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

1.1 Product identifier

InovaPrint sep
Article number: 237-XXXX

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

1.2.1 Relevant uses

Separating agent
Dental sector

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

HPdent GmbH
Hauptstr. 99, Geb. 66
78244 Gottmadingen / GERMANY
Phone +49 7731 16 95 80
Homepage www.hp-dent.com
E-mail kontakt@hp-dent.com

Address enquiries to

Technical information kontakt@hp-dent.com

Safety Data Sheet sdb@chemiebuero.de (No dispatch of safety data sheets)

Safety data sheets are available from the supplier.

1.4 Emergency telephone number

Advisory body Call NHS 111 or a doctor

Company +49 7731 16 95 80 (Mo - Fr 8:00 -16:00 Uhr)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Flam. Liq. 2: H225 Highly flammable liquid and vapour.
Eye Irrit. 2: H319 Causes serious eye irritation.
STOT SE 3: H336 May cause drowsiness or dizziness.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word DANGER

Contains: Propan-2-ol

Hazard statements

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing mist/vapours/spray.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice / attention.
P403+P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards

Human health dangers Contains no ingredients with endocrine-disrupting properties.

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
40 - 45	Propan-2-ol
	CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336
5 - 10	Butan-2-ol
	CAS: 78-92-2, EINECS/ELINCS: 201-158-5, EU-INDEX: 603-004-00-6
	GHS/CLP: Flam. Liq. 3: H226 - Eye Irrit. 2: H319 - STOT SE 3: H335 - STOT SE 3: H336
< 0,25	Methanol
	CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X
	GHS/CLP: Flam. Liq. 2: H225 - Acute Tox. 3: H301 H311 H331 - STOT SE 1: H370
	SCL [%]: >= 10: STOT SE 1: H370, >=3 - <10: STOT SE 2: H371

Comment on component parts For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Change soaked clothing.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.
Get medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Drowsiness
Vertigo

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Foam, dry powder, water spray jet, carbon dioxide

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use personal protective equipment.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. general-purpose binder).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.

Keep away from all sources of ignition - Refrain from smoking.
Ignitable mixtures can be formed in the empty container.
Take precautionary measures against static discharges.
Vapours can form an explosive mixture with air.
Ground/bond container and receiving equipment.

Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work.
Take off contaminated clothing and wash before reuse.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Provide solvent-resistant and impermeable floor.

Do not store with oxidizing or self-igniting materials.

Protect from heat/overheating.
Keep container in a well-ventilated place.
Keep container tightly closed.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (UK)

Substance
Butan-2-ol
CAS: 78-92-2, EINECS/ELINCS: 201-158-5, EU-INDEX: 603-004-00-6
Long-term exposure: 100 ppm, 308 mg/m³
Short-term exposure (15-minute): 150 ppm, 462 mg/m³
Propan-2-ol
CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0
Long-term exposure: 400 ppm, 999 mg/m³
Short-term exposure (15-minute): 500 ppm, 1250 mg/m³
Methanol
CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X
Long-term exposure: 200 ppm, 266 mg/m³, Sk
Short-term exposure (15-minute): 250 ppm, 333 mg/m³

Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

Substance / EC LIMIT VALUES
Methanol
CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X
Eight hours: 200 ppm, 260 mg/m³, H

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	> 0,4 mm; Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	light protective clothing
Other	Do not inhale vapours. Avoid contact with eyes and skin.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Form	liquid
Color	green
Odor	characteristic
Odour threshold	not determined
pH-value	6,5
pH-value [1%]	not determined
Boiling point or initial boiling point and boiling range [°C]	82
Flash point [°C]	18
Flammability	yes
Lower explosion limit	1,6 Vol%
Upper explosion limit	13,4 Vol%
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	< 4,1 (20 °C)
Density [g/cm³]	0,94
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	not determined
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	not determined
Kinematic viscosity	> 20,5 mm²/s
Relative vapour density	2,1
Melting point [°C]	not determined
Auto-ignition temperature [°C]	> 390
Decomposition temperature [°C]	not determined
Particle characteristics	No information available.

9.2 Other information

55 - 65 % Solvent content
Solids content: 40 -45 %

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Evolution of highly flammable gases/vapours.
Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity

Product
ATE-mix, oral, > 2000 mg/kg

Substance
Butan-2-ol, CAS: 78-92-2
LD50, oral, Rat, 6500 mg/kg (IUCLID)
Propan-2-ol, CAS: 67-63-0
LD50, oral, Rat, 5840 mg/kg
Methanol, CAS: 67-56-1
LD50, oral, Rat, 5628 mg/kg bw (IUCLID)

Acute dermal toxicity

Product
ATE-mix, dermal, > 2000 mg/kg

Substance
Butan-2-ol, CAS: 78-92-2
LD50, dermal, Rabbit, 4900 mg/kg (IUCLID)
Propan-2-ol, CAS: 67-63-0
LD50, dermal, Rabbit, 13900 mg/kg
Methanol, CAS: 67-56-1
LD50, dermal, Rabbit, 17100 mg/kg bw (Lit.)

Acute inhalational toxicity

Product
LC50, inhalative, > 20 mg/L

Substance
Propan-2-ol, CAS: 67-63-0
LC50, inhalative, Rat, 25 mg/l 4h
Methanol, CAS: 67-56-1
LC50, inhalative, Rat, 43,68 mg/l/6h

Serious eye damage/irritation Irritant
Based on the available information, the classification criteria are fulfilled.
Calculation method

Substance
Propan-2-ol, CAS: 67-63-0
Eye, irritant

Skin corrosion/irritation Based on the available information, the classification criteria are not fulfilled.

Substance
Propan-2-ol, CAS: 67-63-0
dermal, non-irritating

Respiratory or skin sensitisation Based on the available information, the classification criteria are not fulfilled.

Substance
Propan-2-ol, CAS: 67-63-0
dermal, non-sensitizing

Specific target organ toxicity — single exposure Vapours may cause drowsiness and dizziness.
Based on the available information, the classification criteria are fulfilled.
Calculation method

Substance
Propan-2-ol, CAS: 67-63-0
inhalative, adverse effect observed

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

Substance
Propan-2-ol, CAS: 67-63-0
no adverse effect observed

Mutagenicity Based on the available information, the classification criteria are not fulfilled.
Based on the available information, the classification criteria are not fulfilled.

Reproduction toxicity Based on the available information, the classification criteria are not fulfilled.

- Fertility

Substance
Propan-2-ol, CAS: 67-63-0
no adverse effect observed

- Development

Substance
Propan-2-ol, CAS: 67-63-0
no adverse effect observed

Carcinogenicity Based on the available information, the classification criteria are not fulfilled.

Substance
Propan-2-ol, CAS: 67-63-0
no adverse effect observed

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties Contains no ingredients with endocrine-disrupting properties.

11.2.2 Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
Butan-2-ol, CAS: 78-92-2
LC50, (96h), Pimephales promelas, 3670 mg/l (IUCLID)
LC50, (24h), Daphnia magna, 3750 mg/l (IUCLID)
Propan-2-ol, CAS: 67-63-0
LC50, (24h), Daphnia magna, > 10000 mg/l
LC50, (4d), Fish, 9,64 - 10 g/l
Methanol, CAS: 67-56-1
LC50, (96h), Lepomis macrochirus, 15400 mg/l (ECOTOX Database)
EC50, (48h), Daphnia magna, > 10000 mg/l (IUCLID)

12.2 Persistence and degradability

Behaviour in environment compartments No information available.

Behaviour in sewage plant No information available.

Biological degradability No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Do not discharge product unmonitored into the environment.
Ecological data of complete product are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.

Waste no. (recommended) 070104*

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.
Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	1987
Inland navigation (ADN)	1987
Marine transport in accordance with IMDG	1987
Air transport in accordance with IATA	1987

14.2 UN proper shipping name

Transport by land according to ADR/RID	Alcohols, n.o.s. (isopropanol, butan-2-ol)
- Classification Code	F1
- Label	
- ADR LQ	1 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D/E)
Inland navigation (ADN)	Alcohols, n.o.s. (isopropanol, butan-2-ol)
- Classification Code	F1
- Label	
Marine transport in accordance with IMDG	Alcohols, n.o.s. (isopropanol, butan-2-ol)
- EMS	F-E, S-D
- Label	
- IMDG LQ	1 l
Air transport in accordance with IATA	Alcohols, n.o.s. (isopropanol, butan-2-ol)
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	3
Inland navigation (ADN)	3
Marine transport in accordance with IMDG	3
Air transport in accordance with IATA	3

14.4 Packing group

Transport by land according to ADR/RID	II
Inland navigation (ADN)	II
Marine transport in accordance with IMDG	II
Air transport in accordance with IATA	II

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EG (2000/532/EC); 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EWG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances ≥ 0.1% that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains ≥ 0.1% of substances with the following restrictions. 40, 69, 75
	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is subject to the following restrictions. 3
TRANSPORT-REGULATIONS	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2024)
NATIONAL REGULATIONS (UK):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	55 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H370 Causes damage to organs.
H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H335 May cause respiratory irritation.
H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.
H319 Causes serious eye irritation.
H225 Highly flammable liquid and vapour.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Flam. Liq. 2: H225 Highly flammable liquid and vapour. (On basis of test data)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method)

Modified position

none