

## 5. Safety data information concerning different kind of desiccant crystals (Molecular sieves, oranges silicagel, brown silicagel, etc.)

To established if a chemical substance is a CMR and SVHC substances you have to follow rules established by Article 4 of this Directive and in Article 4 of Directive 1999/45/EC and other relevant Directives on dangerous preparations:

1.5. Article 6 requires that manufacturers, distributors and importers of dangerous substances which appear in the Einesc but which have not yet been introduced into Annex I shall be obliged to carry out an investigation to make themselves aware of the relevant and accessible data which exist concerning the properties of such substances. On the basis of this information, they shall package and provisionally label these substances according to the rules laid down in Articles 22 to 25 and the criteria in this Annex.

1.6.1. For substances the data required for classification and labelling may be obtained:

- (a) as regards substances for which the information specified in Annex VII is required, most of the necessary data for classification and labelling appear in the 'base set'. This classification and labelling must be reviewed, if necessary, when further information is available (Annex VIII);
- (b) as regards other substances (e.g. those referred to in section 1.5 above), the data required for classification and labelling may, if necessary, be obtained from a number of different sources, for example:
  1. - the results of previous tests;
  2. - information required by international rules on the transport of dangerous substances;
  3. - information taken from reference works and the literature; or
  4. - information derived from practical experience.

It means that if a MSDS, supplies by a chemical manufacturer, specifies that his substance is, or suspected, or investigated to be a CMR, this information respond to the European criteria to be considered as CMR and SVHC. Now, end users, suppliers or manufacturers have to opportunity to invest hundreds thousands euro to prove that their substance is non CMR and safe fir human and environment.

# MSDS of silicagel or desiccant crystals



## Msds provide by suppliers of this kind of desiccant filter

1.1	Commercial product name/ designation	<b>MS with indicator</b> <b>75% Z4-01 + 25% Z-R gel</b>
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<b>2</b>	<b>Composition</b>	
2.1	Chemical characterisation	75% Zeolite Z4-01 (CAS-No.: 1318-02-1) 25% Z-R gel (CAS-No.: 7631-86-9; < 0.1% pigment)

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications do not imply any guarantee of a property.

## Msds provide by manufacturers of the chemical substance

**Manufacturer/Supplier:** Nanostructured & Amorphous Materials, Inc.  
820 Kristi Lane Los Alamos, NM 87544  
Emergency Tel: (505) 661-8671

**2 Composition/Data on components: Chemical characterization:**  
**Description: (CAS#)** Silicon oxide (CAS# 7631-86-9), 99.5%

### Other information (about experimental toxicology):

Tumorigenic effects have been observed on tests with laboratory animals.

Reproductive effects have been observed on tests with laboratory animals.

Carcinogenic effects have been observed on tests with laboratory animals

### Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for components in this product.

IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.

NTP-2: Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals.

# Always for the same desiccant crystals

Trade name Molecular Sieve 512

Company :Grace GmbH Post Address D-67545 Worms In der Hollerhecke 1

Telephone/Fax + 49-6241-403-300/+49-6241-403-211

## **2 Composition/Information on ingredients**

Substance/Preparation

Description Crystalline Aluminosilicate

Components Zeolites(CAS 1318-02-1;EINECS 215-283-8)

Hazardous components Quartz (CAS 14808-60-7;EINECS 238-878-4) 1%

The product is very adsorbent and may have a drying effect on skin and eyes. When exceeding the Occupational Exposure Limit (OEL) a mechanical overburdening of the respiratory system is possible. In contact with water heat development and therefore burning of the skin and mucous membrane is possible. This product contains ca. 1% quartz carried over from the mineral binders. However, quartz has been recently classified IARC (International Agency for Research on Cancer) as carcinogenic to humans by inhalation (Group 1). Furthermore, quartz can cause silicosis or other lung diseases on prolonged exposure. When handling Molecular Sieve Beads, the concentration of respirable quartz in the workingenvironment is expected to be well below the limits allowed by the worker protection regulations. Nevertheless, the user is responsible for controlling the working environment according to local regulations, e. g. in the UK: COSHH Regulations.

# MSDS of Chameleon orange silicagel



**Silicagel supplies by Ineos, Engelhard**  
**Commercial names: KC Trockenperlen or**  
**Orange Chameleon**

<b>Manufacturer/Supplier:</b>	INEOS Silicas Ltd. P.O. Box 26 Warrington Cheshire United Kingdom WA5 1AB
<b>Telephone:</b>	+44 (0)1925 416100
<b>Fax:</b>	+44 (0)1925 416116

Ingredient(s)	%WW	CAS No.	EINECS No.	EC Classification
Synthetic amorphous silica	> 93 %	112926-00-8	2315454	Occupational Exposure Limits
Ferric ammonium sulphate	< 5 %	7783-83-7		Occupational Exposure Limits

**MSDS published by Chemical producer of the substance:**

**Company Identification:** Fisher Scientific 1 Reagent Lane  
 Fair Lawn, NJ 07410

**CAS#7783-83-7**

**Chemical Name:** Ferric Ammonium Sulfate  
 Dodecahydrate

**Warning!** The toxicological properties of this material have not been fully investigated. May cause cardiac disturbances. May cause liver and kidney damage. Causes eye and skin irritation. Causes digestive and respiratory tract irritation.

**OR:**

**Company Identification: Sciencelab.com, Inc.**  
 14025 Smith Rd. Houston, Texas 77396

**Name:** Ferric ammonium sulfate dodecahydrate

**CAS # 7783-83-7**

**Special Remarks on Chronic Effects on Humans:** May affect genetic material (mutagenic)

**This substance respond to European CMR classification criteria and must be considered as a SVHC substance**

# MSDS of colored silicagel



<b>I. PRODUCT IDENTIFICATION: AIR SENTRY<sup>®</sup> Contamination Control Breathers</b>	
Company Name: Fluid Protection Corporation	Product Models: D-100, D-101, D-102, D-108, Gold Color
Street: 930 Whitmore Drive	Date Prepared: September 2001
City, State, Zip: Rockwall, TX 75087	Phone: 972-722-1415 FAX: 972-722-3253

<b>II-a. INGREDIENTS</b>		<b>Hazard Data:</b>
Material or Component:		Non-Hazard: CAS# 112926-00-8
SiO <sub>2</sub>	98.2%	Hazard: CAS# 77-09-08
Phenolphthalein	100 ppm	

18th COMMISSION DIRECTIVE 95/34/EC of 10 July 1995 adapting to technical progress Annexes II, III, VI and VII to Council Directive 76/768/EEC on the approximation of the laws of the Member States relating to cosmetic products (Text with EEA relevance)

Whereas recent toxicological studies of 3,3-Bis(4-hydroxyphenyl)phthalide (Phenolphthalein\*); show a net clastogenic effect in vitro; whereas the safety margin is low, especially where children are concerned; whereas it is therefore necessary to prohibit its use; Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive no later than 30 June 1996. They shall forthwith inform the Commission thereof.

Done at Brussels, 10 July 1995.

For the Commission  
Emma BONINO  
Member of the Commission

Use of this substance is prohibited in Europe since 1996!!!

**This substance respond to European CMR classification criteria and must be considered as a SVHC substance**

# MSDS of "Brown" silicagel



*caldigel oranje supply by CALDIC*

No CAS Désignation 7631-86-9 dioxyde de silicium,  
prepare par voiechimique

· Code(s) d'identification No EINECS: 231-545-4

· Composants dangereux:

548-62-9 chlorure de [4-[4,4'-

bis(diméthylamino)benzhydrylidène]cyclohexa-2,5-  
diène-1-ylidène]

diméthylammonium

MSDS published by Chemical producer of the  
substance:

**Company Identification:** Bracton Industries (NSW) Pty.  
Ltd. ACN 003 060 160

P.O. Box 386, Brookvale NSW 2100, Australia

CAS# 548-62-9

**Chemical Name:** Methyl violet

**Toxicology :** Methyl violet has been reported in the USA as  
a suspected cancer agent - rat, mouse.

Or

**Company Identification:** Physical & Theoretical  
Chemistry Lab.

CAS# 548-62-9

**Chemical Name:** gentian violet, aniline violet, bismuth  
violet, hexamethyl violet, methyl violet, paper blue R,  
oxyozyl, methylrosaniline chloride, numerous trade names

**Toxicology:** May cause cancer. Severe eye irritant.  
Harmful by inhalation, ingestion and through skin contact

This substance respond to European CMR classification  
criteria and must be considered as a SVHC substance

# MSDS of "Brown" silicagel



Producteur/Fournisseur :

LEVOSIL S.p.A.  
Via Torino 44  
10050 Chiusa San Michele  
Italy

N° Cas	Dénomination	%
112926 - 00 - 8	Amorphous silica	>97
7732 - 18 - 5	Eau	< 2 %
10125-13-0	Chlorure de cuivre	< 0,25 %
7791-18-6	Chlorure de magnésium	0,5% min - 2% max

**MSDS published by Chemical producer of the substance:**

**Company Identification:** Science Stuff, Inc.  
1104 Newport Avenue Austin, TX 78753  
CAS#10125-13-0

**Chemical Name:** Cupric Chloride

**Conditions to Avoid:** Avoid contact with incompatible materials, Moisture and heat

**HEALTH HAZARDS :** May be fatal if inhaled, swallowed or absorbed thru the skin Avoid all contact. Use with adequate ventilation.

Or

**Company Identification:** GFS CHEMICALS, INC. P.O.  
Box 245 Powell, OH 43065  
CAS#10125-13-0

**Chemical Name:** Cupric Chloride

**HEALTH HAZARDS:** Investigated as a mutagen.

**This substance respond to European CMR classification criteria and must be considered as a SVHC substance**

# 6. Safety data information concerning oil residues presents in desiccant crystals when it is necessary to replace desiccant.

## MSDS of Dielectric oils

Because of the work principle of Desiccant breathers, when it is necessary to replace the desiccant it may contain 30% and more of oil mist. Due to this point, on refilling breathers, there will be exposition of employees and environment to chemical components of dielectric oils. For instance

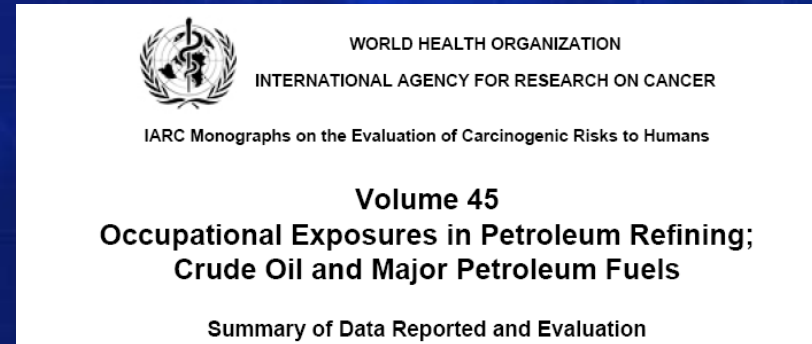
### NINAS oil Nytro 10XN contains:

Chemical Name:	CAS-No.:	EC-No.:
Hydrotreated Light Naphthenic Distillate	64742-53-6	265-156-6
2,6-ditertiary Butyl-4-Methyl Phenol	128-37-0	204-881-4

### Exxon UNIVOLT 60 contains

COMPONENTS	CAS NO. OF COMPONENTS	APPROXIMATE CONCENTRATION
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	Greater than 99.9%

### Classification of industrial oils:



### Overall Evaluation

Occupational exposures in petroleum refining are *probably carcinogenic to humans (Group 2A)*.

### Refinery streams:

- Light naphthenic distillate
- Light paraffinic distillate

### Notes of Exxon Mobil:

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person.

Products or articles that contains oil residues must be considered as contains SVHC substances and falling down on the RECAH regulation.