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

1.1 Product identifier

Trade name

SCANDIPLAST

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

Relevant identified uses of the substance or mixture
adhesive resin, paint resin ,cast resin

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
SCAN-DIA GmbH
Luetkenheider Strasse 11
58099 Hagen
Germany

Telephone no. +49 (0) -2331-62469-0
Fax no. +49 (0) -2331-62469-29
e-mail info@scan-dia.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Chronic 3; H412
Eye Irrit. 2; H319
Flam. Liq. 3; H226
Repr. 2; H361d
Skin Irrit. 2; H315
STOT RE 1; H372
STOT SE 3; H335

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms


GHS02


GHS07


GHS08

Signal word
Danger

Hazardous component(s) to be indicated on label:
styrene

Hazard statement(s)

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to the ear through prolonged or repeated exposure by inhalation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378	In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

2.3 Other hazards

PBT assessment
The components of this product are not considered to be a PBT.

vPvB assessment
The components of this product are not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**styrene**			
	100-42-5 202-851-5 601-026-00-0 01-2119457861-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Asp. Tox. 1; H304 STOT SE 3; H335 STOT RE 1; H372 Aquatic Chronic 3; H412 Repr. 2; H361d	>= 25.00 - < 50.00	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Route, target organ, concrete effect
1	H372 inhalational; ear; -

Acute toxicity estimate (ATE) values			
No	oral	dermal	inhalative
1			11,8 mg/l

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove affected person from danger area, lay him down. If the patient is likely to become unconscious, place and transport in stable sideways position.

After inhalation
Ensure supply of fresh air. In case of persisting adverse effects consult a physician. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice.

After skin contact
Remove contaminated clothing immediately and dispose of safely. When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.

After eye contact
Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and seek medical advice.

After ingestion
Rinse the mouth thoroughly with water. Do not induce vomiting - aspiration hazard. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
Headache; Dizziness; Nausea; In some cases intoxication symptoms may only occur after a long time / several hours.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet; Alcohol-resistant foam; Carbon dioxide; Dry chemical extinguisher

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Nitrogen oxides (NOx); Carbon monoxide (CO); Carbon dioxide (CO2); In case of combustion evolution of dangerous gases possible. Formation of explosive mixtures with air is possible.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion byproducts. Use self-contained breathing apparatus. Cool endangered containers with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Ensure adequate ventilation. Keep away from ignition sources. Avoid contact with skin, eyes and clothing. Do not inhale vapours. High risk of slipping due to leakage/spillage of product.

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the subsoil/soil. Do not allow to enter drains or waterways. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g., general-purpose binder). When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid contact with skin and eyes. Do not eat or drink during work - no smoking.

General protective and hygiene measures
Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs.

Advice on protection against fire and explosion
Keep away from sources of heat and ignition. Do not smoke. Take precautionary measures against static charges.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep only in the original container, tightly closed, in a well ventilated place. Protect from heat and direct sunlight. Storage: cool and dry; Store the Whey Bath away from moisture.

Incompatible products
Do not store together with: oxidizing agents; oxidizing substances; spontaneously combusting substances; Heavy metal salts; Acids; Bases; Peroxides

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	**styrene**	**100-42-5**		**202-851-5**	
	List of approved workplace exposure limits (WELs) / EH40				
	Styrene				
	WEL short-term (15 min reference period)	1080	mg/m³	250	ppm
	WEL long-term (8-hr TWA reference period)	430	mg/m³	100	ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**styrene**			**100-42-5 202-851-5**	
	dermal	Long term (chronic)	systemic	406	mg/kg/day
	inhalative	Short term (acut)	systemic	289	mg/m³
	inhalative	Long term (chronic)	systemic	85	mg/m³
	inhalative	Short term (acut)	local	306	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**styrene**			**100-42-5 202-851-5**	
	oral	Long term (chronic)	systemic	2.1	mg/kg/day
	dermal	Long term (chronic)	systemic	343	mg/kg/day
	inhalative	Long term (chronic)	systemic	10.2	mg/m³
	inhalative	Short term (acut)	systemic	174.25	mg/m³
	inhalative	Short term (acut)	local	182.75	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	**styrene**		**100-42-5** **202-851-5**	
	water	fresh water	0.028	mg/L
	water	marine water	0.014	mg/L
	water	fresh water sediment	0.614	mg/kg dry weight
	water	marine water sediment	0.307	mg/kg dry weight
	water	Aqua intermittent	0.04	mg/L
	soil	-	0.2	mg/kg dry weight
	sewage treatment plant	-	5	mg/L

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn.
Breathing apparatus: gas filter A, code colour: brown

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Chemical resistant gloves (EN 374); For prolonged or repeated contact: use barrier creams, which may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Mind the manufactuer recommendations.

Appropriate Material	butyl rubber		
Material thickness		0.7	mm
Breakthrough time		30	min

Other
Check suitability of protective clothing for the specific workplace conditions. Chemical resistance of the protective equipment should be discussed with the manufacturer of the protective equipment.

Environmental exposure controls
Do not empty into drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form/Colour
liquid
green

Odour
of styrene

pH value
No data available

Boiling point / boiling range
No data available

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point			
Value	34	°C	
Method	ISO 3679		

Ignition temperature		
Value	480	°C
Reference substance	Styrene	

Auto-ignition temperature		
Value	480	°C
Reference substance	Styrene	

Flammability
No data available

Lower explosion limit		
Value	1.1	% vol
Reference substance	Styrene	

Upper explosion limit		
Value	8	% vol
Reference substance	Styrene	

Vapour pressure		
Value	6	mbar
Reference temperature	20	°C
Reference substance	Styrene	

Relative vapour density
No data available

Relative density
No data available

Density		
Value	1.04	g/ml
Reference temperature	20	°C

Solubility in water	
Comments	insoluble

Solubility
No data available

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**styrene**	**100-42-5**		**202-851-5**
log Pow			2.96	
Reference temperature			25	°C
Source	ECHA			

Viscosity		
Value	61	s
Method	ISO 2431 (6 mm)	

Particle characteristics
No data available

9.2 Other information

Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
Protect from light. Heat effect; risk of polymerisation

10.5 Incompatible materials
Exothermal reactions with: Acids; Bases; Peroxides; Heavy metal salts; Radical former

10.6 Hazardous decomposition products
None if stored, handled and transported properly.

SECTION 11: Toxicological information

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

Acute oral toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**styrene**	**100-42-5**		**202-851-5**
LD50		5000		mg/kg bodyweight
Species	rat			
Source	ECHA			

Acute dermal toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**styrene**	**100-42-5**		**202-851-5**
LD50	>	2000		mg/kg bodyweight
Species	rat			
Method	OECD 402			
Source	ECHA			

Acute inhalational toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**SCANDIPLAST**
Comments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE for inhalation: > 20.000 ppmV (gases), > 20 mg/l (vapours), > 5 mg/l (dusts/mists).

Acute inhalational toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**styrene**	**100-42-5**		**202-851-5**
LC50		11.8		mg/l
Duration of exposure		4		h
State of aggregation	Vapour			
Species	rat			
Source	ECHA			

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**

Species	rabbit
Source	ECHA
Evaluation	irritant

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
Species	rabbit		
Source	ECHA		
Evaluation	irritant		

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
Route of exposure	Skin		
Species	guinea pig		
Source	ECHA		
Evaluation	non-sensitizing		

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are met.		

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

STOT - single exposure
No data available

STOT - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
LC50		4.02	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Source	ECHA		

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
EC50		4.7	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
NOEC		1.01	mg/l
Duration of exposure		21	day(s)
Species	Daphnia magna		
Method	OECD 211		
Source	ECHA		

Toxicity to algae (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
EC50		4.9	mg/l
Duration of exposure		72	h
Species	Selenastrum capricornutum		
Method	EPA OTS 797.1050		
Source	ECHA		

Toxicity to algae (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
EC10		0.28	mg/l
Duration of exposure		96	day(s)
Species	Selenastrum capricornutum		
Method	EPA OTS 797.1050		
Source	ECHA		

Bacteria toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
EC50	appr.	500	mg/l
Species	activated sludge		
Method	OECD 209		
Source	ECHA		

12.2 Persistence and degradability

Biodegradability			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
Type	ThOD		
Value		70.9	%
Duration		28	d
Method	ISO DIS 9408		
Source	ECHA		
Evaluation	readily biodegradable		

Abiotic Degration			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
Type	Photolysis		

Half-life		7.4	h
Source	ECHA		

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
log Pow		2.96	
Reference temperature		25	°C
Source	ECHA		

12.4 Mobility in soil

Mobility in soil			
No	**Substance name**	**CAS no.**	**EC no.**
1	**styrene**	**100-42-5**	**202-851-5**
log Koc		2.55	
Reference temperature		20	°C
Method	QSAR		
Source	ECHA		

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	The components of this product are not considered to be a PBT.
vPvB assessment	The components of this product are not considered to be a vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment. Do not allow to enter soil, waterways or waste water canal.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.
Remove in accordance with local offical regulations.

Packaging

Completely discharge containers. Do not reuse product container. Comply with all EU, national and local regulations.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	3
Classification code	F1
Packing group	III
Hazard identification no.	30
UN number	UN1866
Proper shipping name	RESIN SOLUTION
Tunnel restriction code	D/E
Label	3

14.2 Transport IMDG

Class	3
Packing group	III

UN number	UN1866
Proper shipping name	RESIN SOLUTION
EmS	F-E, S-E
Label	3

14.3 Transport ICAO-TI / IATA

Class	3
Packing group	III
UN number	UN1866
Proper shipping name	Resin solution
Label	3

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES				
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				No 3, 40
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				
No	**Substance name**	**CAS no.**	**EC no.**	**No**
1	**styrene**	**100-42-5**	**202-851-5**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	P5c

Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)	
VOC content	0.83 %

Other regulations
Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing mothers.

15.2 Chemical safety assessment

A chemical safety assessment has been carried out for the following substance/s in this mixture:

CAS no.	100-42-5
EC no.	202-851-5

SECTION 16: Other information

Sources of key data used to compile the data sheet:
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H304	May be fatal if swallowed and enters airways.
H332	Harmful if inhaled.

Creation of the safety data sheet
UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

Prod-ID 639670