## SAFETY DATA SHEETS

## This SDS packet was issued with item:

## 077143902

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

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## 1 Identification

## Product identifier

- Trade name: IPS Empress CAD / IPS Empress CAD Multi
- CAS Number:

66402-68-4

- EC number:

266-340-9

- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture

Manufacture of dental prothesis
Leucite-reinforced glass-ceramic blocks for the CAD/CAM technique

- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Ivoclar Vivadent Inc.
175 Pineview Drive, Amherst, N.Y. 14228
USA
Tel. +18005336825
Fax +1 7166912285
Ivoclar Vivadent Inc.
1-6600 Dixie Road
Mississauga, Ontario
L5T 2Y2
Canada
Phone: +1 9056708499
Fax: +1 9056703102

- Information department: Quality Assurance / Regulatory Affairs
- Emergency telephone number:

24 Hour Emergency Assistance:
Emergency-Call USA - Infotrac: 1-800-535-5053
Emergency-Call Canada - Canutec: 1-613-996-6666
General SDS Assistance:
US: 1-800-533-6825
Canada: 1-800-263-8182

## 2 Hazard(s) identification

- Classification of the substance or mixture

The substance is not classified according to the Globally Harmonized System (GHS).

## - Label elements

- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Classification system:
- NFPA ratings (scale 0-4)



## Trade name: IPS Empress CAD / IPS Empress CAD Multi

- HMIS-ratings (scale 0-4)

| HEALTH | 0 | Health $=0$ |
| :--- | :--- | :--- |
| FIRE | 0 | Fire $=0$ |
| REACTIVITY | 0 | Reactivity $=0$ |

- Other hazards Avoid breathing sanding dust /swarf.
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.


## 3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description

66402-68-4 ceramic materials

- Identification number(s) ---
- EC number: 266-340-9
- Description: Leucite-reinforced glass-ceramic blocks


## 4 First-aid measures

## - Description of first aid measures

- General information: No special measures required.
- After inhalation: Grinding dust: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:

Grinding dust: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Mechanical effects only.

- After swallowing:

Grinding dust: Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.

- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.


## 5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: The product is not flammable.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.


## 6 Accidental release measures

[^0]
## Trade name: IPS Empress CAD / IPS Empress CAD Multi

- Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

## 7 Handling and storage

## - Handling:

- Precautions for safe handling

Only adequately trained personnel should handle this product.
For use in dentistry only.

- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- 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.
- Control parameters
- Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: Usual hygienic measures for dental practice.
- Breathing equipment: Use respiratory protective device against the effects of dust.
- Protection of hands: Not required.
- Material of gloves -
- Penetration time of glove material -

Eye protection:
Always wear safety goggles during mechanical processing (grinding, sawing /cutting, drilling, milling).

## 9 Physical and chemical properties

|  |  |
| :---: | :---: |
| Information on basic physical and chemical properties <br> - General Information |  |
| - Appearance: |  |
| Form: | Solid |
| Color: | According to product specification |
| - Odor: | Odorless |
| - Odour threshold: | Not determined. |
| - pH-value: | Not applicable. |
| - Change in condition |  |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |

## Trade name: IPS Empress CAD / IPS Empress CAD Multi

|  |  | (Contd. of page 3) |
| :---: | :---: | :---: |
| - Flash point: | Not applicable. |  |
| - Flammability (solid, gaseous): | Product is not flammable. |  |
| - Auto igniting: | Not determined. |  |
| - Danger of explosion: | Product does not present an explosion hazard. |  |
| - Explosion limits: Lower: Upper: | Not determined. <br> Not determined. |  |
| - Vapor pressure: | Not applicable. |  |
| - Density: <br> - Relative density <br> - Vapour density <br> - Evaporation rate | Not determined. <br> Not determined. <br> Not applicable. <br> Not applicable. |  |
| - Solubility in / Miscibility with Water: | Insoluble. |  |
| - Partition coefficient (n-octano | : Not determined. |  |
| - Viscosity: <br> Dynamic: <br> Kinematic: <br> - Other information | Not applicable. <br> Not applicable. <br> No further relevant information available. |  |

## 10 Stability and reactivity

- Reactivity No further relevant information available.
- Chemical stability Stable under normal handling and storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: None under normal conditions of storage and use.


## 11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information: No further relevant information available.
- Carcinogenic categories
- NTP (National Toxicology Program)

Substance is not listed.

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

Substance is not listed.

## Trade name: IPS Empress CAD / IPS Empress CAD Multi

## 12 Ecological information

- Toxicity
- 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.
- Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes: Generally not hazardous for water
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects No further relevant information available.


## 13 Disposal considerations

- Waste treatment methods
- Recommendation:

Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.

- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.


## 14 Transport information

| - UN-Number <br> - DOT, ADR, ADN, IMDG, IATA | Void |
| :---: | :---: |
| UN proper shipping name <br> - DOT, ADR, ADN, IMDG, IATA | Void |
| - Transport hazard class(es) <br> - DOT, ADR, ADN, IMDG, IATA <br> - Class | Void |
| - Packing group <br> - DOT, ADR, IMDG, IATA | Void |
| - Environmental hazards: <br> - Marine pollutant: | No |
| - Special precautions for user | Not applicable. |
| - Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| - Transport/Additional information: | Product is not classified as a dangerous good for transport (ADR, IMDG, IATA). |
| - UN "Model Regulation": | - |

## Trade name: IPS Empress CAD / IPS Empress CAD Multi

## 15 Regulatory information

```
- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
```

- Section 355 (extremely hazardous substances):
Substance is not listed.
- Section 313 (Specific toxic chemical listings):
Substance is not listed.
- TSCA (Toxic Substances Control Act):
Substance is not listed.
- Proposition 65
- Chemicals known to cause cancer:
Substance is not listed.
- Chemicals known to cause reproductive toxicity for females:
Substance is not listed.
- Chemicals known to cause reproductive toxicity for males:
Substance is not listed.
- Chemicals known to cause developmental toxicity:
Substance is not listed.
- Carcinogenic categories
- EPA (Environmental Protection Agency)
Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH)
Substance is not listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health)
Substance is not listed.
- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- National regulations:
- Other regulations, limitations and prohibitive regulations
The product is a medical device according to the Directive 93/42/EEC.
This product is classified as a medical device under US and Canadian regulations and has been reviewed by
the US Food and Drug Administration and Health Canada.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.


## 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.

## - Date of preparation / last revision 05/18/2015 / 3

## - Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

## Safety Data Sheet

acc. to OSHA HCS
Printing date 05/18/2015
Version number 4
Reviewed on 04/16/2015

## Trade name: IPS Empress CAD / IPS Empress CAD Multi

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

* Data compared to the previous version altered.


## 1 Identification

## Product identifier

Trade name: IPS Empress CAD / IPS Empress CAD Multi
CAS Number:
66402-68-4
EC number:
266-340-9

- Application of the substance / the mixture

Manufacture of dental prothesis
Leucite-reinforced glass-ceramic blocks for the CAD/CAM technique

- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Ivoclar Vivadent Inc.
175 Pineview Drive, Amherst, N.Y. 14228
USA
Tel. +1 8005336825
Fax +1 7166912285

Ivoclar Vivadent Inc.
1-6600 Dixie Road
Mississauga, Ontario
L5T 2Y2
Canada
Phone: +1 9056708499
Fax: +1 9056703102

- Information department: Quality Assurance / Regulatory Affairs

Emergency telephone number:
24 Hour Emergency Assistance:
Emergency-Call USA - Infotrac: 1-800-535-5053
Emergency-Call Canada - Canutec: 1-613-996-6666
General SDS Assistance:
US: 1-800-533-6825
Canada: 1-800-263-8182

## 2 Hazard identification

## Classification of the substance or mixture

The substance is not classified according to the Globally Harmonized System (GHS).

## - Label elements

GHS label elements Void

- Hazard pictograms Void
- Signal word Void
- Hazard statements Void

Classification system:
NFPA ratings (scale 0-4)

## Trade name: IPS Empress CAD / IPS Empress CAD Multi

HMIS-ratings (scale 0-4)

| HEALTH | 0 | Health $=0$ |
| :--- | :--- | :--- |
| FIRE | 0 | Fire $=0$ |
|  | 0 | Reactivity $=0$ |
|  |  |  |

Other hazards Avoid breathing sanding dust /swarf.

## 3 Composition/Information on ingredients

Chemical characterization: Substances
CAS No. Description
66402-68-4 ceramic materials

- Identification number(s) ---
- EC number: 266-340-9
- Description: Leucite-reinforced glass-ceramic blocks


## 4 First aid measures

## Description of first aid measures

General information: No special measures required.

- After inhalation: Grinding dust: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:

Grinding dust: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Mechanical effects only.
After swallowing:
Grinding dust: Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.

- Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

## 5 Firefighting measures

## Extinguishing media

Suitable extinguishing agents: The product is not flammable.
Special hazards arising from the substance or mixture No further relevant information available.

- Advice for firefighters
- Protective equipment: No special measures required.


## 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up: Pick up mechanically.
- Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

## Trade name: IPS Empress CAD / IPS Empress CAD Multi

See Section 13 for disposal information.

## 7 Handling and storage

## Handling:

- Precautions for safe handling

Only adequately trained personnel should handle this product.
For use in dentistry only.

- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities

Storage:

- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- 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.

Control parameters
Components with limit values that require monitoring at the workplace: Not required.

- Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

Usual hygienic measures for dental practice and dental laboratories.

- Breathing equipment: Use respiratory protective device against the effects of dust.

Protection of hands: Not required.

- Material of gloves -

Penetration time of glove material -
Eye protection:
Always wear safety goggles during mechanical processing (grinding, sawing /cutting, drilling, milling).

## 9 Physical and chemical properties

| - Information on basic physical and chemical properties <br> - General Information <br> - Appearance: |  |  |
| :---: | :---: | :---: |
| - pH-value: | Not applicable. |  |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | Undetermined. Undetermined. |  |
| - Flash point: | Not applicable. |  |
| - Flammability (solid, gaseous): | Product is not flammable. |  |
|  |  | (Contd. on page 4) |

## Safety Data Sheet according to HPR, Schedule 1

Trade name: IPS Empress CAD / IPS Empress CAD Multi

|  |  | (Contd. of page 3) |
| :---: | :---: | :---: |
| - Auto igniting: | Not determined. |  |
| - Danger of explosion: | Product does not present an explosion hazard. |  |
| Explosion limits: Lower: Upper: | Not determined. Not determined. |  |
| - Vapor pressure: | Not applicable. |  |
| Density: <br> Relative density <br> Vapor density <br> - Evaporation rate | Not determined. <br> Not determined. <br> Not applicable. <br> Not applicable. |  |
| Solubility in / Miscibility with Water: | Insoluble. |  |
| - Partition coefficient (n-octano | Not determined. |  |
| Viscosity: <br> Dynamic: <br> Kinematic: <br> - Other information | Not applicable. <br> Not applicable. <br> No further relevant information available. |  |

## 10 Stability and reactivity

- Reactivity No further relevant information available.
- Chemical stability Stable under normal handling and storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: None under normal conditions of storage and use.


## 11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information: No further relevant information available.

Carcinogenic categories

- NTP (National Toxicology Program)

Substance is not listed.

## 12 Ecological information

```
- Toxicity
- 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.
```


## Trade name: IPS Empress CAD / IPS Empress CAD Multi

- Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes: Generally not hazardous for water
- Results of PBT and vPvB assessment

PBT: Not applicable.

- vPvB: Not applicable.

Other adverse effects No further relevant information available.

## 13 Disposal considerations

## Waste treatment methods

## Recommendation:

Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.

- Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

| UN-Number <br> DOT, TDG, ADN, IMDG, IATA | Void |
| :---: | :---: |
| UN proper shipping name DOT, TDG, ADN, IMDG, IATA | Void |
| Transport hazard class(es) <br> DOT, TDG, ADN, IMDG, IATA Class | Void |
| Packing group <br> DOT, TDG, IMDG, IATA | Void |
| Environmental hazards: <br> Marine pollutant: | No |
| Special precautions for user | Not applicable. |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| - Transport/Additional information: | Product is not classified as a dangerous good for transport (ADR, IMDG, IATA). |
| - UN "Model Regulation": | Void |

## 15 Regulatory information

| • Safety, health and environmental regulations/legislation specific for the substance or mixture |
| :--- |
| - Sara |
| Section 355 (extremely hazardous substances): |
| Substance is not listed. |
| Section 313 (Specific toxic chemical listings): |
| Substance is not listed. |

Trade name: IPS Empress CAD / IPS Empress CAD Multi
(Contd. of page 5)
TSCA (Toxic Substances Control Act):
Substance is not listed.
GHS label elements Void

- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- National regulations:
- Other regulations, limitations and prohibitive regulations

The product is a medical device according to the Directive 93/42/EEC.
This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 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.

- Date of preparation / last revision 04/24/2018 / 4


## - Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
${ }^{v P v B}$ : very Persistent and very Bioaccumulative

* Data compared to the previous version altered.


[^0]:    - Personal precautions, protective equipment and emergency procedures Not required.
    - Environmental precautions: No special measures required.
    - Methods and material for containment and cleaning up: Pick up mechanically.

