

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Polystyrene - Glue

Product no.

-

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture

Nurseries

Uses advised against

-

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

Stål & Plast A/S
Industrivej 19
DK-5750 Ringe
Denmark
Tel: +45 6262 1216
Fax: +45 6262 3611

Contact person

Jacob B. Sørensen

E-mail

js@staal-plast.dk

SDS date

2016-12-08

SDS Version

2.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

▼ 2.1. Classification of the substance or mixture

Flam. Liq. 2; H225
Asp. Tox. 1; H304
Skin Irrit. 2; H315
Repr. 2; H361
STOT RE 2; H373
See full text of H-phrases in section 2.2.

2.2. Label elements

▼ Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Highly flammable liquid and vapour. (H225)

May be fatal if swallowed and enters airways. (H304)

Causes skin irritation. (H315)

Suspected of damaging fertility or the unborn child. (H361)

May cause damage to organs through prolonged or repeated exposure. (H373)

Safety statement(s)

General

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Prevention

Obtain special instructions before use. (P201).

Use personal protective equipment as required. (P281).

Response

Do NOT induce vomiting. (P331).

IF SWALLOWED: Immediately call a POISON CENTER/doctor. (P301+P310).

Storage

Store in a well-ventilated place. Keep cool. (P403+P235).

Disposal

Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

toluene

2.3. Other hazards

This product contains teratogenic substances, which may cause long-term adverse effects to the unborn foetus.

This product contains substances that can cause chemical pneumonia if inhaled. The symptoms of chemical pneumonia may appear after several hours.

This product contains substances that may cause adverse effects to the reproductive system.

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Additional labelling

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SECTION 3: Composition/information on ingredients**3.1/3.2. Substances/Mixtures**

NAME:	toluene
IDENTIFICATION NOS.:	CAS-no: 108-88-3 EC-no: 203-625-9 Index-no: 601-021-00-3
CONTENT:	10-15%
CLP CLASSIFICATION:	Flam. Liq. 2, STOT RE 2, STOT SE 3, Skin Irrit. 2, Asp. Tox. 1, Repr. 2 H225, H304, H315, H336, H361, H373
NOTE:	SL

(*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.

S = Organic solvent L = European occupational exposure limit.

Other information

ATEmix(inhale, vapour) > 20

Skin Cat. 2 $\text{Sum} = \text{Sum}(\text{Ci}/\text{S}(\text{G})\text{CLi}) = > 1 - 1,2$

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.

The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Bring the person into fresh air and stay with him.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately and bring safety data sheet or label. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Do not induce vomiting! If vomiting occurs, keep head facing down to prevent vomit entering the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should be kept under medical attention for a minimum of 48 hours.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

This product contains substances that can cause chemical pneumonia if inhaled. The symptoms of chemical pneumonia may appear after several hours.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances. Avoid inhalation of vapours from spilled material. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid static electricity. Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.
Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Storage temperature

Dry, cool and well ventilated

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

toluene (EH40)

Long-term exposure limit (8-hour TWA reference period): 50 ppm | 191 mg/m³

Short-term exposure limit (15-minute reference period): 100 ppm | 384 mg/m³

Comments: Sk (Sk = Can be absorbed through skin.)

DNEL / PNEC

No data available

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment



Generally

Use only CE marked protective equipment.

Respiratory Equipment

If ventilation at the work place is insufficient, use a half- or whole mask with an appropriate filter or an air-supplied breathing apparatus depending on the concrete work situation and how long you will be using the product.

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

Hand protection

Wear protective gloves. The specific work situation is unknown. Contact the suppliers of the gloves for further advice regarding the appropriate glove type. Please note that elastic gloves stretch when used. The thickness of the gloves, and therefore their penetration time, will be reduced. Moreover, the temperature of the glove in use is about 35°C, while the standard test, EN 374-3, is done at 23°C. The penetration time is therefore reduced by a factor of 3.

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	No data available.
Odour	Sharp/pungent
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm³)	No data available.

Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.

Data on fire and explosion hazards

Flashpoint (°C)	28
Ignition (°C)	No data available.
Self-ignition (°C)	No data available.
Explosion limits (Vol %)	1 - 8 v/v%

Solubility

Solubility in water	Insoluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	No data available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in the section “Handling and storage”.

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

Avoid static electricity. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Species	Test	Route of exposure	Result
Substance				
No data available.				
Skin corrosion/irritation				
Causes skin irritation.				
Serious eye damage/irritation				
No data available.				
Respiratory or skin sensitisation				
No data available.				
Germ cell mutagenicity				
No data available.				
Carcinogenicity				
No data available.				
Reproductive toxicity				
Suspected of damaging fertility or the unborn child.				
STOT-single exposure				
No data available.				
STOT-repeated exposure				
May cause damage to organs through prolonged or repeated exposure.				
Aspiration hazard				
May be fatal if swallowed and enters airways.				
Long term effects				
Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders.				
Reproductive toxicity: This product contains reprotoxig substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cycle.				
Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.				
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.				

SECTION 12: Ecological information

12.1. Toxicity				
Substance	Species	Test	Duration	Result
No data available.				
12.2. Persistence and degradability				
Substance	Biodegradability		Test	Result
No data available.				
12.3. Bioaccumulative potential				
Substance	Potential bioaccumulation		LogPow	BCF
No data available.				
12.4. Mobility in soil				
No data available				
12.5. Results of PBT and vPvB assessment				
No data available				
12.6. Other adverse effects				
No special				

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances

Specific labelling

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Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

14.1. UN number	1133
14.2. UN proper shipping name	ADHESIVES containing flammable liquid
14.3. Transport hazard class(es)	3
14.4. Packing group	III
Notes	-
Tunnel restriction code	D/E

IMDG

UN-no.	1133
Proper Shipping Name	ADHESIVES containing flammable liquid
Class	3
PG*	III
EmS	F-E, S-D
MP**	No
Hazardous constituent	-

IATA/ICAO

UN-no.	1133
Proper Shipping Name	ADHESIVES containing flammable liquid
Class	3
PG*	III

14.5. Environmental hazards

-

14.6. Special precautions for user

-

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

No data available

(*) Packing group
(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

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Additional information

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Sources

COUNCIL DIRECTIVE 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

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 (CLP).

EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H225 - Highly flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H336 - May cause drowsiness or dizziness.

H361 - Suspected of damaging fertility or the unborn child.

H373 - May cause damage to organs through prolonged or repeated exposures.

The full text of identified uses as mentioned in section 1

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Other symbols mentioned in section 2

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Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data.

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

clan/chymeia

Date of last essential change

(First cipher in SDS version)

2016-12-08

Date of last minor change

(Last cipher in SDS version)

2016-12-08