	Flammable liquid and vapor.
	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Danger labeling pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.

Hazard pictograms:

Warnings: Caution

SECTION 2. Hazards identification... / >>

Hazard statements:

H226	Flammable liquid and vapor.
H411	Toxic to aquatic life with long lasting effects. Repeated exposure may cause
EUH066	skin dryness or cracking. Contains:
EUH208	2-BUTANONE OXIME
	It can cause an allergic reaction.

Precautionary advice:

P501	Dispose of the product / container in collection points for hazardous or special
P102	waste. Keep out of reach of children.
P210	Keep away from heat sources, hot surfaces, sparks, open flames or other sources of ignition. Not smoking. Wear
P280	protective gloves / clothing and protect eyes / face.
P370 + P378	In case of fire: use carbon dioxide, foam or chemical powder to extinguish. Do not disperse
P273	in the environment.

VOC (Directive 2004/42 / EC):

High performance one-component paints. VOC expressed in g / liter of ready-to-use product:		222.54
Maximum limit:		500.00
- Diluted with:	10.00%	ODORLESS THINNER

2.3. Other dangers

On the basis of available data, the product does not contain PBT or vPvB substances in percentage greater than 0.1%.

SECTION 3. Composition / information on ingredients

3.2. Blends

Contains:

Identification	**Conc.%**	**Classification 1272/2008 (CLP)**
HYDROCARBONS, C9-C11, N-ALKANS, ISOALKANS, CYCLICS, <2% AROMATICS *CAS*		
64742-48-9	12.658	**Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066**
THERE IS *919-857-5*		
INDEX		
Reg. No. *01-2119463258-33*		
Bis (orthophosphate) of trizinc		
CAS *7779-90-0*	2.925	**Aquatic Acute 1 H400 M = 1, Aquatic Chronic 1 H410 M = 1**
THERE IS *231-944-3*		
INDEX *030-011-00-6*		
Reg. No. *01-2119485044-40*		
2-BUTANONE OXIME		
CAS *96-29-7*	0.511	**Carc. 2 H351, Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Sens. 1 H317**
THERE IS *202-496-6*		
INDEX *616-014-00-0*		
Reg. No. *01-2119639477-28-XXXX*		
1-METHYL-2-METHOXYETHYL ACETATE		
CAS *108-65-6*	0.154	**Flam. Liq. 3 H226**
THERE IS *203-603-9*		
INDEX *607-195-00-7*		
Reg. No. *01-2119475791-29-XXXX*		
DIPROPYLEN GLYCOL MONOMETHYL ETHER		
CAS *34590-94-8*	0.019	**Substance with a community workplace exposure limit.**
THERE IS *252-104-2*		
INDEX		
Reg. No. *01-2119450011-60*		
XYLENE (MIXTURE OF ISOMERS)		
CAS *1330-20-7*	0.011	**Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note according to Annex VI of the CLP Regulation: C**
THERE IS *215-535-7*		
INDEX *601-022-00-9*		
Reg. No. *01-2119488216-32-xxxx*		

SECTION 3. Composition / information on ingredients . . . / >>

ETHYLBENZENE
CAS *100-41-4* 0.004 **Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373**
THERE IS *202-849-4*
INDEX *601-023-00-4*
Reg. No. *01-2119489370-35-XXXX*

2-BUTOXYETHANOL
CAS *111-76-2* 0.003 **Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315**
THERE IS *203-905-0*
INDEX *603-014-00-0*
Reg. No. *01-2119475108-36*

2- (2-BUTOXYETHOXY) ETHANOL
CAS *112-34-5* 0.002 **Eye Irrit. 2 H319**
THERE IS *203-961-6*
INDEX *603-096-00-8*
Reg. No. *01-2119475104-44*

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

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove any contact lenses. Wash immediately and abundantly with water for at least 30/60 minutes, opening the eyelids well. Consult a physician immediately.
SKIN: Take off contaminated clothing. Take a shower immediately. Consult a physician immediately.
INGESTION: Give as much water to drink as possible. Consult a physician immediately. Do not induce vomiting unless expressly authorized by your doctor.
INHALATION: Call a doctor immediately. Take the person out into the fresh air, away from the scene of the accident. If breathing stops, give artificial respiration. Take adequate precautions for the rescuer.

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

No specific information on symptoms and effects caused by the product is known.

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

Information not available

SECTION 5. Firefighting measures

5.1. Fire fighting

SUITABLE EXTINGUISHING MEDIA
Extinguishing media are: carbon dioxide, foam, chemical powder. For product leaks and spills that have not caught fire, water spray can be used to disperse flammable vapors and protect those involved in stopping the leak.

UNSUITABLE EXTINGUISHING MEDIA
Do not use water jets. Water is not effective to extinguish the fire however it can be used to cool closed containers exposed to the flame, preventing bursts and explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Overpressure can be created in containers exposed to fire with danger of explosion. Avoid breathing combustion products.

5.3. Recommendations for firefighters

GENERAL INFORMATIONS
Cool the containers with jets of water to avoid product decomposition and the development of substances potentially hazardous to health. Always wear full fire protection equipment. Collect the extinguishing water which must not be discharged into the sewers. Dispose of the contaminated water used for extinguishing and the residue of the fire according to current regulations.

EQUIPMENT
Normal clothing for firefighting, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and fire brigade boots (HO A29 or A30).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop the leak if there is no danger.
Wear suitable protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These indications are valid both for the workers and for emergency interventions.

Keep unequipped people away. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) or heat from the area where the leak occurred.

6.2. Environmental precautions

Prevent the product from entering sewers, surface water, groundwater.

6.3. Methods and materials for containment and cleaning up

Suck up the leaked product into a suitable container. Evaluate the compatibility of the container to be used with the product, checking section 10.
Absorb the remainder with inert absorbent material.
Provide sufficient ventilation of the place affected by the leak. The disposal of contaminated material must be carried out in accordance with the provisions of point 13.

6.4. Reference to other sections

Any information regarding 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 open flames, do not smoke or use matches or lighters. Without adequate ventilation, vapors can accumulate on the ground and catch fire even at a distance, if triggered, with the risk of backfire. Avoid the accumulation of electrostatic charges. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas. Avoid the dispersion of the product in the environment.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in the original container. Store in a cool and well-ventilated place, away from heat sources, open flames, sparks and other sources of ignition. Keep containers away from any incompatible materials, checking section 10.

7.3. Specific end uses

See the exhibition scenarios attached to this safety data sheet.

SECTION 8. Exposure controls / personal protection

8.1. Control parameters

Normative requirements:

DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
GBR	United Kingdom	EH40 / 2005 Workplace exposure limits (Third edition, published 2018)
ITA	Italy	COMMISSION DIRECTIVE (EU) 2017/164 of 31 January 2017
EU	OEL EU	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 91/322 / EEC.
	TLV-ACGIH	ACGIH 2019

SECTION 8. Exposure controls / personal protection

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HYDROCARBONS, C9-C11, N-ALKANS, ISOALKANS, CYCLICS, <2% AROMATICS

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations
		mg / m3	ppm	mg / m3	ppm	
TLV-ACGIH		1200	197			

Health - Derived no-effect level - DNEL / DMEL

	Effects on Local				Effects on workers			
Route of Exposition	Consumers	Systemic	Locals	Systemic	Locals	Systemic	Locals	Systemic
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral				125 mg / kg bw / d				
Inhalation				185 mg / m3				871 mg / m3
Dermal				125 mg / kg bw / d				208 mg / kg bw / d

TITANIUM DIOXIDE

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations
		mg / m3	ppm	mg / m3	ppm	
WEL	GBR	4				RESPIR
WEL	GBR	10				INALAB
TLV-ACGIH		10				

Predicted No Effect Concentration on the Environment - PNEC

Reference value in fresh water	0.184	mg / l
Reference value in sea water	0.0184	mg / l
Reference value for sediments in fresh water	1000	mg / kg
Reference value for sediments in sea water	100	mg / kg
Reference value for STP microorganisms	100	mg / l
Reference value for the food chain (secondary poisoning)	1667	mg / kg
Reference value for the terrestrial compartment	100	mg / kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on Local				Effects on workers			
Route of Exposition	Consumers	Systemic	Locals	Systemic	Locals	Systemic	Locals	Systemic
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral				700 mg / kg bw / d				
Inhalation								10 mg / m3

2-BUTANONE OXIME

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations
		mg / m3	ppm	mg / m3	ppm	
AGW	DEU	1	0.3	8	2.4	LEATHER

SECTION 8. Exposure controls / personal protection

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1-METHYL-2-METHOXYETHYL ACETATE

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations
		mg / m3	ppm	mg / m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
WEL	GBR	274	50	548	100	LEATHER
VLEP	ITA	275	50	550	100	LEATHER
OEL	EU	275	50	550	100	LEATHER

Predicted No Effect Concentration on the Environment - PNEC

Reference value in fresh water	0.635	mg / l
Reference value for sediments in fresh water	3.29	mg / kg
Reference value for sediments in sea water	0.329	mg / kg
Reference value for STP microorganisms	100	mg / l
Reference value for the food chain (secondary poisoning)	0.29	mg / kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on Local				Effects on workers			
Route of Exposition	Consumers	Systemic	Locals	Systemic	Locals	Systemic	Locals	Systemic
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral				1.67 mg / kg bw / d				
Inhalation				33 mg / m3				275 mg / m3
Dermal				54.8 mg / kg bw / d				153.5 mg / kg bw / d

DIPROPYLEN GLYCOL MONOMETHYL ETHER

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations
		mg / m3	ppm	mg / m3	ppm	
AGW	DEU	310	50	310	50	
MAK	DEU	310	50	310	50	
WEL	GBR	308	50			LEATHER
VLEP	ITA	308	50			LEATHER
OEL	EU	308	50			LEATHER
TLV-ACGIH		606	100	909	150	LEATHER

Predicted No Effect Concentration on the Environment - PNEC

Reference value in fresh water	19	mg / l
Reference value in sea water	1.9	mg / l
Reference value for sediments in fresh water	70.2	mg / kg
Reference value for sediments in sea water	7.02	mg / kg
Reference value for STP microorganisms	4168	mg / l
Reference value for the terrestrial compartment	2.74	mg / kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on Local				Effects on workers			
Route of Exposition	Consumers	Systemic	Locals	Systemic	Locals	Systemic	Locals	Systemic
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral			1.67 mg / kg bw / d	36 mg / kg bw / d				
Inhalation				37.2 mg / m3				308 mg / m3
Dermal				121 mg / kg bw / d				283 mg / kg bw / d

SECTION 8. Exposure controls / personal protection

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XYLENE (MIXTURE OF ISOMERS)

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations
		mg / m3	ppm	mg / m3	ppm	
AGW	DEU	440	100	880	200	LEATHER
MAK	DEU	440	100	880	200	LEATHER
WEL	GBR	220	50	441	100	LEATHER
VLEP	ITA	221	50	442	100	LEATHER
OEL	EU	221	50	442	100	LEATHER
TLV-ACGIH		434	100	651	150	

Predicted No Effect Concentration on the Environment - PNEC

Reference value in fresh water	0.327	mg / l
Reference value in sea water	0.327	mg / l
Reference value for sediments in fresh water	12.46	mg / kg
Reference value for sediments in sea water	12.46	mg / kg
Reference value for water, intermittent release	0.327	mg / l
Reference value for STP microorganisms	6.58	mg / l
Reference value for the terrestrial compartment	2.31	mg / kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on Local				Effects on workers			
Route of Exposition	Consumers	Systemic	Locals	Systemic	Locals	Systemic	Locals	Systemic
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral				1.6 mg / kg bw / d				
Inhalation	174 mg / m3	174 mg / m3		14.8 mg / m3	289 mg / m3	289 mg / m3		77 mg / m3
Dermal				108 mg / kg bw / d				180 mg / kg bw / d

ETHYLBENZENE

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations
		mg / m3	ppm	mg / m3	ppm	
AGW	DEU	88	20	176	40	LEATHER
MAK	DEU	88	20	176	40	LEATHER
WEL	GBR	441	100	552	125	LEATHER
VLEP	ITA	442	100	884	200	LEATHER
OEL	EU	442	100	884	200	LEATHER
TLV-ACGIH		87	20			

SECTION 8. Exposure controls / personal protection

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2-BUTOXYETHANOL

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations	
		mg / m3	ppm	mg / m3	ppm		
AGW	DEU	49	10	98 (C)	20 (C)	LEATHER	
MAK	DEU	49	10	98	20	LEATHER	Hinweis
WEL	GBR	123	25	246	50	LEATHER	
VLEP	ITA	98	20	246	50	LEATHER	
OEL	EU	98	20	246	50	LEATHER	
TLV-ACGIH		97	20				

Predicted No Effect Concentration on the Environment - PNEC

Reference value in fresh water	8.8	mg / l
Reference value in sea water	0.88	mg / l
Reference value for sediments in fresh water	34.6	mg / kg
Reference value for sediments in sea water	3.46	mg / kg
Reference value for water, intermittent release	9.1	mg / l
Reference value for STP microorganisms	463	mg / l
Reference value for the terrestrial compartment	2.33	mg / kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on Local				Effects on workers			
Route of Exposition	Consumers	Systemic	Locals	Systemic	Locals	Systemic	Locals	Systemic
	acute	acute	chronic	chronic	acute	acute	chronic	chronic
Oral		26.7 mg / kg bw / d		6.3 mg / kg bw / d				
Inhalation	147 mg / m3	426 mg / m3		59 mg / m3	246 mg / m3	1091 mg / m3		98 mg / m3
Dermal		89 mg / kg bw / d		75 mg / kg bw / d		89 mg / kg bw / d		125 mg / kg bw / d

2- (2-BUTOXYETHOXY) ETHANOL

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min		Notes / Observations	
		mg / m3	ppm	mg / m3	ppm		
AGW	DEU	67	10	100.5 (C)	15 (C)		Hinweis
MAK	DEU	67	10	100.5	15		Hinweis
WEL	GBR	67.5	10	101.2	15		
VLEP	ITA	67.5	10	101.2	15		
OEL	EU	67.5	10	101.2	15		
TLV-ACGIH		66	10				

Legend:
(C) = CEILING; INALAB = Inhalable Fraction; RESPIR = Breathing Fraction; TORAC = Thoracic Fraction.
VND = hazard identified but no DNEL / PNEC available; NEA = no exposure expected; NPI = no hazard identified.

8.2. Exposure controls

Considering that the use of adequate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local exhaust.
For the choice of personal protective equipment, if necessary, seek advice from your chemical suppliers. Personal protective equipment must bear the CE mark which certifies their compliance with current regulations.
For the choice of risk management measures and operational conditions, also consult the attached exposure scenarios.
HAND PROTECTION
Protect hands with category III work gloves (ref. Standard EN 374).
For the final choice of the material of the work gloves it is necessary to consider: compatibility, degradation, breakage time and permeation.
In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is not foreseeable. Gloves have a wear time that depends on the duration and method of use.
SKIN PROTECTION
Wear category I work clothes with long sleeves and safety footwear for professional use (ref. Regulation 2016/425 and standard EN ISO 20344). Wash with soap and water after removing protective clothing.
Consider providing antistatic clothing if the workplace presents a risk of explosivity. EYE PROTECTION

It is recommended to wear airtight protective goggles (ref. Standard EN 166). RESPIRATORY PROTECTION
In case of exceeding the threshold value (e.g. TLV-TWA) of the substance or of one or more of the substances present in the product, it is advisable to wear a mask with a type A filter whose class (1, 2 or 3) must be chosen in relation to the limit concentration of use. (ref.

SECTION 8. Exposure controls / personal protection

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standard EN 14387). If there are gases or vapors of a different nature and / or gases or vapors with particles (aerosols, fumes, mists, etc.), combined filters must be provided. technical measures adopted are not sufficient to limit worker exposure to the threshold values taken into consideration. The protection offered by the masks is however limited.

In the event that the substance in question is odorless or its olfactory threshold is higher than the relative TLV-TWA and in the event of an emergency, wear an open-circuit compressed air breathing apparatus (ref. Standard EN 137) or a self-contained breathing apparatus. outdoor air (ref. EN 138 standard). For the correct choice of the respiratory protection device, refer to the EN 529 standard.

ENVIRONMENTAL EXPOSURE CONTROLS
Emissions from manufacturing processes, including those from ventilation equipment should be controlled for compliance with environmental protection legislation.
Product residues must not be discharged without control into waste water or water courses.
For information on controlling environmental exposure, refer to the exposure scenarios attached to this safety data sheet.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value	Information
Physical state	liquid	
Color	Grey	
Odor	aliphatic hydrocarbons	
Odor threshold	Unavailable	
pH	Not applicable	
Melting or freezing point Initial	Unavailable	
boiling point	Unavailable	
Boiling range Flash	Unavailable	
point Evaporation rate	23 ≤ T ≤ 60 ° C	
	Unavailable	
Flammability of solids and	Unavailable	
gases Lower flammability limit	Unavailable	
Upper flammability limit Lower	Unavailable	
explosive limit Upper explosive	Unavailable	
limit Vapor pressure	Unavailable	
	Unavailable	
Vapor density	Unavailable	
Relative density	1.7	
Solubility	insoluble in water	
Partition coefficient: n-octanol / water: Auto-	Not applicable	
ignition temperature	Unavailable	
Decomposition temperature	Unavailable	
Viscosity	> 20.5 mm2 / sec (40 ° C)	
Explosive properties	Not available	
Oxidizing properties	Unavailable	

9.2. Other information

VOC (Directive 2004/42 / EC):	14.40% - 244.79	g / liter

SECTION 10. Stability and reactivity

10.1. Reactivity

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

2-BUTANONE OXIME
It decomposes under the effect of heat.
1-METHYL-2-METHOXYETHYL ACETATE
Stable under normal conditions of use and storage.
With air it can slowly give peroxides which explode due to a rise in temperature.

DIPROPYLEN GLYCOL MONOMETHYL ETHER
Forms peroxides with: air.
2-BUTOXYETHANOL
It decomposes under the effect of heat.

SECTION 10. Stability and reactivity... / >>

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Vapors can form explosive mixtures with air.

2-BUTANONE OXIME
Reacts violently with: strong oxidizing agents, acids.
Above the flash point (69 ° C / 156 ° F) explosive mixtures can form with air.

1-METHYL-2-METHOXYETHYL ACETATE
May react violently with: oxidizing substances, strong acids, alkali metals.
DIPROPYLEN GLYCOL MONOMETHYL ETHER
May react violently with: strong oxidizing agents.
XYLENE (MIXTURE OF ISOMERS)
Stable under normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.
ETHYLBENZENE
Reacts violently with: strong oxidants Attacks various types of plastics May form explosive mixtures with: air. 2-BUTOXYETHANOL
May react dangerously with: aluminum, oxidizing agents.Peroxides form with: air. 2-(2-BUTOXYETHOXY) ETHANOL
May react with: oxidizing substances.May form peroxides with: oxygen.Develop hydrogen in contact with: aluminum.May form explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating. Avoid the accumulation of electrostatic charges. Avoid any source of ignition.

DIPROPYLEN GLYCOL MONOMETHYL ETHER
Avoid exposure to: heat sources Possibility of explosion. 2-BUTOXYETHANOL
Avoid exposure to: heat sources, open flames. 2- (2-BUTOXYETHOXY) ETHANOL
Avoid exposure to: air.

10.5. Incompatible materials

2-BUTANONE OXIME
Incompatible with: oxidizing substances, strong acids. 1-METHYL-2-METHOXYETHYL ACETATE
Incompatible with: oxidizing substances, strong acids, alkaline metals.
2- (2-BUTOXYETHOXY) ETHANOL
Incompatible with: oxidizing substances, strong acids, alkaline metals.

10.6. Hazardous decomposition products

Due to thermal decomposition or in the event of fire, gases and vapors potentially harmful to health can be released.

2-BUTANONE OXIME
It can develop: nitrogen oxides, carbon oxides.
ETHYLBENZENE
It can develop: methane, styrene, hydrogen, ethane. 2-BUTOXYETHANOL
Can develop: hydrogen. 2- (2-BUTOXYETHOXY) ETHANOL
Can develop: hydrogen.

SECTION 11. Toxicological information

In the absence of experimental toxicological data on the product itself, any health hazards of the product have been assessed on the basis of the properties of the substances contained, according to the criteria established by the reference legislation for classification.
Therefore, consider the concentration of the individual dangerous substances possibly mentioned in sect. 3, to evaluate the toxicological effects deriving from exposure to the product.

11.1. Information on toxicological effects

Metabolism, kinetics, mechanism of action and other information

SECTION 11. Toxicological information... / >>

1-METHYL-2-METHOXYETHYL ACETATE
The main route of entry is the skin, while the respiratory one is less important, given the low vapor pressure of the product.

Information on likely routes of exposure

WORKERS 1-METHYL-2-METHOXYETHYL
ACETATE: inhalation; contact with the skin.

XYLENE (MIXTURE OF ISOMERS) WORKERS:
inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

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

2- (2-BUTOXYETHOXY) ETHANOL WORKERS:
inhalation; contact with the skin.

Delayed and immediate effects and chronic effects from short and long term exposure

1-METHYL-2-METHOXYETHYL ACETATE
Above 100 ppm there is irritation of the ocular, nasal and oropharyngeal mucous membranes. At 1000 ppm there are balance disturbances and severe eye irritation. Clinical and biological tests performed on the exposed volunteers did not reveal any anomalies. Acetate produces greater skin and eye irritation on direct contact. No chronic effects on humans are reported (INCR, 2010).

XYLENE (MIXTURE OF ISOMERS)
Toxic action on the central nervous system (encephalopathies); irritant action on the skin, conjunctiva, cornea and respiratory system.

ETHYLBENZENE
Like the benzene homologs, it can exert an acute action on the central nervous system, with depression, narcosis, often preceded by vertigo and associated with headache (Ispesl). It is irritating to the skin, conjunctivae and respiratory system.

2- (2-BUTOXYETHOXY) ETHANOL
It can be absorbed by inhalation, ingestion and skin contact; it is irritating to the skin and especially to the eyes. Damage to the spleen can occur. At room temperature the danger of inhalation is unlikely, due to the low vapor pressure of the substance.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)
Alcohol intake interferes with the metabolism of the substance, inhibiting it. Consumption of ethanol (0.8 g / kg) before a 4-hour exposure to xylen vapors (145 and 280 ppm) causes a 50% decrease in the excretion of metilippuric acid, while the blood concentration of xylenes rises about 1.5-2 times. At the same time there is an increase in the secondary side effects of ethanol. The metabolism of xylenes is enhanced by phenobarbital and 3-methyl-colanthrene-type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with glycine, resulting in decreased urinary excretion of metilippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:	Not classified (no relevant component) Not
LD50 (Oral) of the mixture: LD50	classified (no relevant component) Not
(Dermal) of the mixture:	classified (no relevant component)

HYDROCARBONS, C9-C11, N-ALKANS, ISOALKANS, CYCLICS, <2% AROMATICS

LD50 (Dermal)	> 5000 mg / kg Rabbit
LC50 (Inhalation)	> 4951 mg / l / 4h rat

XYLENE (MIXTURE OF ISOMERS)

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

DIPROPYLEN GLYCOL MONOMETHYL ETHER

LD50 (Oral)	5135 mg / kg Rat
LD50 (Dermal)	9510 mg / kg rabbit

SECTION 11. Toxicological information... / >>

1-METHYL-2-METHOXYETHYL ACETATE

LD50 (Oral)	> 5000 mg / kg Rat male
LD50 (Dermal)	> 5000 mg / kg Rabbit
LC50 (Inhalation)	> 2000 ppm / 4h Male rat

2- (2-BUTOXYETHOXY) ETHANOL

LD50 (Oral)	3384 mg / kg Rat
LD50 (Dermal)	2700 mg / kg Rabbit

ETHYLBENZENE

LD50 (Oral)	3500 mg / kg Rat
LD50 (Dermal)	15354 mg / kg Rabbit
LC50 (Inhalation)	17.2 mg / l / 4h Rat

2-BUTOXYETHANOL

LD50 (Oral)	615 mg / kg Rat
LD50 (Dermal)	405 mg / kg Rabbit
LC50 (Inhalation)	2.2 mg / l / 4h Rat

2-BUTANONE OXIME

LD50 (Oral)	2400 mg / kg Rat
LD50 (Dermal)	> 1000 mg / kg Rabbit
LC50 (Inhalation)	20 mg / l / 4h Rat

SKIN CORROSION / SKIN IRRITATION

Repeated exposure can cause skin dryness and cracking.

SERIOUS EYE DAMAGE / EYE IRRITATION

It does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITIZATION

It can cause an allergic reaction.
Contains:
2-BUTANONE OXIME

MUTAGENICITY ON GERMINAL CELLS

It does not meet the classification criteria for this hazard class

CARCINOGENICITY

It does not meet the classification criteria for this hazard class

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) claims that "the data were found to be inadequate for an assessment of carcinogenic potential."

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

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

REPRODUCTION TOXICITY

It does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

It does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

It does not meet the classification criteria for this hazard class

SECTION 11. Toxicological information... / >>

DANGER IN CASE OF SUCTION

Does not meet the classification criteria for this hazard class Viscosity:> 20.5 mm2 / sec (40 ° C)

SECTION 12. Ecological information

The product is to be considered as dangerous for the environment and has toxicity to aquatic organisms with long-term negative effects for the aquatic environment.

12.1. Toxicity

HYDROCARBONS, C9-C11, N-ALKANS, ISOALKANS, CYCLICS, <2% AROMATICS

LC50 - Fish	> 1000 mg / l / 96h Oncorhynchus mykiss
EC50 - Crustaceans	> 1000 mg / l / 48h Daphnia magna
EC50 - Algae / Aquatic Plants	> 1000 mg / l / 72h Pseudokirchneriella subcapitata

Trizinc bis (orthophosphate)

LC50 - Pisces	> 100 mg / l / 96h
EC50 - Crustaceans	> 100 mg / l / 48h
Chronic NOEC Crustaceans	> 1 mg / l

XYLENE (MIXTURE OF ISOMERS)

LC50 - Pisces	2.6 mg / l / 96h Oncorhyncus mykiss
Chronic NOEC for Pisces	> 1.3 mg / l Salmo gairdneri
Chronic NOEC Crustaceans	1.17 mg / l

DIPROPYLEN GLYCOL MONOMETHYL ETHER

LC50 - Pisces	> 1000 mg / l / 96h Poecilia reticulata
Chronic NOEC Crustaceans	> 0.5 mg / l Daphnia magna (22d)

1-METHYL-2-METHOXYETHYL ACETATE

LC50 - Fish	> 100 180 mg / l / 96h Oncorhynchus mykiss
EC50 - Crustaceans	500 mg / l / 48h Daphnia magna
EC50 - Algae / Aquatic Plants	> 1000 mg / l / 72h
NOEC Chronic Fish	> 47.5 mg / l Oryzias latipes (Medaka) 14 days
Chronic NOEC Crustaceans	> 100 mg / l Dalphina magna 21 days
Chronic NOEC for Algae / Aquatic Plants	> 1000 mg / l Selenastrum capricornutum 96h

2-BUTOXYETHANOL

LC50 - Pisces	1474 mg / l / 96h Oncorhynchus mykiss
EC50 - Crustaceans	1550 mg / l / 48h Daphnia magna
EC50 - Algae / Aquatic Plants	1840 mg / l / 72h Pseudokirchneriella subcapitata
NOEC Chronic Fish	> 100 mg / l Brachydanio rerio (21d)
Chronic NOEC Crustaceans	100 mg / l Daphnia magna (21d)

12.2. Persistence and degradability

HYDROCARBONS, C9-C11, N-ALKANS, ISOALKANS, CYCLICS, <2% AROMATICS
Rapidly degradable

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

DIPROPYLEN GLYCOL MONOMETHYL ETHER
Solubility in water 1000 - 10000 mg / l
Quickly degradable

1-METHYL-2-METHOXYETHYL ACETATE
Rapidly degradable

2- (2-BUTOXYETHOXY) ETHANOL
Solubility in water 1000 - 10000 mg / l
Quickly degradable

SECTION 12. Ecological information... / >>

ETHYLBENZENE	
Solubility in water	1000 - 10000 mg / l
Quickly degradable	
2-BUTOXYETHANOL	
Solubility in water	1000 - 10000 mg / l
Quickly degradable	
2-BUTANONE OXIME	
Solubility in water	1000 - 10000 mg / l
Inherently degradable	

12.3. Bioaccumulation potential

XYLENE (MIXTURE OF ISOMERS) Partition coefficient: n-octanol / water BCF	3.12 25.9
DIPROPYLENE GLYCOL MONOMETHYL ETHER Partition coefficient: n-octanol / water	0.0043
1-METHYL-2-METHOXYETHYL ACETATE Partition coefficient: n-octanol / water	1.2
2- (2-BUTOXYETHOXY) ETHANOL Partition coefficient: n-octanol / water	1
ETHYLBENZENE Partition coefficient: n-octanol / water	3.6
2-BUTOXYETHANOL Partition coefficient: n-octanol / water	0.81
2-BUTANONE OXIME Partition coefficient: n-octanol / water BCF	0.63 0.5

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS) Partition coefficient: soil / water	2.73
DIPROPYLEN GLYCOL MONOMETHYL ETHER Partition coefficient: soil / water	0.28
2-BUTOXYETHANOL Partition coefficient: soil / water	0.45
2-BUTANONE OXIME Partition coefficient: soil / water	0.55

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain PBT or vPvB substances in percentage greater than 0.1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse if possible. Product residues are to be considered special hazardous waste. The dangerousness of the waste that partially contains this product must be assessed on the basis of the laws in force.
Disposal must be entrusted to an authorized waste management company, in compliance with national and possibly local regulations.

SECTION 13. Disposal considerations

. . . / >>

The transport of waste may be subject to ADR.
CONTAMINATED PACKAGING
Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 1263

14.2. UN proper shipping name

ADR / RID: PAINTS or MATERIALS SIMILAR TO PAINTS
IMDG: PAINT or PAINT RELATED MATERIAL (Trizinc bis (orthophosphate))
IATA: PAINT or PAINT RELATED MATERIAL

14.3. Transport hazard classes

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Dangers for the environment

ADR / RID: Dangerous for the environment

IMDG: Marine Pollutant

IATA: NO

For air transport, the environmental hazard mark is mandatory only for UN Nos. 3077 and 3082.

14.6. Special precautions for users

ADR / RID:	HIN - Kemler: 30 Special provision: - EMS: FE, S	Limited Quantity: 5 L	Tunnel restriction code: (D / E)
IMDG:	-AND	Limited quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packing instructions: 366
	Pass .:	Maximum quantity: 60 L	Packing instructions: 355
	Special instructions:	A3, A72, A192	

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

Not relevant information

SECTION 15. Regulatory information

15.1. Health, safety and environmental legislation and regulations specific to the substance or mixture

Seveso Category - Directive 2012/18 / EC: P5c-E2

SECTION 15. Regulatory information . . . / >>

Restrictions relating to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006

Product

Point 3 - 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain SVHC substances in percentage greater than 0.1%.

Substances subject to authorization (Annex XIV REACH)

None

Substances subject to export notification obligation Reg. (EC) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Sanitary checks

Information not available

VOC (Directive 2004/42 / EC):

High performance one-component paints.

Legislative Decree 152/2006 and subsequent amendments

Emissions according to Part V Annex I:

TAB. D.	Class 3	00.07%
TAB. D.	Class 4	00.01%

15.2. Chemical safety assessment

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

SECTION 16. Other information

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

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Carc. 2	Carcinogenicity, category 2 Acute
Acute Tox. 4	toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2 Serious eye
Eye Dam. 1	damage, category 1
Eye Irrit. 2	Eye irritation, category 2 Skin
Skin Irrit. 2	irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3 Skin
Skin Sens. 1	sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H225	Liquid and highly flammable vapors.
H226	Flammable liquid and vapor.
H351	Suspected of causing cancer.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	It can be fatal if swallowed and if it enters the respiratory tract. May cause
H373	damage to organs through prolonged or repeated exposure. Causes serious
H318	eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	It can irritate the respiratory tract.
H317	May cause an allergic skin reaction. It can
H336	cause drowsiness or dizziness.

SECTION 16. Other information... / >>

H400	Very toxic to aquatic organisms.
H410	Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with
H411	long lasting effects. Harmful to aquatic life with long lasting effects.
H412	Repeated exposure may cause skin dryness or cracking.
EUH066	

LEGEND:
- ADR: European agreement for the transport of dangerous goods by road
- CAS NUMBER: Number of the Chemical Abstract Service
- EC50: Concentration affecting 50% of the population under test
- CE NUMBER: Identification number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived no effect level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System for Classification and Labeling of Chemicals
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Concentration of immobilization of 50% of the population subject to testing
- IMDG: International maritime code for the transport of dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in Annex VI of the CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulating and toxic according to REACH
- PEC: Predicted environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predicted No Effect Concentration
- REACH: EC Regulation 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration which must not be exceeded during any moment of occupational exposure.
- TWA STEL: Short term exposure limit
- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulating according to REACH
- WGK: Water hazard class (Germany).

GENERAL BIBLIOGRAPHY:
1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 790/2009 of the European Parliament (I Atp. CLP)
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
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) 2018/1480 (XIII Atp. CLP)
16. Regulation (EU) 2019/521 (XII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- NI Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA Agency website
- Database of SDS models of chemical substances - Ministry of Health and National Institute of Health

Note for the user:
The information contained in this sheet is based on the knowledge available to us at the date of the latest version. The user

SECTION 16. Other information... / >>

must ensure the suitability and completeness of the information in relation to the specific use of the product. This document must not be interpreted as a guarantee of any specific property of the product.
Since the use of the product does not fall under our direct control, the user is obliged to observe the laws and regulations in force on hygiene and safety under his own responsibility. No responsibility is assumed for improper use.
Provide adequate training to personnel assigned to the use of chemical products.

The classification of the product is based on the calculation methods set out in Annex I of CLP, unless otherwise indicated in sections 11 and 12.

The methods for evaluating the chemical-physical properties are reported in section 9.

Changes from the previous revision Changes were
made to the following sections:
02/03/06/07/08/09/10/11/12/14/15/16 / Exhibition Scenarios. TLVs
changed in section 8.1 for the following countries:
GBR, TLV-ACGIH, DEU, ITA,

Exhibition Scenarios

Substance	HYDROCARBONS, C9-C11, N-ALKANS, ISOALKANS, CYCLICS, <2% AROMATICS
Scenario title	Use in coatings Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics 1
Revision n.	
File	IT_ DEAROMATIZED WATER RAY_1.pdf
Substance	2-BUTANONE OXIME
Scenario title	Use in 2-butanone oxime coatings 1
Revision n.	
File	IT_2-BUTANONE OXIME_1.pdf
Substance	1-METHYL-2-METHOXYETHYL ACETATE Use in
Scenario title	coatings methoxypropanol acetate 1
Revision n.	
File	IT_ METHOXYPROPANOL ACETATE_1.pdf
Substance	XYLENE (MIXTURE OF ISOMERS)
Scenario title	Use in xylene coatings (mixture of isomers) 1
Revision n.	
File	IT_XYLENE (MIXTURE OF ISOMERS) _1.pdf
Substance	2-BUTOXYETHANOL
Scenario title	Use in butylglycol coatings 1
Revision n.	
File	IT_BUTILGLICOLE_1.pdf