SAFETY DATA SHEETS

This SDS packet was issued with item:

077173487

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

070386938 070386946 070386953 070386961 070386979 070386987 070386995 070387001 070387019 070387027 070434456 070442491 070442509 070442517 070442525 070442533 070442541 070442558 070442566 070442574 070442582 070442590 070442608 070442616 070442624 070442632 070442640 070442657 070442665 070442673 070442681 070442699 070442863 070442889 070442897 070442913 070442921 070442939 070442947 070442954 070987917 070987925 070987933 070987941 070987958 070987966 070987974 070987982 070987990 070988006 070988113 070988121 070988139 070988147 070988162 070988170 070988196 070988220 070988238 070988246 070988253 070988261 070988279 070988287 070988295 070988303 070988311 070988329 070988337 070988345 070988352 070988360 070988378 070988386 070988394 070988402 070988410 070988428 070988436 070988444 070988451 070988469 070988477 070988485 070988493 070988501 070988519 070988527 070988535 070988543 070988550 070988568 070988576 070988584 070988592 070988600 070988618 070988634 070988642 070988659 070988667 070988675 070988683 070988691 070988725 070988733 070988741 070988766 070988774 070988790 070988808 070988816 070988824 070988832 070988840 070988857 070988865 070988881 070988899 070988907 070988915 070988923 070988931 070988949 070988956 070988964 070988972 070988998 070989004 070989012 070989020 070989046 070989053 070989061 070989079 070989087 070989095 070989103 070989137 077143605 077143613 077143621 077143639 077143647 077143654 077143753 077173008 077173016 077173024 077173032 077173040 077173057 077173065 077173305 077173313 077173321 077173339 077173347 077173354 077173362 077173370 077173388 077173396 077173404 077173412 077173420 077173438 077173446 077173453 077173461 077173479 077173495 077173503 077173511 077173529 077173537 077173545 077173552 077173560 077173578 077173586 077173594 077173602 077173610 077173628 077173636 077173644 077173651 077173669 077173677 077173685 077173693 077173701 077173982 077173990 077174006 077174014 077174022 077174030 077174048 077174055 077174063 077174071 077174089 077174139 077174147 077174154 077174162 077174170 077174188 077174196 077174204 077174212 077174220 077174238 077174279 077174287 077174295 077174303 077174311 077174329 077174337 077174345 077174352 077174360 077174378 077174501 077174519 077174527 077174535 077174543 077174550 077174568 077174576 077174584 077174592 077174600 077174618 077174626 077174634 077174642 077174659 077174667 077174675 077174683 077174691 077174709 077174717 077174725 077174733 077174741 077174758 077174766 077174774 077174782 077174790 077174808 077174816 077174824 077174832

077174840 077174899 077174907 077175359 077175383 077175706 077176118 077176126 077176134 077176142 077176159 077176167 077176175 077176183 077176191 077176209 077176217 077176225 077176233 077176241 077176258 077176266 077176274 077176282 077176290 077176308 077176316 077176407 077176415 077176423 077176431 077176449 077176456 077176464 077176472 077176480 077176498 273011110 273011792 273011794 273011992 273012248 273023177

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).

070215517 077144843 077144850 273005804



Printing date 05/20/2015 Version number 6

Reviewed on 04/11/2015

1 Identification

- · Product identifier
- · Trade name: IPS Classic Glaze and Stain Liquid
- · CAS Number:

107-21-1

· EC number:

203-473-3

· Index number:

603-027-00-1

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Auxiliary for manufacture of dental prothesis
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Ivoclar Vivadent Inc.

175 Pineview Drive, Amherst, N.Y. 14228

USA

Tel. +1 800 533 6825

Fax +1 716 691 2285

Ivoclar Vivadent Inc.

1-6600 Dixie Road

Mississauga, Ontario

L5T 2Y2

Canada

Phone: +1 905 670 8499 *Fax:* +1 905 670 3102

· 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

Acute Tox. 4 H302 Harmful if swallowed.

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

Harmful

Harmful if swallowed.

- · Information concerning particular hazards for human and environment: Not applicable.
- · Label elements
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

- US

Printing date 05/20/2015 Version number 6 Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

(Contd. of page 1)

· Hazard pictograms



- · Signal word Warning
- · Hazard-determining components of labeling:

ethanediol

· Hazard statements

Harmful if swallowed.

· Precautionary statements

Wash thoroughly after handling.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Fire = 1

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description 107-21-1 ethanediol
- · Identification number(s)
- · EC number: 203-473-3
- · Index number: 603-027-00-1

4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

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(Contd. of page 2)

Induce vomiting and call for medical help.

- · 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:

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.
- · Advice for firefighters
- · 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

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:

Keep receptacle tightly sealed.

This product is hygroscopic.

 \cdot *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.

(Contd. on page 4)

US

Printing date 05/20/2015 Version number 6 Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

(Contd. of page 3)

· Control parameters

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

107-21-1 ethanediol

TLV Long-term value: NIC-10* mg/m³
Ceiling limit value: (100) mg/m³
(H);*as inhalable fraction and vapor

- · 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.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

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 on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid
Color: Colorless
Odor: Odorless
Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -12.4 °C (10 °F)

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Trade name: IPS Classic Glaze and Stain Liquid

| | | (Contd. of page |
|---|---|-----------------|
| Boiling point/Boiling range: | 197 °C (387 °F) | |
| · Flash point: | 111 °C (232 °F) | |
| · Flammability (solid, gaseous): | Not applicable. | |
| · Ignition temperature: | gnition temperature: 410 °C (770 °F) | |
| · Auto igniting: | Not determined. | |
| · Danger of explosion: | Product does not present an explosion hazard. | |
| · Explosion limits: | | |
| Lower: | 3.2 Vol % | |
| Upper: | 53 Vol % | |
| · Vapor pressure at 20 °C (68 °F): | 0.08 hPa | |
| · Density at 20 °C (68 °F): | 1.11 g/cm³ (9.263 lbs/gal) | |
| · Relative density | | |
| · Vapour density | Not determined. | |
| Evaporation rate | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water at 20 °C (68 °F): | 1 g/l | |
| · Partition coefficient (n-octanol/wate | e r): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Other information | 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

Reacts with strong oxidizing agents.

Reacts with alkali (lyes).

- · 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:

| · LD/LC50 values that are relevant for classification: | | | | | |
|--|---------------------|------|---------------------|--|--|
| Γ | 107-21-1 ethanediol | | | | |
| Γ | Oral | LD50 | 5840 mg/kg (rat) | | |
| l | Dermal | LD50 | 9530 mg/kg (rabbit) | | |

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.

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Trade name: IPS Classic Glaze and Stain Liquid

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- · Additional toxicological information:
- · Carcinogenic categories
- · NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

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.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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.

| UN-Number | | |
|--|------|--|
| DOT, ADR, ADN, IMDG, IATA | Void | |
| UN proper shipping name DOT, ADR, ADN, IMDG, IATA | Void | |
| Transport hazard class(es) | | |
| DOT, ADR, ADN, IMDG, IATA | | |
| Class | Void | |
| Packing group | | |
| DOT, ADR, IMDG, IATA | Void | |
| Environmental hazards: | | |
| Marine pollutant: | No | |

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Trade name: IPS Classic Glaze and Stain Liquid

| | (Contd. of page 6 |
|---|--|
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II MARPOL73/78 and the IBC Code | of Not applicable. |
| · Transport/Additional information: | Product is not classified as a dangerous good for transport (ADR, IMDG, IATA). |
| · UN ''Model Regulation'': | - |

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 listed.

· TSCA (Toxic Substances Control Act):

Substance is 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)

107-21-1 ethanediol

A4

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

Substance is not listed.

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



· Signal word Warning

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Trade name: IPS Classic Glaze and Stain Liquid

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· Hazard-determining components of labeling:

ethanediol

· Hazard statements

Harmful if swallowed.

· Precautionary statements

Wash thoroughly after handling.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

· 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 05/20/2015 / 5
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

* Data compared to the previous version altered.

US