

Material Safety Data Sheet according to (EU) No.453/2010



Chapter 1: Identification of the substance/ preparation and of the company

1.1 Product identification

1.2 Trade name: Apex Marina Superior gelcoat

Material number: GCX10-YYH gelcoat spray application quality and
GCX10-YYs gelcoat application by hand quality

X : colour code

YY: identifications number

1.3 Relevant identified uses for the product and uses not recommended

Relevant industrial sector: Composite industry/GRP industry

Use: For the external coating of GRP products

1.4 Producer and supplier name

New-Coat A/S

Industriskellet 6, DK-3540 Lynge

Denmark

Mail: new-coat@new-coat.dk

1.5 Emergency telephone

+ 45 48 19 20 11

Chapter 2: Hazard identification

2.1 Classification of the substance or mixture

Xn – Harmful

R-phrases: 10 Flammable
20 Harmful if inhaled
36/38 Irritating to eyes and skin

S-phrases: 23 Avoid inhaling vapours

Contains styrene which in Denmark is considered to be carcinogenic

2.2 Labelling

Labelling according to EU directive

Labelled as styrene (index number 601-026-00-0) according to EU 1272/2008

2.3 Other dangers

The product contains organic solvents. Repeated exposure to organic solvents can damage the central nervous system and organs such as the as kidney and liver

Chapter 3: Composition of/information on ingredients

3.1 Mixture

Chemical characterisation

Mixture of polyester (containing 38-42 % styrene), colour pigments, additives, fillers and rheological additives. Styrene content 30-45 %

Chapter 4: First aid measures

4.1 Description of first aid measures

General remarks

If there is an accident, contact a doctor or casualty department and produce this Material Safety Data Sheet. If there are on-going symptoms or you have any doubt about the condition of the injured person, seek a doctor immediately. Never give water to an unconscious person

Inhalation

Seek fresh air and medical attention

Skin contact

Remove any contaminated clothes and shoes. Wash skin thoroughly with soap and water. Seek medical attention if redness, swelling, itching or burning occurs

Eye contact

Remove any contact lenses. Irrigate with water immediately for 15 minutes. If there is constant irritation, seek medical assistance

Ingestion

Do not induce vomiting. If the person is conscious give them several glasses of water. Remove the patient to a well-ventilated area. Call a doctor or take the patient to a medical facility

4.2 Important short-term and long-term symptoms and effects

Symptoms

Irritation: The product contains materials that cause irritation when in contact with the skin or eyes or when ingested

Contact with irritating materials can result in the contact areas becoming more sensitive to the absorption of damaging materials such as allergens

Neurologic effects: The product contains organic solvent that can damage the central nervous system. Symptoms can include loss of appetite, headache, dizziness, buzzing in the ears, a prickling sensation on the skin, cramps and loss of concentration

Repeated exposure to organic solvents can cause damage to the natural fat layer: The skin will subsequently be more sensitive to allergens

Dangers

No further information

Chapter 5: Fire-fighting measures

5.1 Extinguishing material

Suitable extinguishing materials

Foam, dry chemical powder, carbon dioxide

Unsuitable extinguishing materials

Water, which might cause the fire to expand

5.2 Special hazards

Avoid inhaling the fumes. At high temperatures, for example during a fire, carbon oxides will be emitted via black smoke. Keep closed containers cool with water

5.3 Special protective equipment for fire-fighters

Wear suitable protective equipment, including self-contained breathing apparatus

Chapter 6: Accidental release measures

6.1 Personal precautions

Use a protective mask, gloves and protective clothing

6.2 Environmental measures and cleaning methods

Cover and soak up with a suitable absorbent such as sand or items of clothing. Dispose according to local rules. Do not dump into the sewage system. Notify the relevant authority

Chapter 7: Handling and storage

7.1 Handling precautions

Do not eat or drink when using. Smoking is strictly prohibited.
See Chapter 8: Exposure controls/personal protection for relevant information

Fire and explosion protection

Keep away from any source of ignition. Smoking and open fires are not permitted.
Take precautions to avoid static electricity. Follow national regulations for fire protection

Fire Class: II (Denmark)

7.2 Storage conditions including incompatibility

Requirements for storage and containers

Keep in closed original containers in a well-ventilated cool place (<25 C). Keep away from any ignition sources. Avoid direct sunlight. Keep product dry

Directions for storage with other materials

Do not store with an oxidiser such as peroxide

Storage stability

Stored correctly, the product will remain stable for 4 months. Exceeding this limit can reduce the quality of the product

7.3 Special uses

The product is only to be used as indicated in 1.2

Chapter 8: Exposure control/personal protection

8.1 Exposure limit

Exposure limit (DK): 25 ppm/105 mg/m³ Remark LKH

Exposure limit (ACGIH) TLV-TWA: 20 ppm

TLV-STEL: 40 ppm

Please consult your national regulations for TLV.

DNEL/DMEL+values

DNEL/DMEL values are not available for this product

PNEC+values

PNEC values are not available for this product

8.2 Exposure control

If no adequate respiratory equipment is used, regular measurements should be taken to ensure that TLV are not exceeded

General precautions

Smoking, eating and drinking is not allowed during use. Food, drinks and tobacco must not be stored in areas where the product is used

Hygiene precautions

At the end of each working session, and at the end of the working day, exposed areas of the body should be washed. Always wash hands, underarms and face.

Respiratory protection

Use suitable equipment to supply fresh air and avoid any risk of inhaling vapours

Hand protection:

Use nitrile rubber gloves (Max 10 minutes). For a longer period of time, use 4H gloves

Eye protection:

Use close-fitting safety goggles and/or visor

Skin protection:

Use clothing that provides comprehensive skin protection

Chapter 9: Physical and chemical Properties

9.1 Information on physical and chemical properties

Physical appearance:	Tixotrop liquid
Particle size:	Not relevant
Colour:	According to label
Odour:	Pungent styrene
Odour limit:	0,1 ppm
PH-value:	Not relevant
Melting point:	-30,6°C (styrene)
Boiling point:	145,2°C (styrene)

Flash point:	32°C
Vapour speed:	0,49 (Styrene)
Flammability	
Lower flammability limit:	1,1 % (styrene)
Upper flammability limit:	6,1 % (styrene)
Heating value:	N/A
Lowest ignition energy:	N/A
Vapour pressure:	4,5 mm HG (20 C) (styrene)
Relative vapour density compared to air:	3,6 (air 1)
Relative density:	1,1 – 1,3 g/cm ³
Solubility in water:	Insoluble
Soluble in:	Styrene and acetone
Coefficient of partition n-oktanol/vand (log paw)	2,96 (styren)
Ignition temperature:	N/A
Self-ignition temperature:	> 350 C
Thermal decomposition:	N/A
Viscosity (dynamic):	9.000 – 17.000 Cps
Viscosity (kinematic):	N/A
Explosive properties:	N/A

9.2 Other Information's

Density: 1,10 – 1,3 g/cm³

Bulk density: Not relevant

Chapter 10: Stability and reactivity

10.1 Reactivity

NA

10.2 Chemical stability

Product is stable under the conditions detailed in Chapter 7: Handling and storage. Stored over 65°C can result in polymerisation as an exothermic reaction

10.3 Risk of dangerous reactions

Can polymerise with peroxides or at high temperatures, causing heat and risk of fire and explosion

10.4 Conditions to avoid

Avoid warming and high temperatures leading to polymerisation

10.5 Materials to avoid

Strongly oxidising materials such as peroxides will start polymerisation

10.6 Hazardous decomposition products

Can create carbon oxides during fire

Chapter 11: Toxicological information

11.1 Information on toxicological effects

For styrene:

Acute oral toxicity: LD₅₀/p.o./rat => 2.000 mg/kg

Acute dermal toxicity: Expected to be low LD₅₀> 2.000/kg

Acute toxicity by inhalation: LD₅₀/i.p./rat => 21mg/L

Air/2 h

Skin irritation: Irritating to skin

Eye irritation: Irritating to eyes

Sensitisation: Not considered to be a skin sensitizer

Repeated dose toxicity: N/A

Mutagenicity: Not considered a mutagenic hazard

Carcinogenicity : Limited evidence of carcinogenic effect.

Denmark: INDEHOLDER STOFFER, DER ER OPTAGET PÅ BEJDSTILSYNETS LISTE OVER STOFFER, DER ANSES FOR AT VÆRE KRÆFT FREMKALDENDE

Reproductive and developmental toxicity: Causes foetotoxicity in animals at doses which are maternally toxic. Not considered to impair fertility

Chapter 12: Ecological Information

12.1 Toxicity

For styrene:

Toxicity on fish: LC50/96t/fish = 10 ml/l

Toxicity on dafnias: eC50/49t/daphnia = 4,7 ml/l

Toxicity on algae: EC50/72t/Algae: 4,9 ml/l

Toxicity on bacteria: N/A

Toxicity on earth organisms: Yes

Toxicity on land organisms: N/A

Toxicity on other ecological organisms: N/A

Toxicity on microorganisms in sediment: N/A

12.2 Persistence and degradability

For styrene:

Physical-chemical Elimination: N/A

Photo decomposition: Yes

Biological decomposition: Yes

Solved organic carbon (DOC): N/A

Chemical Oxygen Dose (COD): N/A

Biochemical Oxygen Dose (BOD5): N/A

12.3 Bioaccumulation

Bioaccumulation: Not expected

12.4 Mobility in earth

Mobility and partition between ecological segments:

Log K_{oc}=2,414 Calculated from LogP_{ow} (moderate mobility potential)

Properties in environmental areas: N/A

12.5 Results from PBT- and vPvB-Evaluation

NA

12.6 Other negative effects

Other negative effects on environment: N/A

Chapter 13: Disposal considerations

13.1 Methods for disposal Product

Recover or recycle if possible. Dispose of the product according to local legislations at an authorised disposal plant

Denmark: EAK kode 070799 Kemikalie affaldsgruppe C

Empty but do not clean containers

Containers containing residues of product shall be handled in the same way as the product

Chapter 14: Transport information

14.1 to 14.5

Road transport:

ADR: 3 PG III Special provision 640 E

Description: UN 1866 resin solution

Danger number: 30

RID: 3 / 31 C

Description: 1866 resin solution

Sea transport:

IMDG/UN: 3.3/1866/III

Special placement: Marine pollutant

EMS: 3-05 MFAG: 310

Correct description: Resin solution (styrene)

14.6 Special precautions

See Chapters 6, 7 and 8 in this Material Safety Data Sheet

14.7 Bulk transport according to exhibit II of MARPOL 73/78 and to IBC-code

N/A

Chapter 15: Regulatory information

15.1 Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments

Commission Directive 1999/45/EC (Classification, packaging and labelling of dangerous preparation) and subsequent amendments

Commission Directive 98/24/EC (Protection of health and safety of workers from risk related to chemical agent)

Commission Directive 2000/39/EC (Occupational exposure limit values) Regulation (EC) no. 1907/2006

Other special regulations for Denmark

Kun til industriel brug.

Ifølge bekendtgørelsen om unges farlige arbejde må unge under 18 år ikke arbejde med dette produkt.

Beskæftigelsesbegrænsninger for kvinder i den fødedygtige alder.

Særlig uddannelse: I Danmark: Polyesterkursus

Produktet indeholder: Styren, der er optaget på Arbejdstilsynets liste over flygtige stoffer/opløsningsmidler. (Danmark)

15.2 Chemical safety evaluation

N/A

Chapter 16: Other information

No other relevant information

Written/revised by Peter Kjær 30-4-13

This Material Safety Data Sheet cancels and replaces any preceding release