

## SATURN 420 TOILES ANTI-CHALEUR

**Poids 420 gr/m<sup>2</sup>    Epaisseur 5 mm**

**Couverture de soudure légère fabriquée à partir de feutre de carbone non tissé. Adaptée à une large variété de travaux de soudage.**

### Application

Le feutre Saturne est adapté à un usage en tant que couverture, spécialement pour le soudage léger et le meulage.

Autres exemples d'utilisation :

- Construction et maintenance de machines
- Maintenance de navires
- Industrie automobile

### Conditions d'utilisation:

- Dans la mesure où les applications pour toiles anti-chaleur varient considérablement, aucune garantie sur l'utilisation de la toile n'est implicite ou prévue. L'utilisateur a l'entière responsabilité quant au choix de toile anti-chaleur à préconiser pour une protection adéquate, en fonction de l'application requise.
- Les toiles épaisses (fabriquées à partir de la même matière) fourniront un niveau de protection supérieur à une certaine température.
- Toujours observer une inclinaison du produit d'au moins 15 degrés.
- Utiliser plusieurs toiles superposées si nécessaire.

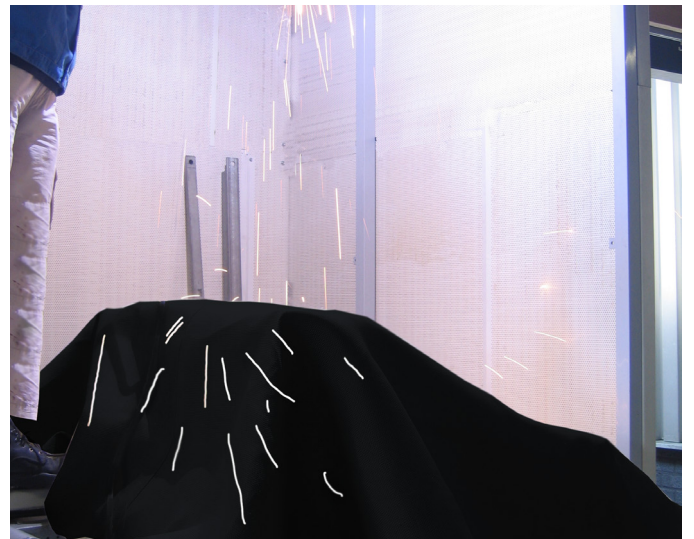
### Attributs

Le feutre anti-chaleur Saturne possède une température de résistance en pointe très élevée (1300 °C) ainsi qu'un poids relativement faible (420 g/m<sup>2</sup>). Par ailleurs, ce feutre est également très flexible, lui permettant d'être utilisé dans de petits espaces et recoins. Le feutre Saturne est fabriqué à partir d'un matériau anti-rayure. De plus il est exempt d'amiante ou de fibres céramiques. Les feutres Saturne ne sont pas à utiliser comme couvertures isolantes pour le contrôle du refroidissement.

**Les feutres Saturne peuvent être utilisés comme couvertures isolantes à des températures inférieures à 200 °C.**

### Dimensions disponible

|   |               |
|---|---------------|
| Saturne 420 - 100 x 100 cm                            | 56.57.11      |
| Saturne 420 - 200 x 100 cm                            | 56.57.22      |
| Saturne 420 - 200 x 200 cm                            | 56.57.15      |
| Saturne 420 - 200 x 300 cm                            | 56.57.16      |
| Saturne 420 - rouleau largeur 200cmx100m <sup>1</sup> | 56.57.01.2099 |
| Saturne 420 - rouleau largeur 200cmx50m <sup>1</sup>  | 56.57.01.2050 |
| Saturne 420 - rouleau largeur 200cmx10m <sup>1</sup>  | 56.57.01.2010 |
| Saturne 420 - partie du rouleau largeur 200cm         | 56.57.01.2000 |



## SATURN WELDING BLANKET

### CLASSIFICATION OF REACTION TO FIRE

Cepro Saturn welding blankets comply with :

**EN 13501-1: 2007+A1:2009**

This is the highest available standard applicable 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>B</b>       | - | <b>s</b>         | <b>1</b> | , | <b>d</b>         | <b>0</b> |

**Reaction to fire classification: B - s1,d0**

## SATURN WELDING BLANKET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

|                                |   |                      |               |
|--------------------------------|---|----------------------|---------------|
| <b>Product description</b>     | Cepro Saturn (200 gr/m <sup>2</sup> / 420 gr/m <sup>2</sup> / 700 gr/m <sup>2</sup> ) |                      |               |
| <b>Synonyms</b>                | n/a   |                      |               |
| <b>Manufacturer / Supplier</b> | <b>Cepro International BV</b>   | <b>Date of issue</b> | December 2011 |
|                                | Provinciënbaan 16<br>NL-5121 DL RIJEN<br>The Netherlands                              |                      |               |
|                                | Tel. no. for information / emergency  | +31 (0)161 22 64 72  |               |
|                                | Fax no. for information / emergency   | +31 (0)161 22 49 73  |               |
| <b>Chemical family</b>         | Oxidized/Stabilized Polyacrylonitrile Fiber   |                      |               |

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

|                             |  |
|-----------------------------|--|
| <b>Component</b>            | <b>Oxidized or stabilized Polyacrylonitrile fiber</b>                        |
| 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, CO <sub>2</sub> , 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

|   |  |
|---|--|
| <b>Respiratory protection</b>                 | normal industrial hygiene practice (dust mask) if high degree of fiber fly is experienced  |
| <b>Ventilation</b>                            | Local exhaust for airborne fiber removal   |
| <b>Protective gloves</b>                      | Normal industrial hygiene practice (gloves if desired)   |
| <b>Eye protection</b>                         | Safety glasses   |
| <b>Other protective clothing or equipment</b> | <b>none</b>  |
| <b>Work / hygienic practices</b>              | 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

|  |   |
|--|---|
| <b>Boiling point</b>                       | n/a   |
| <b>Vapor pressure</b>                      | n/a   |
| <b>Vapor density</b>                       | n/a   |
| <b>Specific gravity (H<sub>2</sub>O=1)</b> | Greater than or equal to 1,35 g/cm <sup>3</sup> |
| <b>Melting point</b>                       | n/a   |
| <b>Evaporation rate (Butyl Acetate=1)</b>  | n/a   |
| <b>Solubility in water</b>                 | insoluble                                       |
| <b>Appearance</b>                          | black, odorless                                 |

### 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| <b>Stability</b>                             | stable  |
| <b>Conditions to avoid</b>                   | Oxidation reaction may occur when exposed to air at temperature above 260 °C generating low levels of HCN, CO, CO <sub>2</sub> , H <sub>2</sub> O and acrylonitrile.  |
| <b>Incompatible materials</b>                | see above   |
| <b>Hazardous decomposition or byproducts</b> | 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 <sub>2</sub> , H <sub>2</sub> O and acrylonitrile. Avoid inhalation. |
| <b>Hazardous polymerization</b>              | Will not occur  |
| <b>Conditions to avoid</b>                   | None  |

## SATURN WELDING BLANKET

### 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 designated 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 determine whether appropriate.

## SATURN WELDING BLANKET

### DESCRIPTION

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

| Test                                | Standard   |                              |                      |
|-------------------------------------|------------|------------------------------|----------------------|
| 1. Thickness ( $\pm 0,2\text{mm}$ ) | EN 29073-2 |                              | 5 mm                 |
| 2. Weight ( $\pm 10\%$ )            | EN 29073-1 |                              | 420 g/m <sup>2</sup> |
| 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 ( $\pm 10\%$ )  | ISO 9237   | (l/m <sup>2</sup> /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 |

## SATURN WELDING BLANKET

### HEAT AND FLAME RESISTANCE TEST

Purpose of this tests was to show the heat and flame resistance of Cepro Saturn (420 g/m<sup>2</sup>). 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/m <sup>2</sup> |
| 5s               | Mass loss (%)          | 18,6                 |
|                  | Exact temperature (°C) | 945                  |
| 30s              | Mass loss (%)          | 32,2                 |
|                  | Exact temperature (°C) | 916                  |

### No loss of weight

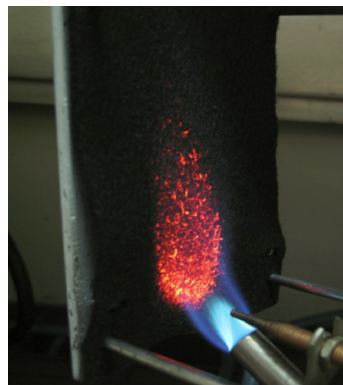
**After the oven test there is no other change to the material except loss of mass. The material still retains its structure and flame retardant properties.**

## 2. FLAME TEST

Purpose of this tests was to show resistance of Cepro Saturn (420 g/m<sup>2</sup>) 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.**

