ivoclar vivadeni:

Material Safety Data Sheet acc. to ISO 11014

Printing date 07/17/2015

Version number 4

Reviewed on 04/18/2015

1 Identification

- · Product identifier
- Trade name: IPS Contrast Spray Chairside blue-lemon / creme-lemon

• *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

Skin Sens. 1H317 May cause an allergic skin reaction.Carc. 1AH350 May cause cancer.Aquatia Chronia 3H412Harmful to aquatia life with long lasting a

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· Label elements

· GHS label elements

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

· Hazard pictograms



· Signal word Danger

• Hazard-determining components of labeling: ethanol Talc (Mg3H2(SiO3)4) citrus oil

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· Hazard statements May cause an allergic skin reaction. May cause cancer. Harmful to aquatic life with long lasting effects. · Precautionary statements Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Pressurized container: Do not pierce or burn, even after use. Do not breathe spray. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. · Hazard description: · WHMIS-symbols: A - Compressed gas B5 - Flammable aerosol · Classification system: · NFPA ratings (scale 0 - 4) Health = 00 Fire = 0Reactivity = 1· HMIS-ratings (scale 0 - 4) HEALTH 0 Health = 0FIRE • Fire = 0**REACTIVITY** 1 *Reactivity* = 1 · Other hazards · Results of PBT and vPvB assessment • **PBT:** Not applicable. · vPvB: Not applicable. 3 Composition/information on ingredients · Chemical characterization: Mixtures · Description: Mixture of the substances listed below with nonhazardous additions. · Dangerous components:

431-89-0	heptafluorpropan	30-60%
64-17-5	ethanol	≤10%
14807-96-6	Talc (Mg3H2(SiO3)4)	3-5%
84929-31-7	citrus oil	0.3-<1%

4 First-aid measures

- · Description of first aid measures
- After inhalation:
- Supply fresh air.
- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
- Rinse with water.

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If skin irritation continues, consult a doctor.

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- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Rinse out mouth and then drink plenty of water.
- · 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.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Do not inhale explosion gases or combustion gases.
- $\cdot \textit{Additional information Cool endangered receptacles with water spray}.$

6 Accidental release measures

- *Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation*
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up:* Absorb liquid components with liquid-binding material. Dispose of the collected material according to regulations.
- **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.
 Keep away from heat and direct sunlight.
 Open and handle receptacle with care.
 Use only in well ventilated areas.

 Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
 Store only in the original receptacle.
 Observe official regulations on storing packagings with pressurized containers.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Protect from heat and direct sunlight.

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Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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

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

64-17-5 ethanol

EL Short-term value: 1000 ppm

EV Long-term value: 1.900 mg/m³, 1.000 ppm

14807-96-6 Talc (Mg3H2(SiO3)4)

- EL Long-term value: 2 mg/m³ respirable
 EV Long-term value: 2* mg/m³, 2 f/cc ppm
- *respirable

• 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. Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed. Do not inhale gases / fumes / aerosols.

• Breathing equipment:

Not necessary if room is well-ventilated. 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

After use of gloves apply skin-cleaning agents and skin cosmetics.

· Material of gloves

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

· Eye protection: Safety glasses

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Information on basic physical and	chemical properties	
General Information		
Appearance:	A	
Form: Color:	Aerosol	
Color: Odor:	According to product specification Characteristic	
Odour threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	~ 78 °C	
Flash point:	Not applicable, as aerosol.	
Flammability (solid, gaseous):	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C:	4000 hPa	
Density:	Not determined.	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wat	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	

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 Danger of explosion.

· 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.

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2B

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

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• Primary irritant effect:

• on the skin: No irritant effect.

 \cdot on the eye: No irritating effect.

• Sensitization: Sensitization possible through skin contact.

• Additional toxicological information: No further relevant information available.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

64-17-5 ethanol

14807-96-6 Talc (Mg3H2(SiO3)4)

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is 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.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Harmful to aquatic organisms

- · 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:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. 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.

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Transport information	
UN-Number DOT, TDG, IMDG, IATA	UN1950
	011750
UN proper shipping name DOT	A anagala wan flammahla
ADR/RID/ADN	Aerosols, non-flammable 1950 Aerosols
IMDG	AEROSOLS
IATA	AEROSOLS, non-flammable
Transport hazard class(es)	
DOT	
$\langle - \rangle$	
· · · · · · · · · · · · · · · · · · ·	
Class	2.2
Label	2.2
TDG (Transport dangerous goods):	
•	
	2 5A Gases
Class Label IMDG, IATA	2 5A Gases 2.2
Label IMDG, IATA	2.2
Label IMDG, IATA	2.2 2.2
Label IMDG, IATA Class Label	2.2
Label IMDG, IATA Class Label Packing group	2.2 2.2 2.2
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA	2.2 2.2
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards:	2.2 2.2 2.2 Void
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant:	2.2 2.2 2.2 Void No
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user	2.2 2.2 2.2 Void
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler):	2.2 2.2 2.2 Void No Warning: Gases
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number:	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U II of
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex MARPOL73/78 and the IBC Code	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex MARPOL73/78 and the IBC Code Transport/Additional information:	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U II of
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex MARPOL73/78 and the IBC Code Transport/Additional information: ADR/RID/ADN	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U II of Not applicable.
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex MARPOL73/78 and the IBC Code Transport/Additional information:	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U II of Not applicable. Code: E0
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex MARPOL73/78 and the IBC Code Transport/Additional information: ADR/RID/ADN	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U II of Not applicable.
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex MARPOL73/78 and the IBC Code Transport/Additional information: ADR/RID/ADN Excepted quantities (EQ) IMDG	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U II of Not applicable. Code: E0
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex MARPOL73/78 and the IBC Code Transport/Additional information: ADR/RID/ADN Excepted quantities (EQ) IMDG Limited quantities (LQ)	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U II of Not applicable. Code: E0 Not permitted as Excepted Quantity 1L
Label IMDG, IATA Class Label Packing group DOT, TDG, IMDG, IATA Environmental hazards: Marine pollutant: Special precautions for user Danger code (Kemler): EMS Number: Transport in bulk according to Annex MARPOL73/78 and the IBC Code Transport/Additional information: ADR/RID/ADN Excepted quantities (EQ)	2.2 2.2 2.2 Void No Warning: Gases - F-D,S-U II of Not applicable. Code: E0 Not permitted as Excepted Quantity

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· UN "Model Regulation":

UN1950, Aerosols, 2.2

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

- · Sara
- · Section 355 (extremely hazardous substances):
- None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

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:

64-17-5 ethanol

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

64-17-5 ethanol

14807-96-6 Talc (Mg3H2(SiO3)4)

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

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Danger

 Hazard-determining components of labeling: ethanol Talc (Mg3H2(SiO3)4) citrus oil
 Hazard statements

May cause an allergic skin reaction.

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May cause cancer. Harmful to aquatic life with long lasting effects. • **Precautionary statements** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Pressurized container: Do not pierce or burn, even after use. Do not breathe spray. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. • **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 07/17/2015 / 3 · Abbreviations and acronyms: 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 ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Carc. 1A: Carcinogenicity, Hazard Category 1A Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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