

Printing date 09/29/2017 Version number 6 Reviewed on 07/27/2017

### 1 Identification

- · Product identifier
- Trade name: IPS Margin Sealer
- · 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.

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USA

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· 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

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Skin Irrit. 2 H315 Causes skin irritation.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT SE 3 H336 May cause drowsiness or dizziness.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- · Label elements
- · GHS label elements

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

· Hazard pictograms







GHS02

2 GHS07

· Signal word Danger

Hazard-determining components of labeling:

n-hexane

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#### · Hazard statements

Highly flammable liquid and vapor.

Causes skin irritation.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

#### Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not breathe dust/fume/gas/mist/vapors/spray.

Keep container tightly closed.

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

If skin irritation or rash occurs:

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



Health = 2Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



\*2 *Health* = \*2 Fire = 3

- · 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:

CAS: 110-54-3 n-hexane

50-100%

### 4 First-aid measures

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

Supply fresh air.

Seek medical treatment.

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

- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; immediately call for medical help.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

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· 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.

- · 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: Wear self-contained respiratory protective device.
- · 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.

· Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

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).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 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

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

· Specific end use(s) No further relevant information available.

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## 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:

#### CAS: 110-54-3 n-hexane

PEL Long-term value: 1800 mg/m³, 500 ppm REL Long-term value: 180 mg/m³, 50 ppm TLV Long-term value: 176 mg/m³, 50 ppm Skin; BEI

## Ingredients with biological limit values:

#### CAS: 110-54-3 n-hexane

BEI 0.4 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: 2.5-Hexanedione without hydrolysis

- · 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.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

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.

#### Recommended filter device for short term use:

Filter A1

Filter A2

Filter A3

#### · Protection of hands:



Protective gloves

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

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

Nitrile rubber, NBR

Fluorocarbon rubber (Viton)

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.

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· 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:



Tightly sealed goggles

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· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid
Color: Colorless
Odor: Characteristic
Odor threshold: Not determined.

• pH-value: Not determined.

· Change in condition

Melting point/Melting range: -95 °C (-139 °F) Boiling point/Boiling range: 69 °C (156 °F)

• Flash point:  $-26 \, ^{\circ}\text{C} \, (-15 \, ^{\circ}\text{F})$ • Ignition temperature:  $240 \, ^{\circ}\text{C} \, (464 \, ^{\circ}\text{F})$ 

• Auto igniting: Product is not selfigniting.

• Danger of explosion: Product is not explosive. However, formation of explosive air/vapor

mixtures are possible.

· Explosion limits:

 Lower:
 1.2 Vol %

 Upper:
 7.4 Vol %

· Vapor pressure at 20 °C (68 °F): 160 hPa (120 mm Hg)

• Density at 20 °C (68 °F): 0.65 g/cm³ (5.424 lbs/gal)

Relative density
 Vapor density
 Evaporation rate
 Not determined.
 Not determined.

· Solubility in / Miscibility with

Water: Insoluble.

· Partition coefficient (n-octanol/water): 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.

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- · 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.
- · 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:

CAS: 110-54-3 n-hexane

 Oral
 LD50
 28710 mg/kg (rat)

 Dermal
 LD50
 >2000 mg/kg (rabbit)

- · on the skin: Irritant to skin and mucous membranes.
- · 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)

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: Toxic for fish
- · Additional ecological information:
- · General notes:

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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

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

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

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## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

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

## 14 Transport information

- · UN-Number
- **DOT** UN1208 • **ADR,RID,ADN, IMDG, IATA** 1208
- · UN proper shipping name
- · ADR/RID/ADN 1208 HEXANES · IMDG, IATA HEXANES
- · Transport hazard class(es)
- $\cdot DOT$



- · Class 3 Flammable liquids
- · Label
- · ADR/RID/ADN



- · Class 3 (F1) Flammable liquids
- ·Label
- $\cdot$  IMDG



- · Class 3 Flammable liquids
- ·Label
- $\cdot$  IATA



- · Class 3 Flammable liquids
- ·Label

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· Packing group · DOT, ADR,RID,ADN, IMDG, IATA	II
Environmental hazards:	Product contains environmentally hazardous substances: n-
	hexane
· Marine pollutant:	Yes
	Symbol (fish and tree)
Special marking (ADR/RID/ADN):	Symbol (fish and tree)
Special precautions for user	Warning: Flammable liquids
Danger code (Kemler):	33
EMS Number:	F-E,S-D
Transport in bulk according to Annex I	I of
MARPOL73/78 and the IBC Code	Not applicable.
· UN ''Model Regulation'':	UN1208, Hexanes, ENVIRONMENTALLY HAZARDOUS, 3, 1.

## 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):

CAS: 110-54-3 n-hexane

· TSCA (Toxic Substances Control Act):

CAS: 110-54-3 n-hexane

- · 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)

CAS: 110-54-3 n-hexane

II

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· 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).

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#### · Hazard pictograms







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

n-hexane

#### · Hazard statements

Highly flammable liquid and vapor.

Causes skin irritation.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

#### · Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not breathe dust/fume/gas/mist/vapors/spray.

Keep container tightly closed.

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

If skin irritation or rash occurs:

#### · National regulations:

## · Other regulations, limitations and prohibitive regulations

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 09/29/2017 / 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

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids - Category 2

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Skin Irrit. 2: Skin corrosion/irritation — Category 2
Repr. 2: Reproductive toxicity — Category 2
STOT SE 3: Specific target organ toxicity (single exposure) — Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) — Category 2
Asp. Tox. 1: Aspiration hazard — Category 1

\* Data compared to the previous version altered.