

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 15/04/2015 Revision date: Version: 1.0

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

Product identifier

Product form : Mixture : FASTGLAS Product name

: Unsaturated polyester Product group

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Function or use category : Unsaturated polyester

1.2.2. Uses advised against

No additional information available

Details of the supplier of the safety data sheet

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1.4. **Emergency telephone number**

Emergency number : +44 1933 230310 (07:30 - 17:00hrs UK time)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3 H226 Acute Tox. 4 (Inhalation:dust,mist) H332 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Repr. 2 H361 STOT RE 1 H372

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Repr.Cat.3; R63

Xn; R20 Xn; R48/20 Xi: R36/38

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. **Label elements**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS02





GHS07

Signal word (CLP) : Danger Hazardous ingredients : styrene

Hazard statements (CLP) : H226 - Flammable liquid and vapour

27/04/2015 EN (English) SDS Ref.: FASTGLAS 1/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Precautionary statements (CLP)

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H361 - Suspected of damaging fertility or the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking

P260 - Do not breathe spray, vapours P273 - Avoid release to the environment

P280 - Wear eye protection, protective clothing, protective gloves

P302+P352 - IF ON SKIN: Wash with plenty of water

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

Skin Sens. 1, H317

contact lenses, if present and easy to do. Continue rinsing

EUH phrases : EUH208 - Contains phthalic anhydride. May produce an allergic reaction

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
styrene	(CAS No) 100-42-5 (EC no) 202-851-5	< 43	Repr.Cat.3; R63 Xn; R20 Xn; R48/20 Xi; R36/38 R10
phthalic anhydride	(CAS No) 85-44-9 (EC no) 201-607-5 (EC index no) 607-009-00-4	< 5	Xn; R22 Xi; R41 Xi; R37/38 R42 R43
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
styrene	(CAS No) 100-42-5 (EC no) 202-851-5	< 43	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT RE 1, H372
phthalic anhydride	(CAS No) 85-44-9 (EC no) 201-607-5 (EC index no) 607-009-00-4	< 5	Acute Tox. 4 (Oral), H302 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1.	Description	of first aid measures	

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation

occurs: Get medical advice/attention. Get medical advice/attention.

First-aid measures after eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Get medical

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

advice/attention.

27/04/2015 EN (English) SDS Ref.: FASTGLAS 2/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010

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

Symptoms/injuries : Suspected of damaging fertility or the unborn child. Causes damage to organs through

prolonged or repeated exposure.

Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if

inhaled.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smoking.

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Protective clothing. Gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers. Collect spillage.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent format

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid breathing spray, vapours, fume. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe spray, vapours, fume.

Hygiene measures : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment. Use explosion-proof electrical, Lighting equipment

equipment.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Ignition sources,

Heat sources, Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Keep container tightly closed.

Incompatible products : Strong bases. Strong acids. Oxidizing agent.

27/04/2015 EN (English) SDS Ref.: FASTGLAS 3/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Storage temperature : < 30 °C

Storage area : Store in a well-ventilated place.

Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

styrene (100-42-5)		
United Kingdom	Local name	Styrene
United Kingdom	WEL TWA (mg/m³)	430 mg/m³
United Kingdom	WEL TWA (ppm)	100 ppm
United Kingdom	WEL STEL (mg/m³)	1080 mg/m³
United Kingdom	WEL STEL (ppm)	250 ppm

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Materials for protective clothing : Impermeable clothing
Hand protection : Wear protective gloves

Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Gas mask with filter type A

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Liquid.

Colour : amber.

Odour : characteristic.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : -30 °C

Freezing point : No data available

Boiling point : $145 \,^{\circ}\text{C}$ Flash point : $31 \,^{\circ}\text{C}$

Auto-ignition temperature : No data available Decomposition temperature : No data available

Flammability (solid, gas) : Flammable liquid and vapour

Vapour pressure : 6 hPa Relative vapour density at 20 °C : 3.6

Relative density : No data available Density : $\approx 1.09 \text{ g/cm}^3$

Solubility : Insoluble in water. Soluble in aromatic hydrocarbons.

Log Pow : No data available
Viscosity, kinematic : 477 - 624 mm²/s
Viscosity, dynamic : 520 - 680 mPa.s
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

27/04/2015 EN (English) SDS Ref.: FASTGLAS 4/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

l1.1. Ir	nformati	on on toxi	icologica	I effects
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Acute toxicity : Inhalation:dust,mist: Harmful if inhaled.

ATE CLP (dust,mist) 3.947 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified

Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Based on available data, the classification criteria are not met

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure) : Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated

exposure)

: Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Based on available data, the classification criteria are not met

FASTGLAS

Viscosity, kinematic 477 - 624 mm²/s

Potential adverse human health effects and

symptoms

: Harmful if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

FASTGLAS		
	Persistence and degradability	Not established.

12.3. Bioaccumulative potential

FASTGLAS	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

27/04/2015 EN (English) SDS Ref.: FASTGLAS 5/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

 UN-No. (ADR)
 : 1866

 UN-No. (IMDG)
 : 1866

 UN-No.(IATA)
 : 1866

 UN-No.(ADN)
 : 1866

 UN-No. (RID)
 : 1866

14.2. UN proper shipping name

Proper Shipping Name (ADR) : RESIN SOLUTION
Proper Shipping Name (IMDG) : RESIN SOLUTION
Proper Shipping Name (IATA) : Resin solution
Proper Shipping Name (ADN) : RESIN SOLUTION
Proper Shipping Name (RID) : RESIN SOLUTION

Transport document description (ADR) : UN 1866 RESIN SOLUTION, 3, III, (D/E)
Transport document description (IMDG) : UN 1866 RESIN SOLUTION, 3, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3



ADN

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3

27/04/2015 EN (English) SDS Ref.: FASTGLAS 6/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010



RID

Transport hazard class(es) (RID) : 3 Danger labels (RID) : 3



14.4. **Packing group**

Packing group (ADR) : 111 Packing group (IMDG) : 111 Packing group (IATA) : 111 : III Packing group (ADN) Packing group (RID) : 111

Environmental hazards 14.5.

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

14.6.1. **Overland transport**

Classification code (ADR) : F1 Special provisions (ADR) : 640E Limited quantities (ADR) : 51 Excepted quantities (ADR) : E1

: P001, IBC03, LP01, R001 Packing instructions (ADR)

Special packing provisions (ADR) : PP1 Mixed packing provisions (ADR) : MP19 Portable tank and bulk container instructions : T2

(ADR)

Portable tank and bulk container special : TP1

provisions (ADR)

Tank code (ADR) : LGBF : FL Vehicle for tank carriage Transport category (ADR) : 3 Special provisions for carriage - Packages : V12

(ADR)

Special provisions for carriage - Operation

(ADR)

Hazard identification number (Kemler No.) : 30

Orange plates

30 1866

: S2

: D/E Tunnel restriction code (ADR) EAC code : •3YE

14.6.2. Transport by sea

Special provisions (IMDG) : 223, 955 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 : P001, LP01

Packing instructions (IMDG) Special packing provisions (IMDG) : PP1

27/04/2015 SDS Ref.: FASTGLAS 7/10 EN (English)

Safety Data Sheet

according to Regulation (EC) No. 453/2010

 IBC packing instructions (IMDG)
 : IBC03

 Tank instructions (IMDG)
 : T2

 Tank special provisions (IMDG)
 : TP1

 EmS-No. (Fire)
 : F-E

 EmS-No. (Spillage)
 : S-E

 Stowage category (IMDG)
 : A

Properties and observations (IMDG) : Miscibility with water depends upon the composition.

14.6.3. Air transport

: E1 PCA Excepted quantities (IATA) PCA Limited quantities (IATA) : Y344 PCA limited quantity max net quantity (IATA) : 10L PCA packing instructions (IATA) : 355 PCA max net quantity (IATA) : 60L CAO packing instructions (IATA) : 366 CAO max net quantity (IATA) : 220L Special provisions (IATA) : A3 ERG code (IATA) : 3L

14.6.4. Inland waterway transport

Classification code (ADN) : F1 Special provisions (ADN) : 64E Limited quantities (ADN) : 5 L : E1 Excepted quantities (ADN) : PP, EX, A Equipment required (ADN) : VE01 Ventilation (ADN) Number of blue cones/lights (ADN) : 0 Carriage prohibited (ADN) : No Not subject to ADN : No

14.6.5. Rail transport

Classification code (RID) : F1
Special provisions (RID) : 640E
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions : T2
(RID)

Portable tank and bulk container special

provisions (RID)

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages : W12

(RID)

Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30
Carriage prohibited (RID) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

: TP1

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

27/04/2015 EN (English) SDS Ref.: FASTGLAS 8/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Seveso Information : This product is subject to the Seveso Directive

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

Regulation (EC) No 1907/2006.

Other information : None.

Full text of R-, H- and EUH-phrases:

A suda Taur A (labalation)	A cuta to visits (inhall) Catagory 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H361d	Suspected of damaging the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
EUH208	Contains . May produce an allergic reaction
R10	Flammable
R20	Harmful by inhalation
R22	Harmful if swallowed
R36/38	Irritating to eyes and skin
R37/38	Irritating to respiratory system and skin
R41	Risk of serious damage to eyes
R42	May cause sensitization by inhalation
R43	May cause sensitisation by skin contact
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R63	Possible risk of harm to the unborn child
Xi	Irritant
Xn	Harmful

UPOL SDS EU (no product code)

27/04/2015 EN (English) SDS Ref.: FASTGLAS 9/10

Safety Data Sheet

according to Regulation (EC) No. 453/2010

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27/04/2015 EN (English) SDS Ref.: FASTGLAS 10/10