

## HI-MACS<sup>®</sup> Sheet SAFETY DATA SHEET

### SECTION 1: CHEMICAL PRODUCT & MANUFACTURER'S INFORMATION

**1.1 Chemical Product Name:** HI-MACS<sup>®</sup>

**1.2 Usage:** Interior building material and furniture applications

**1.3 Manufacturer:**

LG Hausys, Oksan Plant  
9, Oksansandan 3-ro, Hungduk-gu,  
CHEONGJU CITY, CHUNGBUK 361-912  
KOREA  
Tel.: +82 43 716 7268  
FAX: +82 43 716 7297

**1.4 In Case of Emergency:** Tel.: +82 26 930 0825

### SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Max. Content (%)
Acrylic Polymer	9011-14-7	35 ~ 45
Hydrated Alumina, Aluminum Hydroxide, Aluminum Trihydroxide	21645-51-2	55 ~ 65

### SECTION 3: HEALTH HAZARD DATA

**3.1** The product is a solid surface sheet of varying color and, as such, has no health hazards associated with it. However dust generated from cutting, sanding, or routing may cause mechanical irritation to the skin, eyes and respiratory tract.

**3.2 Eyes:**

Dust generated during fabrication may irritate eyes.

**3.3 Skin:**

Any sharp edges will cut or abrade the skin. Dust generated by fabrication may cause skin sensitization. (Methyl Methacrylate has been shown to cause allergic responses at high concentrations.)

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### 3.4 Respiratory Tract:

Dust generated during fabrication may cause irritation to respiratory tract, characterized by sneezing and coughing. May also cause headache in case of long term exposure.

## SECTION 4: FIRST AID MEASURES

### 4.1 Eye contact:

Upon contact with nuisance dust particles, flush eyes immediately with large amounts of water for a minimum of 15 minutes. Seek medical attention.

### 4.2 Skin contact:

Not expected to be a problem. It may cause skin sensitization. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. If irritation persists, seek medical attention.

### 4.2 Ingestion:

Not applicable.

## SECTION 5: FIRE AND EXPLOSION DATA

**5.1 Flammability:** Non-flammable

**5.2 Flash Point:** Not available

**5.3 Auto ignition temperature:** Not available

**5.4 Products of combustion:** Some metallic oxides

### 5.5 Fire hazards in presence of various substances:

Non-flammable in presence of shocks heat, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.

### 5.6 Fire Fighting Media:

Use dry chemicals, CO<sub>2</sub>, Water spray or foam. Extinguishing Media must not be used for safety reason; high volume water jet.

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### SECTION 6: SPILL PROCEDURES & WASTE DISPOSAL

**6.1** Review Federal, provincial or State and Local government requirements prior to disposal. Store material for disposal as indicated in storage conditions. Disposal by controlled incineration may be accepted.

**6.2 Waste-Key-codes according to EU regulations:**

12 01 05 plastic chips / 17 02 03 Plastics // 15 01 03 Packaging wooden pallets

### SECTION 7: HANDLING AND STORAGE

**7.1 Handling:**

Do not breathe dust. If user operations generating dust, use ventilation and exhaust extraction system to keep airborne contaminants below the exposure limit.

**7.2 Storage:**

No specific storage is required. Ensure that it is not necessary to strain to reach materials and that shelves are not overloaded.

**7.3 DOT/TDG classification:** Not a DOT controlled material.

### SECTION 8: SPECIAL PROTECTION INFORMATION

**8.1 Eye:** Safety glasses

**8.2 Hands:** Gloves to protect against cuts and abrasions are highly recommended.

**8.3 Respirator:**

Wear appropriate respirator when ventilation is inadequate (NIOSH approved) because of generated dust.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Appearance:** Solid

**9.2 Odor:** Odorless

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**9.3 pH:** Not applicable

**9.4 Specific Gravity:** 1.75

**9.5 Evaporation Rate:** Not available

**9.6 Vapor Pressure:** Not available

**9.7 Solubility in water:** Insoluble

**9.8 Solubility in solvents:** Insoluble in methanol, diethyl ether, n-octanol, acetone

### SECTION 10: STABILITY AND REACTIVITY

**10.1 Stability:** Stable

**10.2 Chemical instability/Materials to avoid:**  
Not considered to be reactive according to our database.

**10.3 Corrosivity:**  
Not considered to be corrosive for metals and glass according to our database.

**10.4 Hazardous decomposition:** Not available

**10.5 Hazardous polymerization:** May occur

### SECTION 11: POTENTIAL CHRONIC HEALTH EFFECTS

**11.1** The product is not toxic to blood, kidneys, lungs, the nervous system, the reproductive system, liver, or mucous membranes.

**11.2 Chronic effects:** No data available

**11.3 Mutagenic effects:** No data available

**11.4 Teratogenic effects:** No data available

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### SECTION 12: ECOLOGICAL INFORMATION

**12.1 Eco-toxicity:** Not applicable

**12.2 BODS and COD:** Not applicable

**12.3 Toxicity of the products of biodegrading:** Not applicable

### SECTION 13: FEDERAL REGULATIONS

**13.1 TSCA (Toxic Substance Control Act):**

All components of the product are listed on the TSCA inventory.

**13.2 HMIS (Hazardous Material Information System):**

Health hazard – 1, Fire hazard – 0, Reactivity – 0, Personal Protection – A

### SECTION 14: OTHER INFORMATIONS

The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification, The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the test.

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### SECTION 1: CHEMICAL PRODUCT & MANUFACTURER'S INFORMATION

#### 1.1 Identification of the substance:

Name: SOLID SURFACE

#### 1.2 Identification of the Company:

Corporate name: Nicos international S.p.A.

Address: via Bastie, 44

Zona Industriale 31019 Portobuffolè (Tv) – Italy

Phone: +39 (0)422 504411

Fax: +39 (0)422 504498

### SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

#### 2.1 Description of product:

Solid Surface is a polymeric material used in sanitary field, shower plate and baths.

Single component ( ) Mixture (x)

#### 2.2 Information on ingredients:

Hazardous components	CAS n°	EINECS	Concentration %	Hazard symbols	R/S Phrases
styrene	100-42-5	202-851-5	30-40	Xn	R10 R20 R36/38
methylmetacrilate	80-62-6	201-297-1	1-5	F Xi	R11 R37/38 R43
Al (OH) <sub>3</sub>	21645-51-2	244-492-7	60-70	–	R37 S2-22-24-25

### SECTION 3: HEALTH HAZARD DATA

In the form supplied the product is non-hazardous. The polymerization reactions uptake monomeric units (reagents) and the end-product is supplied without solvents.

Nevertheless some dust can be released in case of mechanical processing; dust consists in polymeric material and Aluminium hydride.

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### SECTION 4: FIRST AID MEASURES

Exposure way	Symptoms	Measures to be taken immediately
Inhalation	Irritation or soreness of respiratory ways	Move away from the contaminated zone. Seek medical attention if needed.
Eyes	Temporary irritation	Flush eyes with large quantities of clean water. Seek medical attention if needed
Skin contact	–	–
Ingestion	Unknown	Seek medical attention

**Other information:** Consult physician if symptoms persist.

### SECTION 5: FIRE AND EXPLOSION DATA

This material is not inflammable or explosive as supplied. Nevertheless is combustible and it is compatible with all standard fire-fighting methods (water, foam, CO<sub>2</sub>, ecc.).

### SECTION 6: SPILL PROCEDURES & WASTE DISPOSAL

#### 6.1 Personal precautions:

See Section No. 8.

#### 6.2. Environmental precautions:

There are no known risks associated with the product if it is exposed to soil or surface water contact.

No special measures are required.

In every case do not discard the product on the environment.

#### 6.3. Methods for cleaning up:

According to amount, remove spilled material manually, or by mechanical means.

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### SECTION 7: HANDLING AND STORAGE

#### 7.1 Handling:

No special precaution is required

#### 7.2. Storage:

Store in dry and naturally aired area, away from heat sources that may cause damage to the product or to packaging materials present.

Excessive moisture or water are not dangerous but can damage the product.

### SECTION 8: SPECIAL PROTECTION INFORMATION

#### 8.1 Exposure controls:

In case of mechanical processing use engineering measures such as dust extraction at point of work to keep dust level to a minimum.

Customers are advised to check National legislation for limit values and their period of reference.

#### 8.2. Personal protection:

During the installation or mechanical processing the following are required:

- Respiratory protection: use approved equipment if conditions so require (e.g. dust mask P1 in mechanical processing).
- Hand protection: use wears non-porous antislip gloves.
- Eye protection: protection glasses are required only if dust is generated during placement and processing.
- Skin protection: safety footwear and overalls are recommended.



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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical form	solid
Appearance	Stiff product
Odour	None
Bulk density	Not available
Melting point	Not available
Boiling point	N.A.
Vapour pressure	N.A.
Solubility	insoluble in water
pH	–
Flammability	None
Autoflammability	None
Explosive properties	None

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Chemical stability:

This material is stable in the form supplied and under normal conditions of dry storage.

#### 10.2. Incompatibility:

Exposure to moisture, solvents or heat although not hazardous, will make the product unusable.

#### 10.3. Decomposition products: –

### SECTION 11: POTENTIAL CHRONIC HEALTH EFFECTS

There are no known health affects that can arise from the product on delivery. The main danger is the possibility of accidental and prolonged exposures to dust overdose in case of mechanical processing.

#### Acute health effects:

Irritation or soreness of respiratory ways.  
Irritation and inflammation of eyes.

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### SECTION 12: ECOLOGICAL INFORMATION

The unused product is considered inert respect to the environment; it remains stable over the time.

### SECTION 13: FEDERAL REGULATIONS

Hazard symbols	Risk phrases	Safety advice phrases
–	–	–

### SECTION 14: OTHER INFORMATION

See: a) ECC Directives 91/155/EEC - 93/112/EEC  
b) Italian law DM 07/09/2002

This Safety Data Sheet has been prepared in strict observance of EC Directive CEE 91/155/EEC - 93/112/CEE and in observance of DM 07/09/2002.

This information was obtained from sources like safety data sheets of ingredients, but they cannot be considered to be exhaustive themselves. The conditions or methods of handling, storage, use and disposal are beyond our control and may be beyond our knowledge. Thus we cannot accept responsibility for any loss, damage or expense connected with the handling, storage, use or disposal of the product.

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