



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

* 1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: **Metasil 5023 Base Clear**

· Application of the substance / the preparation

Silicone resin

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Mereco Division
Metachem Resins Corporation
1505 Main Street
West Warwick, RI 02893
USA

Phone +1 / 401 / 822-9300

· Information department:

Technical department.
email = info@mereco.com

· Emergency telephone number:

Telephone: (401) 822-9300

* 2 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description:

Mixture of the substances listed below with non-hazardous additions.

· Components:

Not Applicable

· Additional information:

This material is non-hazardous.

This material is a blend of silicone liquids and mineral or ceramic powders. These solid fillers do not pose airborne hazards to the user of this formulated product because they are completely encapsulated in the liquid material. If any of the powdered ingredients are hazardous in accordance with Section 313 of the Emergency Planning and Community Right-to-know Act (EPCRA) they are identified in section 15 of this MSDS (SARA Section 313).

For the wording of the listed risk phrases refer to section 16.

* 3 Hazards identification

· Classification of the substance or mixture

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

This material is non-hazardous

Not Applicable

· Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of international guidelines.

(Contd. on page 2)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Base Clear

- (Contd. from page 1)
- **Classification system:** The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

· Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.

· Classification system:

- **NFPA ratings (scale 0 - 4)**
 - Health = 1
 - Fire = 1
 - Reactivity = 1
- **HMS-ratings (scale 0 - 4)**
 - Health = 1
 - Fire = 1
 - Reactivity = 1

4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

* 5 Firefighting measures

- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Protective equipment:** No special measures required.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections** No dangerous substances are released. See Section 7 for information on safe handling.

(Contd. on page 3)

—USA—

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Base Clear

(Contd. from page 2)

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* 7 Handling and storage

· Handling:

· Precautions for safe handling

No special measures required.
Store in cool, dry place in tightly closed receptacles.
Use only in well ventilated areas.

· Information about protection against explosions and fires:

No special measures required.

· Storage:

· Requirements to be met by storerooms and receptacles:

No special requirements.

· Information about storage in one common storage facility:

Not required.

· Further information about storage conditions:

None.

· Specific end use(s)

No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems:

No further data; see item 7.

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information:

The lists that were valid during the creation were used as basis.

· Personal protective equipment:

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment:

Not required.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material is based on consideration of the penetration times, rates of diffusion and the degradation of the material.

(Contd. on page 4)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Base Clear

- (Contd. from page 3)
- **Material of gloves** The selection of suitable gloves depends not only on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
 - **Penetration time of glove material** The exact penetration time has to be determined by the glove manufacturer and has to be observed.
 - **Eye protection:** Goggles recommended during refilling.

* 9 Physical and chemical properties

· General Information	
· Appearance:	
· Form:	Viscous
· Color:	Clear
· Odor:	Odorless
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	205°C
· Flash point:	> 93°C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20°C:	
· Relative density	1.1 g/cm ³
· Vapour density	Not determined.
· Evaporation rate	Not determined.

(Contd. on page 5)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Base Clear

(Contd. from page 4)

<ul style="list-style-type: none"> · Solubility in / Miscibility with · Water: 	Hydrolyzed. Not miscible or difficult to mix.
<ul style="list-style-type: none"> · Segregation coefficient (n-octanol/water): 	Not determined.
<ul style="list-style-type: none"> · Viscosity: · Dynamic: · Kinematic: 	Not determined. Not determined.
<ul style="list-style-type: none"> · Solvent content: · Organic solvents: · Other information 	0.0 % No further relevant information available.

* 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
 - **Possibility of hazardous reactions** Danger of forming explosive hydrogen-air mixture when stored in enclosed spaces.
 - **Conditions to avoid** No further relevant information available.
 - **Incompatible materials:** Reacts with alcohols, amines, aqueous acids and alkalis.
Protect from humidity and water.
 - **Hazardous decomposition products:** Possible in traces:
Hydrogen
Formaldehyde
-

* 11 Toxicological information

- **Acute toxicity:**

<ul style="list-style-type: none"> · LD/LC50 values that are relevant for classification: 	
63148-62-9 dimethylpolysiloxanes	
Inhalative	LC50/4 h > 535 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** The product is not subject to classification according to internally approved calculation methods for preparations:

(Contd. on page 6)

—USA—

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Base Clear

(Contd. from page 5)

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

* 12 Ecological information

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
- **Additional ecological information:**
 - **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

* 14 Transport information

· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Not Applicable
· UN proper shipping name	
· DOT	Not Regulated
· ADR, ADN	Not Applicable
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Not Applicable
· Packing group	
· DOT, ADR, IMDG, IATA	Not Applicable
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.

(Contd. on page 7)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Base Clear

(Contd. from page 6)

- | |
|--|
| <ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. |
|--|
-

* 15 Regulatory information

- **Sara**

- **Section 302 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed by CAS number.

- **Sections 311/312 (Specific hazard chemical listings):**

None of the ingredients is listed.

- **Sections 311/312 Hazard Categorizations:**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

(Contd. on page 8)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Base Clear

(Contd. from page 7)

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)
--

None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Technical department

· **Contact:** Dr. John F. Plummer

· *** Data compared to the previous version altered.**

USA



Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

* 1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

· Trade name: **Metasil 5023 Catalyst Clear**

· Application of the substance / the preparation

Hardening agent / Curing agent

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Mereco Division
Metachem Resins Corporation
1505 Main Street
West Warwick, RI 02893
USA

Phone +1 / 401 / 822-9300

· Information department:

Technical department.
email = info@mereco.com

· Emergency telephone number:

Telephone: (401) 822-9300

* 2 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description:

Mixture of the substances listed below with non-hazardous additions.

· Components:

Not Applicable

· Additional information:

This material is non-hazardous.

This material is a blend of silicone liquids and mineral or ceramic powders. These solid fillers do not pose airborne hazards to the user of this formulated product because they are completely encapsulated in the liquid material. If any of the powdered ingredients are hazardous in accordance with Section 313 of the Emergency Planning and Community Right-to-know Act (EPCRA) they are identified in section 15 of this MSDS (SARA Section 313).

For the wording of the listed risk phrases refer to section 16.

* 3 Hazards identification

· Classification of the substance or mixture

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

This material is non-hazardous

Not Applicable

· Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of international guidelines.

(Contd. on page 2)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Catalyst Clear

- (Contd. from page 1)
- **Classification system:** The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

· Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.

· Classification system:

- **NFPA ratings (scale 0 - 4)**

Health	= 1
Fire	= 1
Reactivity	= 1
- **HMS-ratings (scale 0 - 4)**

Health	= 1
Fire	= 1
Reactivity	= 1

4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

* 5 Firefighting measures

- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Protective equipment:** No special measures required.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections** No dangerous substances are released. See Section 7 for information on safe handling.

(Contd. on page 3)

—USA—

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Catalyst Clear

(Contd. from page 2)

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* 7 Handling and storage

· Handling:

· Precautions for safe handling

No special measures required.
Store in cool, dry place in tightly closed receptacles.
Use only in well ventilated areas.

· Information about protection against explosions and fires:

No special measures required.

· Storage:

· Requirements to be met by storerooms and receptacles:

No special requirements.

· Information about storage in one common storage facility:

Not required.

· Further information about storage conditions:

None.

· Specific end use(s)

No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems:

No further data; see item 7.

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information:

The lists that were valid during the creation were used as basis.

· Personal protective equipment:

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment:

Not required.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material is based on consideration of the penetration times, rates of diffusion and the degradation of the material.

(Contd. on page 4)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Catalyst Clear

- (Contd. from page 3)
- **Material of gloves** The selection of suitable gloves depends not only on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
 - **Penetration time of glove material** The exact penetration time has to be determined by the glove manufacturer and has to be observed.
 - **Eye protection:** Goggles recommended during refilling.
-

* 9 Physical and chemical properties

· General Information	
· Appearance:	
· Form:	Viscous
· Color:	Clear
· Odor:	Odorless
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	205°C
· Flash point:	302°C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20°C:	
· Relative density	1.1 g/cm ³
· Vapour density	Not determined.
· Evaporation rate	Not determined.

(Contd. on page 5)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Catalyst Clear

(Contd. from page 4)

<ul style="list-style-type: none"> · Solubility in / Miscibility with · Water: 	Hydrolyzed. Not miscible or difficult to mix.
<ul style="list-style-type: none"> · Segregation coefficient (n-octanol/water): 	Not determined.
<ul style="list-style-type: none"> · Viscosity: · Dynamic: · Kinematic: 	Not determined. Not determined.
<ul style="list-style-type: none"> · Solvent content: · Organic solvents: · Other information 	0.0 % No further relevant information available.

* 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
 - **Possibility of hazardous reactions** Danger of forming explosive hydrogen-air mixture when stored in enclosed spaces.
 - **Conditions to avoid** No further relevant information available.
 - **Incompatible materials:** Reacts with acids, alkalis and oxidizing agents.
 - **Hazardous decomposition products:** Possible in traces:
Hydrogen
Formaldehyde
-

* 11 Toxicological information

- **Acute toxicity:**

<ul style="list-style-type: none"> · LD/LC50 values that are relevant for classification: 		
63148-62-9 dimethylpolysiloxanes		
Inhalative	LC50/4 h	> 535 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** The product is not subject to classification according to internally approved calculation methods for preparations:

(Contd. on page 6)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Catalyst Clear

(Contd. from page 5)

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

* 12 Ecological information

- **Aquatic toxicity:** No further relevant information available.
 - **Persistence and degradability** No further relevant information available.
 - **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Additional ecological information:**
 - **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
-

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** Smaller quantities can be disposed of with household waste.
 - **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.
-

* 14 Transport information

· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Not Applicable
· UN proper shipping name	
· DOT	Not Regulated
· ADR, ADN	Not Applicable
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Not Applicable
· Packing group	
· DOT, ADR, IMDG, IATA	Not Applicable
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.

(Contd. on page 7)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: **Metasil 5023 Catalyst Clear**

(Contd. from page 6)

- | | |
|--|-----------------|
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
|--|-----------------|

* 15 Regulatory information

· Sara

· Section 302 (extremely hazardous substances):
--

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):
--

None of the ingredients is listed by CAS number.
--

· Sections 311/312 (Specific hazard chemical listings):
--

None of the ingredients is listed.

· Sections 311/312 Hazard Categorizations:

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:
--

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
--

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)
--

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)
--

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

(Contd. on page 8)

— USA —

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 06/27/2011

Version 3

Reviewed on 06/27/2011

Trade name: Metasil 5023 Catalyst Clear

(Contd. from page 7)

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)
--

None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Technical department

· **Contact:** Dr. John F. Plummer

· *** Data compared to the previous version altered.**

USA
