



SAFETY DATA SHEET gelcoat Enguard PX

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Identification of the article

Product name

ENGUARD : Gel coat, Pâte colorante, Colle - MAXGUARD "2G100"

Product code

"2G100" = Code (SAFETY DATA SHEET)

1.2 Identification of the manufacturer/importer/supplier

1.2.1 Supplier

ASHLAND POLYESTER
S.A.S

1.2.2 Address

Quartier des Bonnelles

30131 PUJAUT, FRANCE

Telephone number

+33-04-66-90-30-70

Fax

+33-04-66-90-30-96

1.2.3 Name and address of the informant in emergency cases

Emergency telephone number

+33-04-66-90-30-70 (France)

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Chemical characterisation

Resin solution

2.2 Hazardous components

2.2.1

CAS-No.

100-42-5

2.2.2

Components

Styrene

2.2.3

Weight %

15-50%

2.2.4

Classification

Xn; R10-20-36/38

3. HAZARDS IDENTIFICATION



Flammable. Harmful by inhalation. Irritating to eyes and skin.

4. FIRST AID MEASURES

4.2 Inhalation

Move to fresh air. Oxygen or artificial respiration if needed. If symptoms persist, call a physician.

4.3 Skin contact

Take off all contaminated clothing immediately. Wash off with soap and plenty of water. If skin irritation persists, call a physician.

4.4 Eye contact

Rinse immediately with plenty of water for at least 15 minutes. Keep eye wide open while rinsing. Rinse thoroughly with plenty of water, also under the eyelids. Consult a physician.

4.5 Ingestion

Do not induce vomiting. Rinse mouth. Ingest activated charcoal. Obtain medical attention.

4.6 Notes to physician

Show this safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

dry powder, alcohol-resistant foam, carbon dioxide (CO₂), water. Water may be ineffective.

5.3 Specific hazards

smoke cloudy black.

5.4 Special protective equipment for firefighters

In the event of fire, wear self contained breathing apparatus.

5.5 Specific methods

Cool containers / tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Remove all sources of ignition. Keep people away from and upwind of spill/leak. Use personal protective equipment.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.



6.3 Methods for cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste.

7. HANDLING AND STORAGE

7.1 Handling

Use only in area provided with appropriate exhaust ventilation. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. wear personal protective equipment. When using do not smoke.

7.2 Storage

Take precautionary measures against static discharges. Keep in a dry, cool and well-ventilated place. Do not repack.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Engineering measures

Ensure adequate ventilation, especially in confined areas.

8.2 Control parameters

8.2.1 National occupational exposure limits

CAS number	100-42-5	
Components	Styrene / FRANCE	
	50 ppm (8 h)	
	215 mg/m ³ (8 h)	
CAS number	100-42-5	
Components	Styrene / FIN (1993)	
	20 ppm (8 h)	100 ppm (15 min)
	86 mg/m ³ (8 h)	430 mg/m ³ (15 min)
CAS number	100-42-5	
Components	Styrene / D (1993) MAK-WERT	
	20 ppm (8 h)	
	85 mg/m ³ (8 h)	

8.3 Personal protective equipment

8.3.1 Hygiene measures

When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

8.3.2 Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment.

8.3.3 Hand protection

solvent-resistant gloves.



8.3.4 Eye protection

safety glasses.

8.3.5 Skin and body protection

Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	Form, Colour, Odour	viscous liquid : stinging
9.2	pH	not applicable
9.3	Information on changes in the physical state	
9.3.1	Boiling point/range	145°C (Styrene)
9.3.2	Melting point/range	-31°C (Styrene)
9.4	Flash point	32°C (closed cup, Styrene)
9.6	Autoignition temperature	480°C (Styrene)
9.8	Explosion limits	
	- lower	1.2 VOL.-% (Styrene)
	- upper	8.9 VOL.-% (Styrene)
9.10	Vapour pressure	6 mbar (20°C, Styrene)
9.11	Relative density	approx 1,0-2,0 kg/dm ³
9.12	Solubility	
	Water solubility	practically insoluble
	- fat solubility	
9.13	Partition coefficient (n-octanol/water)	logK _{o_w} = 2.95 (Styrene)

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid

Polymerisation occurs when exposed to white light, ultraviolet light or heat. Exothermic reaction.

10.2 Materials to avoid

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Reacts violently with peroxides.

11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity

LD50/oral/rat = 5000 mg/kg (Styrene)

11.2 Local effects

Vapours may be irritating to eyes, nose, throat, and lungs.

11.4 Long term toxicity

Prolonged skin contact may cause skin irritation and/or dermatitis.



11.5 Human experience

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

12 ECOLOGICAL INFORMATION

12.1 Persistence and degradability

12.1.1 Biodegradation

1

Biochemical oxygen demand within 5 days (BOD5) = 0.55-1.95 (Styrene)

12.1.2 Chemical degradation

2

ABIOTIC DEGRADATION / CALCULATED HALF-LIFE (T1/2) IN AIR = 2.5 HOURS (Styrene)

12.2 Bioaccumulation

$\log K_{ow} = 2.95$ (Styrene) BCF/GOLDFISH = 13.5 (Styrene)

12.3 Mobility

HENRY'S LAW CONSTANT/25°C = $5.2 \times 10^{-3} \text{ ATM} \times \text{M}^3 / \text{MOL}$ (Styrene, CALCULATED)

12.4 Ecotoxicity effects

12.4.1 Toxicity to algae

1

LC50/48h/daphnia = 23 mg/l (Styrene) LC50/96h/LEPOMIS MACROCHIRUS = 25 mg/l (Styrene)

13 DISPOSAL CONSIDERATIONS

The following actions are recommended : 1. solution : Dispose of as special waste in compliance with local and national regulations. 2. Toughened : Can be disposed of as a solid waste or burned in a suitable installation subject to local regulations. 3. Empty containers : In accordance with local and national regulations

14 TRANSPORT INFORMATION

14.1 UN-No	1866
14.2 Packaging group	III
14.3 ADR/RID	
14.3.1 Class	3,31 (c) ADR/ RTMDR
1	



14.3. HI/UN No	30
2	
14.3. Proper shipping name	Resin solution POLYESTER RESIN
3	
14.3. Further Information	-
4	
14.4 IMO	
14.4. Class	3.3 IMDG CODE : 3379
1	
14.4. Proper shipping name	UNSATURATED POLYESTER RESIN
2	
MFAG	310
EmS	3-05
14.4. Further Information	MARINE POLLUANT
3	
14.5 ICAO	
14.5. Class	3
1	
14.5. Proper shipping name	UNSATURATED POLYESTER RESIN
2	
14.5. Further Information	-
3	

15 REGULATORY INFORMATION

15.1 Labelling

15.1. Danger classification

1

Xn harmful

15.1. Contains STYRENE

2

15.1. R-phrases

3

R10 Flammable.
R20 Harmful by inhalation.
R36/38 Irritating to eyes and skin.

15.1. S-phrases

4

S2 Keep out of reach of children.
S23 Do not breathe vapour.

15.2 National regulations

The product is classified and labelled in accordance with EC directives.

16 OTHER INFORMATION

16.3 Further information

Contact manufacturer.



16.4 Additional information available from

ASHLAND POLYESTER S.A.S./ PRODUCT LIABILITY / TEL. +33-04-66-90-30-70

16.5 Sources of information used in the compilation of the safety data sheet

HOMMEL (1993) : HANDBUCH DER GEFÄHRLICHEN GÜTER PHILIP H. HOWARD (1990) :
HANDBOOK OF ENVIRONMENTAL FATE AND EXPOSURE DATA FOR ORGANIC
CHEMICALS.

The information presented in this document is based on our latest knowledge.