

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



Safety Data Sheet dated 4/2/2019, version 4

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

1.1. Product identifier

Mixture identification:

Trade name: VERNIFER AVORIO BRILLANTE
Trade code: 4878

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

Recommended use:

Paint for metal materials

1.3. Details of the supplier of the safety data sheet

Supplier:

Arexons S.p.A.
via Antica di Cassano, 23, 20063
Cernusco sul Naviglio (MI), Italy

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Competent person responsible for the safety data sheet:

arexons@arexons.it

1.4. Emergency telephone number

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Centro Antiveleni di Pavia IRCCS- Fondazione Maugeri tel. +39 (0)382 24444 (h24; it, en)

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

In Ireland: Beaumont Hospital - National Poisons Information Centre 01 809 2166 (7days, 8:00 - 22:00)

In South Africa: Poison Information Helpline 0861 555 777

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

⚠ Warning, Flam. Liq. 3, Flammable liquid and vapour.

⚠ Warning, STOT SE 3, May cause drowsiness or dizziness.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P271 Use only outdoors or in a well-ventilated area.

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



P370+P378 In case of fire, use a foam fire extinguisher to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents in accordance with national regulation.

Special Provisions:

None

Contains

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics
1-methoxy-2-propanol
2-butanone oxime: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 20% - < 25% Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

REACH No.: 01-2119463258-33, EC: 919-857-5

⚠ 2.6/3 Flam. Liq. 3 H226

⚠ 3.10/1 Asp. Tox. 1 H304

⚠ 3.8/3 STOT SE 3 H336

EUH066

DECLP (CLP)*

>= 7% - < 10% Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

REACH No.: 01-2119457273-39, EC: 918-481-9

⚠ 3.10/1 Asp. Tox. 1 H304

EUH066

>= 2% - < 3% 1-methoxy-2-propanol

REACH No.: 01-2119457435-35, Index number: 603-064-00-3, CAS: 107-98-2, EC: 203-539-1

⚠ 2.6/3 Flam. Liq. 3 H226

⚠ 3.8/3 STOT SE 3 H336

>= 0,5% - < 1% 2-butanone oxime

REACH No.: 01-2119539477-28, Index number: 616-014-00-0, CAS: 96-29-7, EC: 202-496-6

⚠ 3.1/4/Dermal Acute Tox. 4 H312

⚠ 3.3/1 Eye Dam. 1 H318

⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

⚠ 3.6/2 Carc. 2 H351

>= 0,5% - < 1% xylene [4]

REACH No.: 01-2119488216-32, Index number: 601-022-00-9, CAS: 1330-20-7, EC: 215-535-7

⚠ 2.6/3 Flam. Liq. 3 H226

4.1/C3 Aquatic Chronic 3 H412

⚠ 3.10/1 Asp. Tox. 1 H304

⚠ 3.3/2 Eye Irrit. 2 H319

⚠ 3.8/3 STOT SE 3 H335

⚠ 3.9/2 STOT RE 2 H373

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



- ⚠ 3.1/4/Inhal Acute Tox. 4 H332
- ⚠ 3.1/4/Dermal Acute Tox. 4 H312
- ⚠ 3.2/2 Skin Irrit. 2 H315

>= 0,25% - < 0,5% 2-Ethylhexanoic acid, zirconium salt
REACH No.: 01-2119979088-21, CAS: 22464-99-9, EC: 245-018-1
⚠ 3.7/2 Repr. 2 H361

>= 0,25% - < 0,5% calcium bis(2-ethylhexanoate)
REACH No.: 01-2119978297-19, CAS: 136-51-6, EC: 205-249-0
⚠ 3.3/1 Eye Dam. 1 H318
⚠ 3.7/2 Repr. 2 H361d

>= 0,05% - < 0,1% Ethylbenzene
REACH No.: 01-2119489370-35, Index number: 601-023-00-4, CAS: 100-41-4, EC: 202-849-4
⚠ 2.6/2 Flam. Liq. 2 H225
⚠ 3.1/4/Inhal Acute Tox. 4 H332
⚠ 3.9/2 STOT RE 2 H373
⚠ 3.10/1 Asp. Tox. 1 H304

>= 0,02% - < 0,05% COBALT BIS(2-ETHYLHEXANOATE)
REACH No.: 01-2119524678-29, CAS: 136-52-7, EC: 205-250-6
⚠ 3.3/2 Eye Irrit. 2 H319
⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
⚠ 3.7/2 Repr. 2 H361
⚠ 4.1/A1 Aquatic Acute 1 H400
4.1/C3 Aquatic Chronic 3 H412

>= 0,02% - < 0,05% 2-butoxyethanol
REACH No.: 01-2119475108-36, Index number: 603-014-00-0, CAS: 111-76-2, EC: 203-905-0
⚠ 3.1/4/Inhal Acute Tox. 4 H332
⚠ 3.1/4/Dermal Acute Tox. 4 H312
⚠ 3.1/4/Oral Acute Tox. 4 H302
⚠ 3.3/2 Eye Irrit. 2 H319
⚠ 3.2/2 Skin Irrit. 2 H315

>= 0,02% - < 0,05% Acetato di 1-metil-2-metossietile; 2-methoxy-1-methylethyl acetate
REACH No.: 01-2119475791-29, Index number: 607-195-00-7, CAS: 108-65-6, EC: 203-603-9
⚠ 2.6/3 Flam. Liq. 3 H226

>= 0,02% - < 0,05% 2-methoxy-1-methylethyl acetate
REACH No.: 01-2119475791-29, Index number: 607-195-00-7, CAS: 108-65-6, EC: 203-603-9
⚠ 2.6/3 Flam. Liq. 3 H226
⚠ 3.8/3 STOT SE 3 H336

*DECLP (CLP): Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008. The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply. This note applies only to certain complex oil-derived substances in Part 3.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media:

Foam

Not Recommended Extinguishing Media:

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store in hermetically sealed containers, preferably in a cool place, away from sources of heat and direct sunlight.

Only store in the original container.

Do not store this material near food and drinks.

Always keep in a well ventilated place.

Store at below 50 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

ACGIH - TWA(8h): 1200 mg/m³, 197 ppm

NIOSH - TWA: 350 mg/m³ - STEL: 1800 mg/m³

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

EU - TWA(8h): 1200 mg/m³

1-methoxy-2-propanol - CAS: 107-98-2

EU - TWA(8h): 375 mg/m³, 100 ppm - STEL: 563 mg/m³, 150 ppm - Notes: Skin

ACGIH - TWA(8h): 50 ppm - STEL: 100 ppm - Notes: A4 - Eye and URT irr

xylene [4] - CAS: 1330-20-7

EU - TWA(8h): 221 mg/m³, 50 ppm - STEL: 442 mg/m³, 100 ppm - Notes: Skin

ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm - Notes: A4, BEI - URT and eye irr, CNS impair

Ethylbenzene - CAS: 100-41-4

EU - TWA(8h): 442 mg/m³, 100 ppm - STEL: 884 mg/m³, 200 ppm - Notes: Skin

ACGIH - TWA(8h): 20 ppm - Notes: A3, BEI - URT irr, kidney dam (nephropathy), cochlear impair

COBALT BIS(2-ETHYLHEXANOATE) - CAS: 136-52-7

20101.13 - TWA: 5 mg/m³, 0.85 ppm

2-butoxyethanol - CAS: 111-76-2

EU - TWA(8h): 98 mg/m³, 20 ppm - STEL: 246 mg/m³, 50 ppm - Notes: Skin

ACGIH - TWA(8h): 20 ppm - Notes: A3, BEI - Eye and URT irr

Acetato di 1-metil-2-metossietile; 2-methoxy-1-methylethyl acetate - CAS: 108-65-6

EU - TWA(8h): 275 mg/m³, 50 ppm - STEL: 550 mg/m³, 100 ppm - Notes: Skin

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

EU - TWA(8h): 275 mg/m³, 50 ppm - STEL: 550 mg/m³, 100 ppm - Notes: Skin

DNEL Exposure Limit Values

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Worker Industry: 300 mg/kg - Worker Professional: 300 mg/kg - Consumer: 300 mg/kg -

Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 1500 mg/m³ - Worker Professional: 1500 mg/m³ - Consumer: 900 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 300 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Worker Industry: 300 mg/kg - Worker Professional: 300 mg/kg - Consumer: 300 mg/kg -

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 900 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 300 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

1-methoxy-2-propanol - CAS: 107-98-2
Consumer: 3.3 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Industry: 369 mg/m³ - Worker Professional: 369 mg/m³ - Consumer: 43.9 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 183 mg/kg - Worker Professional: 183 mg/kg - Consumer: 78 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 553.5 mg/m³ - Worker Professional: 553.5 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Industry: 553.5 mg/m³ - Worker Professional: 553.5 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

2-butanone oxime - CAS: 96-29-7
Worker Industry: 2.5 mg/kg - Worker Professional: 2.5 mg/kg - Consumer: 1.5 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Worker Industry: 1.3 mg/kg - Worker Professional: 1.3 mg/kg - Consumer: 0.78 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 9 mg/m³ - Worker Professional: 9 mg/m³ - Consumer: 2.7 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 3.33 mg/m³ - Worker Professional: 3.33 mg/m³ - Consumer: 2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

xylene [4] - CAS: 1330-20-7
Worker Industry: 77 mg/m³ - Worker Professional: 77 mg/m³ - Consumer: 14.8 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 289 mg/m³ - Worker Professional: 289 mg/m³ - Consumer: 174 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Industry: 180 mg/kg - Worker Professional: 180 mg/kg - Consumer: 108 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 1.6 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Ethylbenzene - CAS: 100-41-4
Worker Industry: 77 mg/m³ - Worker Professional: 77 mg/m³ - Consumer: 15 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 293 mg/m³ - Worker Professional: 293 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 180 mg/kg - Worker Professional: 180 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 1.6 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

2-butoxyethanol - CAS: 111-76-2
Worker Professional: 89 mg/kg - Consumer: 44.5 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Worker Professional: 135 ppm - Consumer: 426 ppm - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Professional: 50 ppm - Consumer: 123 ppm - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Industry: 125 mg/kg - Worker Professional: 125 mg/kg - Consumer: 38 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 20 ppm - Worker Professional: 20 ppm - Consumer: 49 ppm - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Worker Industry: 796 mg/kg - Worker Professional: 796 mg/kg - Consumer: 320 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 275 mg/m³ - Worker Professional: 275 mg/m³ - Consumer: 33 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 36 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Industry: 550 mg/m³ - Worker Professional: 550 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



Consumer: 500 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

PNEC Exposure Limit Values

1-methoxy-2-propanol - CAS: 107-98-2

Target: Fresh Water - Value: 10 mg/l

Target: Freshwater sediments - Value: 52.3 mg/kg

Target: Marine water sediments - Value: 5.2 mg/kg

Target: Microorganisms in sewage treatments - Value: 100 mg/l

Target: Soil (agricultural) - Value: 4.59 mg/kg

2-butanone oxime - CAS: 96-29-7

Target: Fresh Water - Value: 0.256 mg/l - Notes: Assesment factor: 10

Target: Microorganisms in sewage treatments - Value: 1.77 mg/l

xylene [4] - CAS: 1330-20-7

Target: Marine water - Value: 0.327 mg/l

Target: Fresh Water - Value: 0.327 mg/l

Target: Soil (agricultural) - Value: 2.31 mg/kg

Target: Marine water sediments - Value: 12.46 mg/kg

Target: Freshwater sediments - Value: 12.46 mg/kg

Ethylbenzene - CAS: 100-41-4

Target: Fresh Water - Value: 0.1 mg/l

Target: Marine water - Value: 0.01 mg/l

Target: Freshwater sediments - Value: 13.7 mg/kg

Target: Marine water sediments - Value: 1.37 mg/kg

Target: Soil (agricultural) - Value: 2.68 mg/kg

2-butoxyethanol - CAS: 111-76-2

Target: Fresh Water - Value: 8.8 mg/l

Target: Marine water - Value: 0.88 mg/l

Target: Freshwater sediments - Value: 34.6 mg/kg

Target: Marine water sediments - Value: 3.46 mg/kg

Target: Soil (agricultural) - Value: 2.8 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

Target: Fresh Water - Value: 0.635 mg/l

Target: Marine water sediments - Value: 0.329 mg/kg

Target: Freshwater sediments - Value: 3.29 mg/kg

Target: Microorganisms in sewage treatments - Value: 100 mg/l

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Anti-splash goggles

Compliant with EN 166

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Nitrile or Viton gloves.

PVC (polyvinyl chloride).

Compliant with EN 374.

Respiratory protection:

In case of insufficient ventilation, use adequate respiratory protection equipment.

Filter for organic vapours. Type A. (EN14387)

Combination filtering device (DIN EN 141).

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

Safety Data Sheet
VERNIFER AVORIO BRILLANTE



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid avorio	--	--
Odour:	Characteristic	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	190°C	--	--
Flash point:	36°C	EN ISO 3679	As denoted on Section 14 of the SDS refer to the ADR exemption for viscous flammable liquids that meet the criteria of section 2.2.3.1.5. ADR
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	>1	--	--
Relative density:	1.120 g/cm3	ISO 2811	--
Solubility in water:	Insoluble	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	>200°C	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	>60" FC 6	ISO 2431	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

NA=not applicable

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable at normal ambient temperatures and when used as recommended.
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
Strong oxidising agents.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

VERNIFER AVORIO BRILLANTE

a) acute toxicity

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Based on available data, the classification criteria are not met

f) carcinogenicity

Based on available data, the classification criteria are not met

g) reproductive toxicity

Based on available data, the classification criteria are not met

h) STOT-single exposure

The product is classified: STOT SE 3 H336

i) STOT-repeated exposure

Based on available data, the classification criteria are not met

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



j) aspiration hazard

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

a) acute toxicity:

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 9300 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - No data available for the product

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics

a) acute toxicity:

Test: LD50 - Route: Oral > 5000

Test: LD50 - Route: Skin > 5000

1-methoxy-2-propanol - CAS: 107-98-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 4016 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 54.6 mg/l - Duration: 4h

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 7000 Ppm - Duration: 8h

d) respiratory or skin sensitisation:

Test: Inhalation Sensitization No

2-butanone oxime - CAS: 96-29-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2400 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 1500 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 4.83 mg/l - Duration: 4h

Test: LC50 - Route: Inhalation - Species: Rat > 10.5 mg/l - Duration: 8h

xylene [4] - CAS: 1330-20-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3500 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 4200 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 20 mg/l - Duration: 4h

Ethylbenzene - CAS: 100-41-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 3500 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 17800 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 4000 mg/l - Duration: 4h

2-butoxyethanol - CAS: 111-76-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1746 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 20 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 23.5 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 72

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



- Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 96
- b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Daphnia = 100 mg/l - Duration h: 504
Endpoint: NOEC - Species: Fish = 0.131 mg/l - Duration h: 672
- Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
- a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 100 mg/l
Endpoint: EC50 - Species: Daphnia > 100 mg/l
Endpoint: EC50 - Species: Algae > 100 mg/l
- b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Fish > 0.1 mg/l
Endpoint: NOEC - Species: Daphnia > 0.1 mg/l
- c) Bacteria toxicity:
Endpoint: EC50 > 100 mg/l
- 1-methoxy-2-propanol - CAS: 107-98-2
- a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 6800 mg/l - Duration h: 96
Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 72
Endpoint: EC50 - Species: Daphnia > 21100 mg/l - Duration h: 48 - Notes: 21100-25900 mg/l
Endpoint: EC50 - Species: Fish = 20800 mg/l - Duration h: 96
- 2-butanone oxime - CAS: 96-29-7
- a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia 201 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae 11.8 mg/l - Duration h: 72
Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96
Endpoint: NOEC - Species: Algae 2.56 mg/l - Duration h: 72
- xylene [4] - CAS: 1330-20-7
- a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 1 ml/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 1 mg/l - Duration h: 24
- Ethylbenzene - CAS: 100-41-4
- a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia = 75 mg/l - Duration h: 48
Endpoint: EC50 - Species: Fish = 48.5 mg/l - Duration h: 96
- 2-butoxyethanol - CAS: 111-76-2
- a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 1474 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 1550 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 1840 mg/l - Duration h: 72
- b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Fish > 100 mg/l - Duration h: 504
Endpoint: NOEC - Species: Daphnia = 100 mg/l - Duration h: 504
- 2-methoxy-1-methylethyl acetate - CAS: 108-65-6
- a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 134 mg/l - Duration h: 96
Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 72
Endpoint: EC50 - Species: Daphnia > 500 mg/l - Duration h: 48
Endpoint: NOEC - Species: Daphnia > 100 mg/l - Duration h: 504
- 12.2. Persistence and degradability
None
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Biodegradability: Readily biodegradable
- 2-butoxyethanol - CAS: 111-76-2
Biodegradability: Readily biodegradable
- 2-methoxy-1-methylethyl acetate - CAS: 108-65-6
Biodegradability: Readily biodegradable
- 12.3. Bioaccumulative potential



Safety Data Sheet

VERNIFER AVORIO BRILLANTE

1-methoxy-2-propanol - CAS: 107-98-2

Test: Kow - Partition coefficient -0.43

2-butoxyethanol - CAS: 111-76-2

Test: Kow - Partition coefficient 0.81 - Notes: n-ottanolo/acqua

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

Bioaccumulation: Not bioaccumulative

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

Reuse if possible. Act in accordance with the local and national laws in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

ADR-Environmental Pollutant: No

IMDG-Marine pollutant: No

14.6. Special precautions for user

N.A.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Volatile Organic compounds - VOCs = 34.45 %

Volatile Organic compounds - VOCs = 344.50 g/Kg

Volatile Organic compounds - VOCs = 385.84 g/l

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

None

SECTION 16: Other information

Text of phrases referred to under heading 3:

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

H312 Harmful in contact with skin.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H412 Harmful to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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

H332 Harmful if inhaled.

H315 Causes skin irritation.

H361 Suspected of damaging fertility or the unborn child.

H361d Suspected of damaging the unborn child.

H225 Highly flammable liquid and vapour.

H361 Suspected of damaging fertility or the unborn child in contact with skin and if swallowed.

H400 Very toxic to aquatic life.

H302 Harmful if swallowed.

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4

Safety Data Sheet
VERNIFER AVORIO BRILLANTE



Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Carc. 2	3.6/2	Carcinogenicity, Category 2
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients
 SECTION 14: Transport information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 3, H226	On basis of test data
STOT SE 3, H336	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
 SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

Safety Data Sheet

VERNIFER AVORIO BRILLANTE



ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NA:	Not applicable
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.