INFOSHEET

CEPRO®
LEADING IN WELDING SAFETY

SATURN 420 WELDING BLANKET

Weight 420 gr/m² Thickness 5 mm

All round welding blanket made from non-woven carbon felt. Suited for a large variety of welding works.

Application

Saturn is perfect to be put to use as an all round welding blanket, for example in the field of :

- Machine building and maintenance.
- Cutting and grinding work
- Ship maintenance
- Automotive industries

Conditions for use

- Since applications of welding blankets vary widely, no warranty on the blanket's usage can be granted / given. The user is responsible for determining whether the chosen blanket will provide adequate protection for the application used!
- Thicker blankets (provided they are from the same material) will provide a higher grade of protection / insulation at a certain temperature.
- Always use on an incline of at least 15 degrees.
- Always use more layers initially.

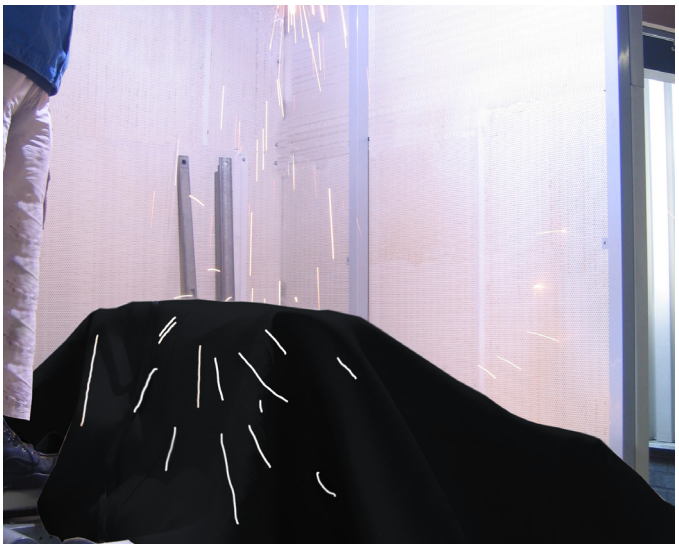
Characteristics

Saturn 420 welding blankets have a very high peak temperature (1300 °C) and are relatively light-weight (420 g/m²). Furthermore, Saturn welding blankets are very flexible and can be used in small spaces and in odd corners. Saturn is made of a scratch-free material and is free from asbestos and ceramic fibres.

Saturn blankets are suitable as isolation blankets for temperatures below 200 °C.

Measurements

Saturn 420 - 200 x 100 cm	56.57.11
Saturn 420 - 200 x 100 cm	56.57.12
Saturn 420 - 200 x 200 cm	56.57.15
Saturn 420 - 200 x 300 cm	56.57.16
Saturn 420 - roll 200cm x 50m[1]	56.57.01.2050
Saturn 420 - roll 200cm x 10m[1]	56.57.01.2010
Saturn 420 - part roll 200cm	56.57.01.2000



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CLASSIFICATION OF REACTION TO FIRE

Cepro Saturn welding blankets comply with :

EN 13501-1: 2007+A1:2009

This is the highest available standard appliclable for welding blankets.

Classification

Climbing wall in relation to its reaction to fire behaviour is classified : B

The additional classification in relation to smoke production is : s1

The additional classification in relation to flaming droplets / particles is : d0

The format of the reaction to fire classification for construction products is :

Fire behaviour		Smoke production			Flaming droplets	
B	-	s	1	,	d	0

Reaction to fire classification: B - s1,d0

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product description Cepro Saturn (200 gr/m² / 420 gr/m² / 700 gr/m²)
Synonyms n/a

Manufacturer / Supplier

Cepro International BV
Provinciënbaan 16
NL-5121 DL RIJEN
The Netherlands

Date of issue December 2011

Tel. no. for information / emergency +31 (0)161 22 64 72
Fax no. for information / emergency +31 (0)161 22 49 73

Chemical family Oxidized/Stabilized Polyacrylonitrile Fiber

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component **Oxidized or stabilized Polyacrylonitrile fiber**

Cas. no. 308060-39-1
% 100

Limits for air contaminants OSHA and ACGIH have not established the permissible exposure limit (PEL/TLV)

3. HAZARDS IDENTIFICATION

Least:0, Slight:1, Moderate:2, High:3, Extreme:4	HEALTH	FIRE	REACTIVITY
HMIS rate	0	1	0

Human health hazards None known
Signs & symptoms of exposure None
Medical conditions generally aggravated by exposure: None known

4. FIRST-AID MEASURES

Eye Flush eyes with water for 15 minutes
Skin Wash affected areas thoroughly with soap and water
Inhalation Remove from the dust area to fresh air
Ingestion In the event of deliberate ingestion, consult with a doctor

5. FIRE-FIGHTING MEASURES

Extinguishing media normal firefighting procedures
Restriction no restrictions
Unusual fire & explosion hazards none
Flash point non determined
Flammable limits n/a
Main combustion gas low levels of CO, CO2, HCN, acrylonitrile and vapors
Personal protection self contained breathing apparatus

SATURN WELDING BLANKET

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled :
In case of spill, collect the spilled materials. If this material is not contaminated, put it into a clean container and it can be reused. Otherwise, dispose of it properly

7. HANDLING AND STORAGE

Precautions to be taken in handling & storing :
Keep the package sealed, away from dirt and moisture. Avoid exposure to sunlight.

Other precautions	None

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection	normal industrial hygiene practice (dust mask) if high degree of fiber fly is experienced
Ventilation	Local exhaust for airborne fiber removal
Protective gloves	Normal industrial hygiene practice (gloves if desired)
Eye protection	Safety glasses
Other protective clothing or equipment	**none**
Work / hygienic practices	Gloves (Tyvek) and NIOSH approved dust masks. Before eating, drinking or smoking wash hands and face thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling point	n/a
Vapor pressure	**n/a**
Vapor density	n/a
Specific gravity (H_20=1)	Greater than or equal to 1,35 g/cm^3
Melting point	n/a
Evaporation rate (Butyl Acetate=1)	n/a
Solubility in water	insoluble
Appearance	black, odorless

10. STABILITY AND REACTIVITY

Stability	stable
Conditions to avoid	Oxidation reaction may occur when exposed to air at temperature above 260 °C generating low levels of HCN, CO, CO_2, H_2O and acrylonotrile.
Incompatible materials	see above
Hazardous decomposition or byproducts	Products of combustion and decomposition depend on other materials present in the fire and the fire conditions. Burning will produce low levels of HCN, CO, CO_2, H_2o and acrylonitrile. Avoid inhalation.
Hazardous polymerization	Will not occur
Conditions to avoid	None

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11. TOXICOLOGICAL INFORMATION

Health hazards	None known
Carcinogenicity	No
Signs & symptoms of exposure	None
Medical conditions generally aggravated by exposure	None known

12. ECOLOGICAL INFORMATION

No ecological data is available for this products

13. DISPOSAL CONSIDERATION

Landfill sites - industrial approved. Do not incinerate. If necessary, consult local, state and federal agencies prior to disposal of this material.

14. TRANSPORT INFORMATION

Proper shipping name	not applicable / not regulated
Hazard class	not applicable
Identification number	not applicable
D.O.T. hazardous substance (Reportable Quantity of Product)	not applicable
D.O.T. label required	not applicable

15. REGULATORY INFORMATION

This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C.

This product does not contain any components defined as toxic chemicals subject to reporting requirements of Section 313 of Title III of 40 CFR 372 or subject to other EPA regulations.

16. OTHER INFORMATION

Disclaimer
This information is furnished without warranty, expressed or implied, except that it is believed to be accurate to the best knowledge of Cepro International BV. The information presented in this MSDS is related only specific material desingated herein. Cepro International BV assumes no legal responsibility for the use or reliance upon these data. The user should review any recommendation in the specific context of the intended use to deterimine wheter appropriate.

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DESCRIPTION

Saturn 420 welding blankets are made from non-woven carbon felt.

Test	Standard		
1. Thickness (± 0,2mm)	EN 29073-2		5 mm
2. Weight (± 10%)	EN 29073-1		420 g/m^2
3. Elongation at break (%)	EN 29073-3	V/MD/L max	70
	EN 29073-3	P/CD/Q max	80
4. Breaking strength (N/5cm)	EN 29073-3	V/MD/L min	115
	EN 29073-3	P/CD/Q min	140
5. Air permeability (± 10%)	ISO 9237	(l/m2/s) 200 Pa	750

Chemical composition (%)	
Carbon content	62
Nitrogen	21,5
Oxygen	12
Hydrogen	4,5
Sodium	< 0,1
Trace metals	< 0,01

Chemical resistance	
Strong acids	Good
Weak acids	Excellent
Strong bases	Poor
Weak bases	Good
Organic solvents	Excellent

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HEAT AND FLAME RESISTANCE TEST

Purpose of this tests was to show the heat and flame resistance of Cepro Saturn (420 g/m²). The test is composed of 2 sections, the flame and oven test.

OVEN TEST

Heat test was carried out in an oven at 950 °C, the time of exposure 5 and 30 seconds. Measured characteristic was the loss of weight after the exposure.

Results of a test at 950°C

Time of exposure	950°C	Weight
		420 g/m²
5s	Mass loss (%)	18,6
	Exact temperature (°C)	945
30s	Mass loss (%)	32,2
	Exact temperature (°C)	916

No loss of weight

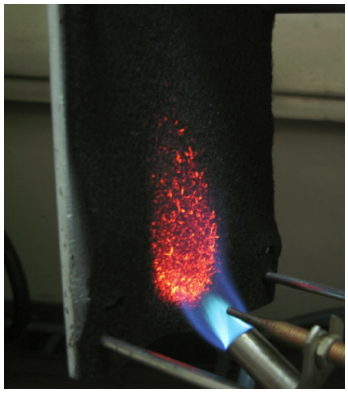
After the oven test there is no other change to the material except loss of mass. The material still retains its structure and flame retardant properties.

2. Flame test

Purpose of this tests was to show resistance of Cepro Saturn (420 g/m²) to direct flame exposure. The test for flame resistance was performed with laboratory gas burner. The flame was approx. 1300 - 1500°C, time of exposure to the flame was 30s. The samples were fixed in a special designed frame, put in lab testing equipment and exposed to direct flame.

Exposure

Samples were exposed to direct flame for 30s on the edge and on the surface. The Cepro Saturn did not burn but only glow which is visible on the photo.



No penetration

On the back side there is no visible glow or penetration of the flame trough the surface.