# AstruPanel CRASH!

## **CLEANING RECOMMENDATIONS**

Periodic cleaning of all LEXAN<sup>™</sup> polycarbonate sheet products can be accomplished easily and without the need for specialised cleaning agents. However precautions need to be taken to avoid any aggressive cleaning agents. The basic cleaning agent for all LEXAN sheet products is a solution of lukewarm water with mild soap or household detergent, using a soft cloth or sponge to loosen any dirt and grime.

All surfaces are then rinsed with cold water and dried with a soft cloth to prevent water spotting caused by lime-scales. However, in some cases this may not be sufficient and certain solvent cleaners may be needed to remove stubborn stains, graffiti, etc. In these cases the following list of cleaning agents are approved for use at room temperature:

- Methyl alcohol Ethyl alcohol Butyl alcohol Isopropyl alcohol White spirit Heptane Hexane Petroleum ether (BP 65°)
- Hydroxide peroxide (1% H2O2)

## **CLEANING PRIOR TO FORMING**

It is necessary to clean LEXAN sheet prior to forming. It is recommended that the dust is blown off with an ionising air gun or the sheet is wiped with a soft cloth dipped in water or a mixture of isopropanol and water.

#### Points to remember!

- Don't use abrasive or highly alkaline cleaners such as acetone and avoid contact with such substances.
- Never scrape the sheet with squeegees, razor blades or other sharp instruments. This may cause aesthetic damage on the surface of the product.
- Don't clean LEXAN sheet products in the hot sun or at elevated temperatures as this can lead to staining.

## STAIN RESISTANCE AND CLEANING

The following table show how to clean typical stains if that occurs on LEXAN sheet.

Stain Substance	Removed With		
Soda	Warm Water		
Mustard	Dry Cloth		
Lemon Juice	Warm Water		
Fruit Preserve	Warm Water		
Milk	Warm Water		
Tea	Warm Water		
Hot Chocolate	Warm Water		
Coffee	Dry Cloth		
Newspaper Print	Warm Water		
Pencil	Warm Water		
Ball Point Pen	Isopropyl Alchohol (IPA)		
Neurtral Marker	Dry Cloth		
Water Resistant Marker	Isopropyl Alchohol (IPA)		

### **EXCELLENT CHEMICAL RESISTANCE**

Cleaning test overview of AstruPanel CRASH sheet by using various cleaning agents, presenting the retention of the original state of the product after testing.

Elongation @23°C	<ul><li>≥80% Retention</li><li>! 60 - 80% Retention</li><li>X ≤60% Retention</li></ul>		
STRAIN	0%	0.5%	1%
No chemical	STD	•	•
Sodium hydroxide 10%	•	!	Х
Neutral Soap	•	•	•
Acetone	X	X	Х
Sodium sulphate 10%	•	•	•
Bleach	•	•	•
Phosphoric acid 30%	•	•	•
Nitric acid 10%	•	•	•
Hydrochloric acid 20%	•	•	•
Citric acid 10%	•	•	•
Acetic acid 10%	•	•	•
Hydrogen Peroxide 30%	•	•	•
Ammonium Chloride 10% **	•	•	1
Formaldehyde 1%	•	•	•
Ethanol 99.8%	•	•	•

Please contact Astrup AS to receive a copy of this test result of AstruPanel CRASH sheet.

<sup>\*\*</sup> Concentration was 10 times higher as requested