



Written by
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Quality assurance

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SAFETY DATA SHEET SEACOAT 228 HB D/A

1 - IDENTIFICATION OF PREPARATION AND COMPANY/BUSINESS

SEACOAT 228 HB HARDENER

SICOMIN
BP23 – RN 568
13161 CHATEAUNEUF LES MARTIGUES Cedex
Telephone 33 04 42 42 30 20 Fax 33 04 42 81 29 29

Composites@sicomin.com

Emergency telephone No.: 0033 (0) 1 45 42 59 59 . Association/Organisation: ORFILA.

2 - INFORMATION REGARDING CONSTITUENTS

Hazardous substances present on their own.
(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state)

This preparation contains no hazardous substance in this category.

Other substances representing a hazard:

No known substance in this category present.

Substances present at a concentration below the minimum danger threshold.

601-021-00-3 TOLUENE Concentration $\geq 10.00\%$ and $< 25.00\%$. Symbol: Xn F R: 11-20-902

607-195-00-7 2-METHOXY-1-METHYLETHYL ACETATE Concentration $\geq 10.00\%$ and $< 25.00\%$. Symbol:

Xi R: 10-36

Other substances with occupational exposure limits.

607-022-00-5 ETHYL ACETATE Concentration $\geq 25.00\%$ and $< 50.00\%$. Symbol: F R: 11

607-025-00-1 BUTYLACETATE N- Concentration $\geq 10.00\%$ and $< 25.00\%$. Symbol: R: 10

3 - IDENTIFICATION OF HAZARDS

This preparation is not classed as hazardous to health by directive 88/379/EEC.

This product is classed: Highly flammable liquid.

4 - FIRST AID.

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing in an unconscious person.

In the event of exposure by inhalation.

In the event of inhalation, move the patient into the fresh air and keep him/her warm and still.

In the event of splashes or contact with eyes.

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

Refer the patient to an ophthalmologist, in particular if there is any redness, pain or visual impairment.

In the event of splashes or contact with skin.

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

DO NOT use solvents or thinners.

In the event of swallowing.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water

and consult a doctor.

Keep still. DO NOT induce vomiting.

If swallowed accidentally, call a doctor to assess the need for monitoring and subsequent treatment in hospital. Show him the label.

5 - FIRE-FIGHTING MEASURES

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

In the event of fire, the recommended extinguishing agents are:

Special foams for polar liquids (known as alcohol resistant), powders, carbon dioxide.

In the event of fire, use specifically suitable extinguishing agents. Never use water.

Extinguishing agents not to be used

Water is not generally recommended since it can be ineffective; however, it can be used successfully to cool containers exposed to the fire and to disperse fumes.

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Special equipment for fire-fighting personnel.

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

6 - MEASURES TO BE TAKEN IN THE EVENT OF ACCIDENTAL SPILLAGE

Safety precautions: Eliminate any possible source of ignition and ventilate the premises.

Avoid inhaling the fumes.

Consult the safety measures listed under headings 7 and 8.

Environmental safety precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatom earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Use drums to dispose of waste recovered in accordance with applicable regulations (see heading 13).

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Cleaning methods:

Clean preferably with a detergent, do not use solvents.

Contaminated areas must be cleaned very quickly.

A possible decontaminant for flammable products may be: (expressed by volume) water (45 parts), ethanol or isopropanol (50 parts), concentrated ammonia (d-0.880) (5 parts). For non-flammable products: sodium carbonate (5 parts), water (95 parts).

These residues must be stored for disposal in accordance with applicable regulations (see 13).

7 - HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.

Handling:

Handle in well-ventilated areas.

The fumes are denser than air. They can spread along the ground and form explosive mixtures with air

Prevent the formation of flammable or explosive concentrations in air and avoid vapour concentrations higher than the occupational exposure limits.

Fire prevention:

Prevent the accumulation of electrostatic charges with connections to earth

The preparation may become electrostatically charged; always place on the ground during transfer. Wear antistatic shoes and clothes and make floors of conductive materials.

Use the product in premises where there are no naked flames or other sources of ignition and have protected electrical equipment

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures

Observe precautions stated on label and also industrial safety regulations

Packages which have been opened must be reclosed carefully and stored in an upright position

Avoid inhaling fumes.

Where the personnel must carry out work in a booth, whether for spraying or otherwise, the ventilation may be inadequate to control particles and solvent fumes in every case.

It is therefore recommended that personnel wear masks with a compressed air supply during spraying operations until the concentration of particles and solvent fumes has fallen below the exposure limits.

Prohibited equipment and procedures.



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Smoking, eating and drinking are prohibited in premises where the preparation is used
Never open the packages under pressure
Storage.

Keep the container tightly closed in a dry, well-ventilated place
Keep away from all sources of ignition - do not smoke. Keep well away from all sources of ignition, heat and direct sunlight The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

8 - EXPOSURE CONTROL - PERSONAL SAFETY

Anyone with a history of skin sensitisation, asthma, allergies, chronic or periodic respiratory problems must on no account use these preparations

Technical measures. Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction. If this ventilation is insufficient to maintain the concentration of solvent fumes below the exposure limits, wear breathing apparatus

Exposure limits per INRS ND 1945-153-93/(1996) and ND 2022-163-96:

France N°:	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP
601-021-00-3 84	100	375	150	550	-	4bis,
607-022-00-5	400	1400	-	-	-	84
607-025-00-1	150	710	200	940	-	84
607-195-00-7	-	-	-	-	-	-
Germany	Class:	MAK-ppm:	MAK-mg/m3:	Notes:	Notes:	
601-021-00-3	II,2	50	190	-	-	
607-022-00-5	I	400	1400	-	-	
607-025-00-1	I	200	950	-	-	
607-195-00-7	I	50	275	-	-	
ACGIH(TLV)	TWA-ppm:	TWA-mg/m3:	STEL-ppm:	STEL-mg/m3:	Notes:	Notes:
601-021-00-3	50	188	-	-	*	
607-022-00-5	400	1440	-	-	-	
607-025-00-1	(150)	(713)	(200)	(950)	-	
607-195-00-7	-	-	-	-	-	

Safety breathing apparatus:

Where workers encounter concentrations higher than the exposure limits, they must wear suitable, approved masks.

Hand protection. Protective creams may be used for exposed skin, but they should not be applied after contact with the product. Due to the solvents present, it is recommended that polyvinyl alcohol or neoprene rubber gloves be worn.

Eye and face protection. Use eye protectors designed to protect against liquid splashes

Skin protection. Wear antistatic clothing made of natural fibre or synthetic fibre resistant to high temperatures.

After contact with the product, any contaminated part of the body shall be washed

For further information, see § 11 of S.D.S. - Toxicological information.

9 - PHYSICAL PROPERTIES

Density:	> 1
Acid/base character of preparation:	not relevant.
Solubility of preparation in water:	Insoluble.
Vapour tension at 50°C of volatile constituents:	Below 110Kpa (1.10 bar).
Physical state:	fluid liquid
Flash point interval:	Flash point: <= 21°C.
The pH is impossible to measure or its value is not relevant.	
Self-ignition temperature:	354 °C.
Decomposition temperature:	not relevant.
Melting temperature interval:	-82 °C.
Average distillation temperature of solvents contained:	80 °C.

10 - STABILITY AND REACTIVITY

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and nitrogen oxide It may also release hydrogen cyanide, amines and alcohols.

Keep away from oxidising agents and strongly acidic or basic materials to avoid exothermic reactions
Exothermic reactions occur with amines and alcohols. The preparations react slowly with water and give off carbonic gas which may produce pressure increases in closed packages Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

11 - TOXICOLOGICAL INFORMATION

No data is available regarding the preparation itself.

Exposure to fumes from solvents contained in the preparation beyond the exposure limits stated may produce effects harmful to health, such as:

Irritation of mucous membrane and respiratory system, kidneys, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Prolonged or repeated contact with the preparation may strip the skin of its natural oil and thus cause non-allergic dermatitis on contact and absorption through the epidermis.

Splashes in the eyes may cause irritation and reversible damage

Based on the properties of isocyanates and taking into account toxicological data for similar preparations, this preparation may cause irritation and/or sensitisation of the respiratory system.

It may also lead to asthma, respiratory problems and angina

Those susceptible may display asthmatic symptoms when exposed to atmospheres with an isocyanate concentration well below those of the VLE: exposure limits.

Repeated exposure may cause permanent respiratory problems.

12 - ECOLOGICAL INFORMATION

No ecological data on the product itself is available.

The product must not be allowed to run into drains or waterways.

13 - DISPOSAL CONSIDERATIONS

Do not pour into drains or waterways.

14 - TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport

UN 1263 = Paint flammable (including lacquer, enamel, stain, shellac, varnish, polish and related material).

ADR/RID	Class	Number	Code	Identif.	Label		
3	5° b	33	1263	3			
IMDG	Page	N°ONU	Class	Number	2°Label	Identif.	N°GSMU
		1263	3.2	II	-	3-07	-

The page number 3230 should not appear anymore on the Dangerous Goods Declaration (Amendment 28-96).

IATA	N°ONU	Class	2°Label	Number	Passenger	Passenger	Freighter	Freighter	nota
	1263	3	-	II	305	5 L	307	60 L	A3
	1263	3	-	II	Y305	1 L	-	-	A7

15 - STATUTORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 88/379/EEC and its adaptations

In addition directive 96/54/EC with the 22° adaptation of directive 67/548/EEC (Hazardous substances) have been taken into account.

Contains compounds with an isocyanate base - refer to the information supplied by the manufacturer. This information is found on this safety data sheet

Preparation classification.


Highly flammable.

Particular hazards associated with the preparation and safety recommendations:

R 11	Highly flammable.
	Contains isocyanates. See information supplied by the manufacturer.
S 23	Do not breathe vapour.
S 33	Take precautionary measures against static discharges.
S 16	Keep away from sources of ignition - no smoking.
S 9	Keep container in a well-ventilated place.

16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

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The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties