

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING



1.1. Product identifier

Product name: METALLEX

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

Material dedicated for laser cutting and engraving.

1.3. Details of the supplier of the safety data sheet

Registered company name: GRAVOTECH MARKING SAS.

Address: 56, avenue Jean Jaurès. 10600. La Chapelle Saint Luc. France.

Telephone: +33 (0)3 25 41 65 65. Fax: +33 (0)3 25 79 04 25.

e-mail: info@gravograph.fr http://www.gravograph.com

1.4. Emergency telephone number: +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.



Other emergency numbers

National Poisons Information Service of England: http://npis.org - NHS 111: dial 111 - National Poisons Information Centre of Ireland: 353 (1) 809 2166 - LUXEMBOURG: (+352) 8002 5500 - European Emergency Number Association (EENA): 112

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

No labelling requirements for this mixture.



2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS



3.2. Mixtures



omposition .	01 15 11 (50) 1050	Note	101
Identification	ntification (EC) 1272/2008		%
INDEX: 607-035-00-6	GHS02, GHS07	D	0 <= x % < 0.1
CAS: 80-62-6	Dgr	[1]	
EC: 201-297-1	Flam. Liq. 2, H225		
REACH: 01-2119452498-28	STOT SE 3, H335		
	Skin Irrit. 2, H315		
METHYL METHACRYLATE	Skin Sens. 1, H317		
INDEX: 601-013-00-X	GHS02, GHS04, GHS08	D	0 <= x % < 0.1
CAS: 106-99-0	Dgr	[1]	

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EC: 203-450-8	Flam. Gas 1, H220 Carc. 1A, H350	[2]	
1,3-BUTADIENE	Muta. 1B, H340		
INDEX: 607-032-00-X	GHS02, GHS07	[1]	0 <= x % < 0.1
CAS: 140-88-5	Dgr		
EC: 205-438-8	Flam. Liq. 2, H225		
	Acute Tox. 4, H332		
ETHYL ACRYLATE	Acute Tox. 4, H312		
	Acute Tox. 4, H302		
	Eye Irrit. 2, H319		
	STOT SE 3, H335		
	Skin Irrit. 2, H315		
	Skin Sens. 1, H317		
INDEX: 608-003-00-4	GHS02, GHS06, GHS08, GHS05, GHS09	DE	0 <= x % < 0.1
CAS: 107-13-1	Dgr	[1]	
EC: 203-466-5	Flam. Liq. 2, H225	[2]	
REACH: 01-2119474195-34	Carc. 1B, H350		
	Acute Tox. 3, H331		
ACRYLONITRILE	Acute Tox. 3, H311		
	Acute Tox. 3, H301		
	STOT SE 3, H335		
	Skin Irrit. 2, H315		
	Eye Dam. 1, H318		
	Skin Sens. 1, H317		
	Aquatic Chronic 2, H411		



Specific concentration limits:

•			
Identification	Specific concentration limits	ATE	
INDEX: 607-032-00-X	Skin Irrit. 2: H315 >=5%		
CAS: 140-88-5	Eye Irrit. 2: H319 C>= 5%		
EC: 205-438-8	STOT SE 3: H335 C>= 5%		
ETHYL ACRYLATE			



Information on ingredients:

(Full text of H-phrases: see section 16)

- [1] Substance for which maximum workplace exposure limits are available.
- [2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.



4.1. description of first aid measures

In the event of exposure by inhalation:

If a large quantity of dust is inhaled, move the patient into the fresh air and keep him/her warm and still.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In case of contact with hot material, cool quickly with cold water. If burn is serious, consult a physician.

In the event of swallowing:

Seek medical attention, showing the label.

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

No data available.

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

No data available.

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

No data available.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming).

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Fire prevention:

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION



8.1. Control parameters Occupational exposure limits:

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3:	VME-ppm:	VLE-mg/m3:	VLE-ppm:	Notes :	
80-62-6	-	50	-	100	-	
106-99-0	2.2	1				
140-88-5	21	5	42	10	-	
107-13-1	1	0.45		1.8	Skin Dermal	
					sens.	

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

CAS	TWΔ ·	STEL	Ceilina:	Definition :	Criteria:	
CAS	I VV 🗆 .	SILL.	Cening .	Delimition .	Cilicila .	

METALLEX - G	SRAV005				
80-62-6	50 ppm	100 ppm		SEN; A4	
106-99-0	2 ppm			A2	
140-88-5	5 ppm	15 ppm		A4	
107-13-1	2 ppm			Skin; A3	
- Germany	/ - AGW (BAuA - TF	RGS 900, 02/2022):			
CAS	VME :	VME :	Excess	Notes	
80-62-6		50 ppm		2(I)	
		210 mg/m ³			
140-88-5		2 ppm		2(I)	

8.3 mg/m³

- Australia (NOHSC: 3008, 1995):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria :
80-62-6	50 ppm	100 ppm			
	208 mg/m3	416 mg/m3			
106-99-0	10 ppm			Н	
	22 mg/m3				
140-88-5	5 ppm			Α	
	20 Peak				
	limitation				
	mg/m3				
107-13-1	2 ppm			Н	
	4.3 mg/m3				
A /F	ODI II N. 450/0004)		-		

- Austria (BGBI. II Nr. 156/2021):

CAS	TWA:	STEL:	Ceiling :	Definition :	Criteria :
80-62-6	50 ppm	100 ppm			
	210 mg/m ³	420 mg/m ³			
106-99-0	1 ppm	8 ppm			
	2.2 mg/m³	17 mg/m³			
140-88-5	5 ppm	10 ppm			
	20 mg/m³	40 mg/m ³			
107-13-1	2 ppm	8 ppm			
	4.5 mg/m³	18 mg/m³			

- Belgium (Royal decree of 11/05/2021) :

20.gram (1.6) a. 400.00 c. 1.700.2021)						
CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria :	
80-62-6	50 ppm	100 ppm				
	208 mg/m ³	416 mg/m ³				
106-99-0	1 ppm			С		
	2.2 mg/m ³					
140-88-5	5 ppm	10 ppm				
	21 mg/m ³	42 mg/m³				
107-13-1	2 ppm			C. D		
	4.4 mg/m ³					

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021):

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No:
80-62-6	50	205	100	410	-	82
106-99-0	1	2.2	-	-	C1A. M1B	99
140-88-5	5	21	10	42	-	65
107-13-1	2	4.5	15	32.5	C2	-

- Switzerland (Suva 2021):

CAS	VME	VLE	Valeur plafond	Notations
80-62-6	50 ppm	100 ppm		
	210 mg/m ³	420 mg/m ³		
106-99-0	2 ppm 4.4 mg/m³			
140-88-5	2.5 ppm 10 mg/m³	10 ppm 42 mg/m³		
107-13-1	2 ppm 4.5 mg/m³			

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA:	STEL:	Ceiling :	Definition :	Criteria :
80-62-6	50 ppm 208 mg/m³	100 ppm 416 mg/m³			
106-99-0	1 ppm 2.2 mg/m³			Carc	

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140-88-5	5 ppm 21 mg/m³	10 ppm 42 mg/m³		
107-13-1	2 ppm 4.4 mg/m³		Carc. Sk	

- USA / OSHA PEL (Occupational Safety and Health Administration, Permissible Exposure Limits):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria :	
80-62-6	100 ppm					
	410 mg/m3					
106-99-0	1 ppm	5 ppm				
140-88-5	25 ppm			skin		
	100 mg/m3					
107-13-1	2 ppm		10 ppm	15-minute.		
				skin		

8.2. Exposure controls



Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.



- Respiratory protection

Avoid inhaling dust.

Type of FFP mask:

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

SECTION 9 : PHYSICAL AND CHEMICAL PROPER	RTIES
9.1. Information on basic physical and chemical prope	erties
Physical state	
Physical state :	Solid.
₹ Colour	
Colour:	Various.
O dour	
Odour threshold :	Not stated.
Odour:	Odourless.
₹	
Freezing point / Freezing range :	Not stated.
Boiling point or initial boiling point and boiling range	
Boiling point/boiling range :	Not relevant.
Plammability	
Flammability (solid, gas) :	Not stated.
Lower and upper explosion limit	

Not stated. Explosive properties, lower explosivity limit (%): Not stated. Explosive properties, upper explosivity limit (%):

Flash point

Flash point interval: Not relevant.

Auto-ignition temperature

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Self-ignition temperature :	Not relevant.
Decomposition temperature	
Decomposition point/decomposition range :	Not relevant.
pH	
pH (aqueous solution):	Not stated.
pH:	Not relevant.
Kinematic viscosity	
Viscosity:	Not stated.
Solubility	
Water solubility:	Insoluble.
Fat solubility:	Not stated.
Partition coefficient n-octanol/water (log value)	
Partition coefficient: n-octanol/water :	Not stated.
Vapour pressure	
Vapour pressure (50°C) :	Not relevant.
Density and/or relative density	
Density:	>1
Relative vapour density	
Vapour density :	Not stated.
0.2 Other information	



9.2. Other information

No data available.



9.2.1. Information with regard to physical hazard classes

No data available.



9.2.2. Other safety characteristics

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.



10.4. Conditions to avoid

Avoid:

- formation of dusts
- heat

Dusts can form an explosive mixture with air.

Do not heat above 300 $^{\circ}$ C: decomposition of the mixture.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION



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

No data available.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

No toxicological data available for the mixture.



11.2. Information on other hazards



$\label{thm:monograph:equation} \textbf{Monograph(s)} \ \text{from the IARC (International Agency for Research on Cancer)}:$

CAS 107-13-1 : IARC Group 2B : The agent is possibly carcinogenic to humans.

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CAS 140-88-5: IARC Group 2B: The agent is possibly carcinogenic to humans.

CAS 106-99-0: IARC Group 1: The agent is carcinogenic to humans.

CAS 80-62-6: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

Not biodegradable.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.



12.6. Endocrine disrupting properties

No data available.



12.7. Other adverse effects

No data available.



German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws):

WGK 1: Slightly hazardous for water.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.



Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Exempt from transport classification and labelling.



14.1. UN number or ID number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user



14.7. Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

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





${\bf Classification\ and\ labelling\ information\ included\ in\ section\ 2:}$

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)



Container information:





Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

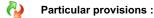
The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):

https://echa.europa.eu/substances-restricted-under-reach.



Explosives precursors:

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.



No data available.



German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 1: Slightly hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.



Wording of the phrases mentioned in section 3:

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects .
H350	May cause cancer .
H411	Toxic to aquatic life with long lasting effects.



Abbreviations and acronyms:

REACH: Registration, Evaluation, Authorization and Restriction of Chemical Substances.

CMR: Carcinogenic, mutagenic or reprotoxic.

STEL: Short-term exposure limit TWA: Time Weighted Averages

TMP : French Occupational Illness table TLV : Threshold Limit Value (exposure)

AEV: Average Exposure Value.

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefahrdungsklasse (Water Hazard Class).

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.