



Safety data sheet

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

1.1. Product identifier

Code: **VM900**
Product name: **ALUMINIUM MED. GRAIN METALLIC**

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

Intended use: **Paint for wood**

Identified Uses	Industrial	Professional	Consumer
Pertinent description of use:	✓	✓	-

1.3. Details of the supplier of the safety data sheet

Name: **INDUSTRIA CHIMICA ADRIATICA S.P.A.**
Full address: **Via S. Pertini, 52**
District and Country: **62012 Civitanova Marche (MC) ITALY**
Tel.: **+39 0733 8080**
Fax: **+39 0733 808140**
e-mail address of the competent person responsible for the Safety Data Sheet: **icalab1@icaspa.com**
Product distribution by: **INDUSTRIA CHIMICA ADRIATICA S.p.A. - Regulatory Affairs**

1.4. Emergency telephone number

For urgent inquiries refer to: **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

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 2	H225	Highly flammable liquid and vapour.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms:



**SECTION 2. Hazards identification** ... / >>

Signal words: Danger

Hazard statements:

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains: Methyl methacrylate May produce an allergic reaction.

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.
P280	Wear protective gloves / eye protection / face protection.
P301+P310	IF SWALLOWED: immediately call a POISON CENTER or doctor.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: use chemical powder to extinguish.

Contains: Xylene, mixture of isomers
N-butyl acetate
Butanone
1-ethoxy-2-propanol acetate

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients**3.1. Substances**

Information not relevant

3.2. Mixtures**Contains:**

Identification	x = Conc. %	Classification 1272/2008 (CLP)
Xylene, mixture of isomers		
CAS 1330-20-7	25,5 ≤ x < 27	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, Note C
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
N-butyl acetate		
CAS 123-86-4	22,5 ≤ x < 24	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC 204-658-1		
INDEX 607-025-00-1		
Reg. no. 01-2119485493-29-XXXX		
Butanone		
CAS 78-93-3	18,5 ≤ x < 20	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC 201-159-0		
INDEX 606-002-00-3		
Reg. no. 01-2119457290-43-XXXX		
1-ethoxy-2-propanol acetate		
CAS 54839-24-6	4,5 ≤ x < 5	Flam. Liq. 3 H226, STOT SE 3 H336
EC 259-370-9		
INDEX 603-177-00-8		
Reg. no. 01-2119475116-39-XXXX		

**SECTION 3. Composition/information on ingredients** ... / >>**Aluminium powder (stabilized)**CAS 7429-90-5 1,5 ≤ x < 2 **Flam. Sol. 2 H228, Water-react. 2 H261**

EC 231-072-3

INDEX 013-002-00-1

Reg. no. 01-2119529243-45-XXXX

EthylbenzeneCAS 100-41-4 1 ≤ x < 1,5 **Flam. Liq. 2 H225, 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**

EC 202-849-4

INDEX 601-023-00-4

Reg. no. 01-2119489370-35-XXXX

Methyl methacrylateCAS 80-62-6 0,15 ≤ x < 0,2 **Flam. Liq. 2 H225, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1 H317, Note D**

EC 201-297-1

INDEX 607-035-00-6

Reg. no. 01-2119452498-28-0000

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

SECTION 4. First aid measures**4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

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

INHALATION: 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.

Obtain medical attention if soreness or redness persists.

Remove contact lens if easily possible.

Never give anything by mouth to an unconscious person.

Do not under any circumstances induce vomiting.

If vomiting should occur spontaneously keep airway clear.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures**5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

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

UNSUITABLE EXTINGUISHING EQUIPMENT

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

Extinguishing media which must not be used for safety reasons:

Water jet.

5.2. Special hazards arising from the substance or mixture**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

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

Methyl methacrylate

Heat may cause the product to polymerise, which could lead to explosion.

Thermal decomposition can lead to the evolution of irritant vapour.

Product may polymerize at high temperatures.

**SECTION 5. Firefighting measures** ... / >>**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).

Cool the containers exposed to the fire with water.

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. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. 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. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. 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 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.

Always keep the containers tightly closed.

Store at temperatures between 5°C and 35°C.

Keep away from strong bases, peroxides, free radical.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Storage class TRGS 510 (Germany): 3

7.3. Specific end use(s)

Information not available

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

Regulatory References:

BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г
CZE	Česká Republika	Nariadení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FIN	Suomi	HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja terveystieteiden tutkimuskeskus julkaisuja 2012:5
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Council of Netherlands (SER) Values, AF 2011:18
NOR	Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da Republica I 26; 2012-02-06
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 20. júna 2007
SVN	Slovenija	Uradni list Republike Slovenije 15. 6. 2007
EU	OEL EU	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 2016

Xylene, mixture of isomers**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		SKIN	A4, IBE
		mg/m3	ppm	mg/m3	ppm		
VLEP	ITA	434	100	651	150	SKIN	A4, IBE
OEL	EU	221	50	442	100	SKIN	

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,32	mg/l
Normal value in marine water	0,32	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value for the terrestrial compartment	2,31	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Chronic local	Acute local	Acute systemic	Chronic systemic
Oral			VND	1.6 mg/kg				
Inhalation			VND	14.8 mg/m3	289 mg/m3	77 mg/m3	221 mg/m3	77 mg/m3
Skin			VND	108 mg/kg			VND	180 mg/kg/d



SECTION 8. Exposure controls/personal protection ... / >>

N-butyl acetate

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU		150		200

Predicted no-effect concentration - PNEC

Normal value in fresh water		0,18	mg/l
Normal value in marine water		0,018	mg/l
Normal value for fresh water sediment		0,981	mg/kg
Normal value for marine water sediment		0,0981	mg/kg
Normal value of STP microorganisms		35,6	mg/l
Normal value for the terrestrial compartment		0,0903	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Chronic local	Acute local	Acute systemic	Chronic systemic
Oral			3,4 mg/kg	VND				
Inhalation	859.7 mg/m3	859.7 mg/m3	102,34 mg/m3	102,34 mg/m3	960 mg/m3	960 mg/m3	480 mg/m3	480 mg/m3
Skin			VND	3,4 mg/kg			VND	7 mg/kg

Butanone

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	600	200	900	300

Predicted no-effect concentration - PNEC

Normal value in fresh water		55,8	mg/l
Normal value in marine water		55,8	mg/l
Normal value for the terrestrial compartment		22,5	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Chronic local	Acute local	Acute systemic	Chronic systemic
Oral	VND	31 mg/kg						
Inhalation	VND	106 mg/m3					VND	600 mg/m3
Skin	VND	412 mg/kg/24h					VND	1161 mg/kg/24h

1-ethoxy-2-propanol acetate

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	300	50		

Predicted no-effect concentration - PNEC

Normal value in fresh water		1,3	mg/l
Normal value in marine water		0,13	mg/l
Normal value for fresh water sediment		6,4	mg/kg
Normal value for marine water sediment		0,64	mg/kg
Normal value for the terrestrial compartment		1,34	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Chronic local	Acute local	Acute systemic	Chronic systemic
Oral			VND	13,1 mg/kg/24h				
Inhalation	VND	365 mg/m3	VND	181 mg/m3	VND	608 mg/m3	VND	302 mg/m3
Skin			VND	62 mg/kg/24h			VND	103 mg/kg/24h



SECTION 8. Exposure controls/personal protection ... / >>

Ethylbenzene

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
VLEP	ITA	442	100	884	200	SKIN
OEL	EU	442	100	884	200	SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,1	mg/l
Normal value in marine water	0,01	mg/l
Normal value for fresh water sediment	13,7	mg/l
Normal value for the terrestrial compartment	2,68	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Chronic local	Acute local	Acute systemic	Chronic systemic
Inhalation					293 mg/m3	VND	VND	77 mg/m3
Skin							VND	180 mg/kg/d

Methyl methacrylate

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	50				
TLV	CZE	50		150		SKIN
AGW	DEU	210	50	420	100	
MAK	DEU	210	50	420	100	
TLV	DNK	102	25			
VLA	ESP		50		100	
HTP	FIN	42	10	210	50	
VLEP	FRA	205	50	410	100	
WEL	GBR	208	50	416	100	
TLV	GRC		50		100	
GVI	HRV	208	50	416	100	
AK	HUN	210		210		SKIN
VLEP	ITA		50		100	
OEL	NLD	205	50	410	100	
TLV	NOR	100	25			
NDS	POL	100		300		
VLE	PRT		50		100	
NPHV	SVK	210	50	420		
MV	SVN	210	50			
OEL	EU		50		100	
TLV-ACGIH		205	50	410	100	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

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.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC 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.

**SECTION 8. Exposure controls/personal protection ... / >>****EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

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

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

Protection for hands:

Do not use natural rubber gloves. Do not wear PVC gloves as PVC absorbs acrylates.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged. [Es. mask with filter typo A (vapors) and/or P (powders) - Norma EN141].

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	liquid
Colour	grey
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	> 79 °C
Boiling range	Not available
Flash point	-18 ≤ T ≤ 23 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	> 1,0000
Relative density	0,93
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

Total solids (250°C / 482°F)	22,85 %		
VOC (Directive 2010/75/EC) :	77,15 %	- 717,47	g/litre
VOC (volatile carbon) :	56,47 %	- 525,14	g/litre

SECTION 10. Stability and reactivity**10.1. Reactivity**

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

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

Methyl methacrylate

May polymerise on contact with: ammonia, organic peroxides, persulphates. Risk of explosion on contact with: dibenzoyl peroxide, di-tert-butyl peroxide, propionaldehyde. May react dangerously with: strong oxidising agents. Forms explosive mixtures with: air.

10.4. Conditions to avoid

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

Methyl methacrylate

Avoid exposure to: heat, UV rays. Avoid contact with: oxidising substances, reducing substances, acids, bases.

Temperature above 60 °C. Direct exposure to sunlight. Contact with heat sources.

10.5. Incompatible materials

Strong bases. Peroxides. Free radical.

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.

Methyl methacrylate

When heated to decomposition releases: harsh fumes, zinc alloys.

Hazardous polymerization can occur when heated or exposed to direct sunlight.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

> 20 mg/l

LD50 (Oral) of the mixture:

Not classified (no significant component)

LD50 (Dermal) of the mixture:

>2000 mg/kg

**SECTION 11. Toxicological information ... / >>**

Ethylbenzene	
LD50 (Oral)	3500 mg/kg Rat
LD50 (Dermal)	17800 mg/kg Rabbit
LC50 (Inhalation)	17,6 mg/l/4h Rat
Aluminium powder (stabilized)	
LD50 (Oral)	> 2000 mg/kg Rat
LC50 (Inhalation)	> 5 mg/l/4h Rat
Xylene, mixture of isomers	
LD50 (Oral)	5627 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rabbit
LC50 (Inhalation)	6700 ppm/4h Rat
1-ethoxy-2-propanol acetate	
LD50 (Oral)	> 5000 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rabbit
N-butyl acetate	
LD50 (Oral)	> 10000 mg/kg Rat
LD50 (Dermal)	> 14000 mg/kg Rabbit
LC50 (Inhalation)	> 21,1 mg/l/4h Rat
Butanone	
LD50 (Oral)	> 2193 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rabbit
LC50 (Inhalation)	32000 mg/m ³ /4h Mouse
Methyl methacrylate	
LD50 (Oral)	> 5000 mg/kg Rat
LD50 (Dermal)	> 5000 Rabbit
LC50 (Inhalation)	> 29,8 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

Methyl methacrylate

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD



Toxic for aspiration

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

Ethylbenzene LC50 - for Fish	48,5 mg/l/96h Fish
Xylene, mixture of isomers LC50 - for Fish Chronic NOEC for Fish Chronic NOEC for Algae / Aquatic Plants	2,6 mg/l/96h > 1,3 mg/l > 1,57 mg/l
1-ethoxy-2-propanol acetate LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants	> 100 mg/l/96h > 100 mg/l/48h > 100 mg/l/72h
N-butyl acetate LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants	18 mg/l/96h Fish 44 mg/l/48h Daphnia 648 mg/l/72h Desmodesmus subspicatus
Butanone LC50 - for Fish EC50 - for Crustacea	2993 mg/l/96h Fish 308 mg/l/48h Daphnia
Methyl methacrylate LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants Chronic NOEC for Fish Chronic NOEC for Crustacea Chronic NOEC for Algae / Aquatic Plants	> 79 mg/l/96h 69 mg/l/48h > 110 mg/l/72h > 9,4 mg/l 37 mg/l > 110 mg/l

12.2. Persistence and degradability

Aluminium powder (stabilized)
Degradability: information not available

Xylene, mixture of isomers
Rapidly degradable

1-ethoxy-2-propanol acetate
Rapidly degradable

N-butyl acetate
Rapidly degradable

Butanone
Rapidly degradable

Methyl methacrylate
Rapidly degradable

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

**SECTION 12. Ecological information ... / >>****12.5. Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

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

ADR / RID, IMDG, IATA: 1263

14.2. UN proper shipping name

ADR / RID: PAINT
IMDG: PAINT
IATA: PAINT

14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3



IMDG: Class: 3 Label: 3



IATA: Class: 3 Label: 3

**14.4. Packing group**

ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33 Special Provision: 640D	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
IMDG:	EMS: F-E, <u>S-E</u>	Limited Quantities: 5 L	
IATA:	Cargo: Pass.: Special Instructions:	Maximum quantity: 60 L Maximum quantity: 5 L A3, A72, A192	Packaging instructions: 364 Packaging instructions: 353

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

Information not relevant

**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EC: P5c

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

Product	Point
	3 - 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (VwVwS 2005)

WGK 2: Hazard to waters

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture.

SECTION 16. Other information

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

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Flam. Sol. 2	Flammable solid, category 2
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H261	In contact with water releases flammable gases.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.

**SECTION 16. Other information ... / >>****H412**
EUH066Harmful to aquatic life with long lasting effects.
Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:



INDUSTRIA CHIMICA ADRIATICA S.P.A.

VM900 - ALUMINIUM MED. GRAIN METALLIC

Revision nr.8
Dated 04/06/2018
Printed on 04/06/2018
Page n. 15 / 15

EN

SECTION 16. Other information ... / >>

01 / 02 / 03 / 04 / 05 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 14 / 15.