

GRAVOGLAS 2

GRAVOGRAPH 50, Av. Jean JAURES BP 36 10 600 LA CHAPELLE SAINT LUC - FRANCE Tel: (33) 3 25 41 65 65 Fax: (33) 3 25 79 04 25 Internet website: www.gravograph.com	Date : 10/04/02
--	-----------------

1. CHEMICAL PRODUCT AND COMPANY NAME

PRODUCT NAME:	GRAVOGLAS 2
IDENTIFICATION CODE:	-ALL-
COMMERCIAL USE:	Engraving
IMPORTER:	Gravograph 50 avenue Jean Jaurès BP 36 10 600 La Chapelle Saint Luc France Tel: (33) 3 25 41 65 65 Fax: (33) 3 25 79 04 25 Internet website: www.gravograph.com

2. COMPOSITION/INFORMATION ON COMPONENTS

N°		Cas Reg. N°	Weight (%)
1	Acrylic copolymers	Not hazardous	99.5 min.
2	Methyl methacrylate	80-62-6	<0.5

See section 8. Exposure Controls/Personal protection

3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF EXPOSURE:

Inhalation
Eye Contact

INHALATION:

Inhalation of monomer vapour from heated product can cause the following :

- irritation of nose, throat, and lungs
- dizziness
- headache
- nausea

EYE AND SKIN CONTACT:

Monomer vapours from heated product can cause the following :

- irritation

4. FIRST AID MEASURES

SKIN CONTACT:

Consult a physician if irritation persists

EYE CONTACT:

Flush eyes with a large amount of water for at least 15 min.
Consult a physician if irritation persists

INGESTION :

INHALATION:

If exposed to monomer vapours generated during processing,
move subject to fresh air

5. FIRE FIGHTING MEASURES

FLASH POINT:	Not applicable
AUTO-IGNITION TEMPERATURE:	393°C/739°F
LOWER EXPLOSIVE LIMIT:	Not applicable
UPPER EXPLOSIVE LIMIT:	Not applicable
UNUSUAL HAZARDS:	Material as sold is combustible Burns vigorously with intense heat
EXTINGUISHING AGENTS:	Use the following media when fighting fires involving this material : <ul style="list-style-type: none">- carbon dioxide- dry chemical- water spray
PERSONAL PROTECTIVE EQUIPMENT:	As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL SPILLAGE MEASURES

PERSONAL PROTECTION:	Wear gloves made of the following material : <ul style="list-style-type: none">- cotton, canvas or leather Additional personal protective equipment should include the following : <ul style="list-style-type: none">- safety glasses (ANSI Z87.1 or approved equivalent)
PROCEDURES :	Floor may be slippery ; use care to avoid falling Transfer spilled material to suitable containers for recovery or disposal

7. HANDLING AND STORAGE

STORAGE CONDITIONS:

This material is not hazardous under normal storage conditions.

However, all materials of this type release some monomer vapours or gases when stored for prolonged periods at elevated temperatures.

Avoid temperature extremes during storage ; ambient temperature preferred.

HANDLING PROCEDURES:

This material can release monomer vapours or gases when heated to high temperatures during processing, cutting or machining.

See Section 8, Exposure Controls/Personal protection for types of ventilation required.

8. SPECIAL PROTECTION INFORMATION

EXPOSURE LIMIT INFORMATION :

N°		Cas Reg. N°	Weight (%)
1	Acrylic copolymers	Not hazardous	99.5 mini.
2	Methyl methacrylate	80-62-6	<0.5

Comp. N°	Units	OSHA		ACGIH	
		TWA	STEL	TWA	STEL
1		None	None	None	None
2	ppm	100	None	100	None

RESPIRATORY PROTECTION:

A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

None required if airborne concentrations are maintained below the exposure limit listed in 'Exposure Limit Information'.

Up to 10 times the TWA/TLV:

- Wear a MSHA/NIOSH approved (or equivalent) half-mask, air purifying respirator

Up to 1000 ppm organic vapour :

- Wear a MSHA/NIOSH approved (or equivalent) full-facepiece, air purifying respirator

Above 1000 ppm organic vapour or unknown :

- Wear a MSHA/NIOSH approved (or equivalent) self-contained breathing apparatus in the positive pressure mode,

OR

- MSHA/NIOSH approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions

Air-purifying respirators should be equipped with MSHA/NIOSH approved (or equivalent) cartridges for protection against organic vapours.

EYE PROTECTION:

Use safety glasses (ANSI Z87.1 or approved equivalent).

HAND PROTECTION:

Cotton, canvas, or leather gloves.

ENGINEERING CONTROLS:
(VENTILATION)

Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec) at the point of vapour evolution. Refer the current edition of *Industrial Ventilation : A manual of Recommended Practice* published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use and maintenance of exhaust systems.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear to opaque
STATE:	Pellets
ODOUR CHARACTERISTIC:	Mild odour
VISCOSITY:	Not applicable
SPECIFIC GRAVITY (Water = 1):	1.15 to 1.19
VAPOUR DENSITY (Air = 1):	Not applicable
VAPOUR PRESSURE:	Not applicable
MELTING POINT:	132°C/270°F Minimum Pour Point
BOILING POINT:	Not applicable
SOLUBILITY IN WATER:	Not applicable
PERCENT VOLATILITY:	0
EVAPORATION RATE (BAc = 1):	Not applicable

See Section 5, Fire Fighting Measures

10. STABILITY AND REACTIVITY

INSTABILITY :	This material is considered stable. However, avoid temperatures above 260°C/500°F for prolonged periods to prevent slow decomposition.
HAZARDOUS DECOMPOSITION PRODUCTS :	Thermal decomposition may yield acrylic monomers.
HAZARDOUS POLYMERIZATION:	Product will undergo polymerisation.
INCOMPATIBILITY:	Prolonged contact with acids, alkalis and strong oxidising agents may attack or dissolve the polymer.

11. TOXICOLOGICAL INFORMATION

ACUTE DATA:	The information shown in Section 3, Hazards Identification, is based on toxicity profiles of similar materials or on the components present in this material.
-------------	---

12. ECOLOGICAL INFORMATION

No applicable data

13. DISPOSAL CONSIDERATIONS

PROCEDURE:	For disposal, incinerate this material at a facility that complies with local, state and federal regulations.
------------	---

14. TRANSPORT INFORMATION

US DOT HAZARD CLASS :	Non regulated
-----------------------	---------------

15. REGULATORY INFORMATION

WORKPLACE CLASSIFICATION:

This product as supplied is non-hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

Under processing conditions it may become OSHA hazardous due to the potential for overexposure to methyl methacrylate monomer vapours. (See Section 7, Handling and Storage, for recommended handling procedures).

This product is not a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA TITLE 3: Section 311/312 Categorisations (40CFR 370) This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

SARA TITLE 3: Section 313 Information (40CFR 372) This product does not contain a chemical which is listed in Section 313 at or above de minimis concentration.

CERCLA INFORMATION (40CFR 302.4) Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act, (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

WASTE CLASSIFICATION:

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40CFR 261.33.

The toxicity characteristic (TC), however, has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

UNITED STATES:

All components of this product are in compliance with the inventory listing requirements of the US Toxic Substances Control Act (TSCA) Chemical Substance Inventory.



Gravograph

PENNSYLVANIA:

MATERIAL SAFETY DATA SHEET



Any material listed as -Not Hazardous- in the CAS REG NO, column of Section 2 Composition/Information on Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

The following chemicals are listed because of the additional requirements of Pennsylvania law :

- Ethyl acrylate (140-88-5)

CALIFORNIA (Proposition 65):

This product contains trace levels of a component or components known to the State of California to cause cancer :

- Ethyl acrylate (140-88-5)

16. OTHER INFORMATION

ABBREVIATIONS:

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

TWA: Time Weighted Average

STEL: Short-Term Exposure Limit

BAC: Butyl acetate

Bar denotes a revision from previous MSDS in this area

17. OTHERS

The information contained herein relates only to the specific material identified. Such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warrantee, express or implied, is made as to the accuracy, reliability or completeness of the information. We urge persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.
