





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

- **Product identifier**
- **Trade name: IPS Natural Die Material Separator**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Separating fluid for die material
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Ivoclar Vivadent AG
Bendererstrasse 2
FL-9494 Schaan
PRINCIPALITY OF LIECHTENSTEIN
- **Tel:** +423 235 35 35
Fax: +423 235 33 60
- **Further information obtainable from:**
Regulatory Affairs
msds@ivoclarvivadent.com
- **Emergency telephone number:** +423 / 235 33 13

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  **Xn; Harmful**
R48/20-62-65: Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of impaired fertility. Harmful: may cause lung damage if swallowed.
-  **Xi; Irritant**
R38: Irritating to skin.
-  **F; Highly flammable**
R11: Highly flammable.
-  **N; Dangerous for the environment**
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67: Vapours may cause drowsiness and dizziness.
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· Label elements

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**



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· **Hazard-determining components of labelling:**

n-hexane

· **Risk phrases:**

11 Highly flammable.

38 Irritating to skin.

48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

62 Possible risk of impaired fertility.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

67 Vapours may cause drowsiness and dizziness.

· **Safety phrases:**

9 Keep container in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

23 Do not breathe fumes/aerosol.

33 Take precautionary measures against static discharges.

36/37 Wear suitable protective clothing and gloves.

57 Use appropriate container to avoid environmental contamination.

· **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 substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 110-54-3	<i>n</i> -hexane	50-100%
EINECS: 203-777-6	☒ Xn R48/20-62-65; ☒ Xi R38; ☒ F R11; ☒ N R51/53 R67	

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

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; call for medical help immediately.

· **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:** CO₂, 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.

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- **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 fire - and explosion protection:**
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 container 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.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

110-54-3 n-hexane

WEL ()	Long-term value: 72 mg/m ³ , 20 ppm
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- **Additional information:** The lists valid during the making 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.

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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.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter A

· **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**

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.

· **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

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	-95°C
Boiling point/Boiling range:	69°C

· **Flash point:** -26°C

· **Ignition temperature:** 240°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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· Explosion limits:	
Lower:	1.2 Vol %
Upper:	7.4 Vol %
· Vapour pressure at 20°C:	160 hPa
· Density at 20°C:	0.65 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Insoluble.
· Segregation 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.
- **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 relevant for classification:**

110-54-3 n-hexane

Oral	LD50	28710 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.

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- **Mobility in soil** No further relevant information available.
- **Ecotoxicological 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 (German Regulation) (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.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue
20 01 13* solvents

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

14 Transport information

· **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 (F1) Flammable liquids.
- **Danger code (Kemler):** 33
- **UN-Number:** 1208
- **Packaging group:** II
- **Hazard label:** 3
- **Special marking:** Symbol (fish and tree)
- **UN proper shipping name:** 1208 HEXANES
- **Tunnel restriction code** D/E

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1208
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Marine pollutant:** Yes
Symbol (fish and tree)

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· **Proper shipping name:** HEXANES

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 3
 · **UN/ID Number:** 1208
 · **Label:** 3
 · **Packaging group:** II
 · **Proper shipping name:** HEXANES

· **Environmental hazards:** Product contains environmentally hazardous substances: n-hexane

· **Special precautions for user** Warning: Flammable liquids.

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

15 Regulatory information

· **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.

· **Relevant phrases**

R11 Highly flammable.

R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R62 Possible risk of impaired fertility.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapours may cause drowsiness and dizziness.

EU-Sicherheitsdatenblatt

IPS Natural Die Material



Ausgabedatum / Referenz

01.12.2005 hot

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Firma

Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan
Fürstentum Liechtenstein

1 Handelsname und Lieferant

- 1.1 Handelsname / Warenkennzeichnung **IPS Natural Die Material**
- 1.2 Anwendung / Einsatz Lichthärtende Stumpfmaterialfarben
- 1.3 Hersteller Ivoclar Vivadent AG, Bendererstrasse 2, FL - 9494 Schaan
Fürstentum Liechtenstein
- 1.4 Lieferant
- 1.5 TOX NOTRUF Notfall-No: +423 / 235 35 35 oder 373 40 40
Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein

2 Zusammensetzung

- 2.1 Chemische Charakterisierung Paste aus Polyesterurethandimethacrylat, Siliciumdioxid, Paraffinöl, Copolymer, Initiatoren, Stabilisatoren und Pigmenten
- 2.2 Gefährliche Bestandteile Keine.
- 2.3 Weitere Angaben Keine.

3 Mögliche Gefahren

Unausgehärtetes Material: Direkter Kontakt kann Reizung der Augen verursachen. Haut: wiederholter oder längerer Kontakt kann leichte Reizungen verursachen.

4 Erste Hilfe

- 4.1 Augenkontakt Mit viel Wasser spülen. Arzt hinzuziehen, wenn die Reizung andauert.
- 4.2 Hautkontakt Gründlich mit Wasser waschen.
- 4.3 Verschlucken Versehentliches Verschlucken kleinster Mengen dürfte keine gesundheitliche Schädigung hervorrufen.
- 4.4 Einatmen Zufuhr von Frischluft.
- 4.5 Weitere Angaben Bei Unwohlsein ärztlichen Rat einholen (dieses Sicherheitsdatenblatt vorzeigen).

5 Brandbekämpfung

- 5.1 Geeignete Löschmittel Wassernebel, Kohlendioxid, Schaum, Trockenlöschmittel.
- 5.2 Ungeeignete Löschmittel Keine bekannt

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5.3 Weitere Angaben Keine.

6 Massnahmen bei unbeabsichtigter Freisetzung Mechanisch aufnehmen.
Unter Beachtung der massgeblichen Vorschriften und Regelungen entsorgen.

7 Handhabung und Lagerung

- 7.1 Handhabung Handhabung dieses Produkts nur durch ausreichend geschultes Personal.
Darf nicht in die Hände von Kindern gelangen.
 - 7.2 Arbeitshygiene Berufstätige Hygienemassnahmen einhalten.
Bei der Arbeit nicht essen, trinken oder rauchen.
 - 7.3 Lagerung Lagerung bei 2-28 °C
 - 7.4 Lagerplatz Vor Lichteinwirkung schützen.
 - 7.5 Brand- und Ex-Schutz Nicht erforderlich.
-

8 Expositionsbegrenzung und Schutzausrüstung

- 8.1 Technische Massnahmen Gute allgemeine Belüftung ist ausreichend.
 - 8.2 Grenzwertüberwachung Kein Grenzwert festgelegt.
 - 8.3 Persönliche Schutzausrüstung
 - 8.3.1 Atemschutz Atemschutz.
 - 8.3.2 Handschutz Schutzhandschuhe.
Handelsübliche medizinische Handschuhe bieten keinen Schutz gegen den sensibilisierenden Effekt von Methacrylaten.
Die Durchbruchzeit der verwendeten Handschuhe ist den Angaben vom Schuhhersteller zu entnehmen.
 - 8.3.3 Augenschutz Schutzbrille.
 - 8.3.4 Andere Keine.
-

9 Physikalische und chemische Eigenschaften

- 9.1 Erscheinungsform Paste
- 9.2 Farbe weiss bis gelb
- 9.3 Geruch praktisch geruchlos
- 9.4 Zustandsänderung ---
- 9.5 Dichte 1.32 - 1.33 g/cm³ (20°C)
- 9.6 Dampfdruck nicht anwendbar

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9.7 Viskosität

nicht bestimmt

9.8 Löslichkeit

Löslichkeit in Wasser

< 0.5 %

9.9 pH-Wert

nicht bestimmt

9.10 Flammpunkt

> 150 °C

9.11 Zündtemperatur

nicht bestimmt

9.12 Explosionsgrenzen

Untere:
Obere:
nicht anwendbar

9.13 Weitere Angaben

Keine.

10 Stabilität und Reaktivität

10.1 Thermische Zersetzung

Keine bei bestimmungsgemässer Verwendung.

10.2 Gefährliche Zersetzungsprodukte

Keine unter normalen Lager- und Handhabungsbedingungen.

10.3 Gefährliche Reaktionen

Keine.

10.4 Weitere Angaben

Produkt vor Lichteinwirkung schützen.

11 Angaben zur Toxikologie

11.1 Akute Toxizität

Orale LD50 / Ratte: > 5'000 mg/kg
Primäre Schleimhautreizwirkung (Kaninchenaugen) nach EG-Richtlinie getestet: nicht reizend

11.2 Subakute / Chronische Toxizität

Haut: wiederholter oder längerer Kontakt kann leichte Reizungen verursachen.

11.3 Weitere Angaben

Versehentliches Verschlucken kleinster Mengen dürfte keine gesundheitliche Schädigung hervorrufen.

12 Angaben zur ÖkologieBei sachgemässer Handhabung und Verwendung sind keine ökologischen Probleme zu erwarten.
praktisch unlöslich

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13 Entsorgung

Unter Beachtung der örtlichen, behördlichen Vorschriften einer geordneten Deponie oder Verbrennungsanlage zuführen.

13.1 EU waste key

20 01 06

13.2 Swiss waste code

13.3 Origin

Dentallabor

14 Transport

14.1 Landtransport

ADR	---	RID	---
Klassifizierungscode			
GGVS	---	GGVE	---
UN Nummer	---	Kemler Zahl	---
Verpackungsgr.	---		
Korrekte Versandbezeichn.	---		

14.2 Schiffstransport

ADNR	---	IMDG	---
GGVSee	---		
UN Nummer	---		
EMS	---	MFAG	---
Verpackungsgr.	---		
Korrekte Versandbezeichn.	---		

14.3 Luftransport

ICAO / IATA-DGR	---
UN Nummer	---
Korrekte Versandbezeichn.	---
Subsidiary Risk	---
Labels	---
Verpackungsgr.	---
Passagierflugzeug	Packing Instructions ---
	Max. ---
Frachtflugzeug	Packing Instructions ---
	Max. ---

14.4 Weitere Angaben

Kein Gefahrgut im Sinne der Transportvorschriften.

15 Vorschriften

Das Produkt ist nicht kennzeichnungspflichtig im Sinne der EG-Richtlinien.

15.1 UN-Nummer

15.2 Nationale Vorschriften

15.3 EU Nummer

15.4 Gefahrensymbole

15.5 Gefahrenbezeichnung

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15.6 R-Sätze (Gefahrenhinweise)

15.7 S-Sätze (Sicherheitsratschläge)

15.8 MAK-Wert

15.9 BVD-Klassierung (CH)

15.10 VbF (D)

15.11 Weitere Angaben

Keine.

16 Weitere HinweiseVersion: 1

Alle vorstehenden Angaben entsprechen dem heutigen Stand unserer Kenntnisse und Erfahrungen. Das Sicherheitsdatenblatt dient der Beschreibung der Produkte im Hinblick auf Sicherheitserfordernisse. Die Angaben haben nicht die Bedeutung von Eigenschaftszusicherungen.
