

Safety Data Sheet

Vivaldi Industrial Brake Pad Cleaner

Date of SDS : 14.11.2025

Revision no. : 0

Date of revision : -

SDS Number : GBF - 5416

1- IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

1.1- Product Identifier:

Product Name Vivaldi Industrial Brake Pad Cleaner

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

Identified uses It is a powerful cleaner in solvent-based aerosol form that quickly dissolves oil, dirt, grease and dust residues on brake and pad surfaces and evaporates without leaving any residue.

Uses advised against Specific non-recommended uses have not been identified.

1.3- Details of the supplier of the safety data sheet:

Company Vivaldi Grup Kozmetik İth. İhr. San. ve Tic. Ltd. Şti.
Address Barbaros Mah. 4407 Sokak. No: 52/A Yunusemre-Manisa/Türkiye
Tel/Fax 0 90 236 408 83 94 - +90 537 569 47 48 - +90 531 722- 03 -29
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1.4- Emergency telephone number:

+90 537 569 47 48

2- HAZARDS IDENTIFICATION

2.1- Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Extremely flammable gas, Category 1, H220

Highly flammable liquid and vapour, Category 2, H225

Skin corrosion/Causes skin irritation. Category 2, H315

Eye damage/Eye irritation. Category 2, H319

STOT Single Exposure, May cause drowsiness or dizziness. Category 3, H336

May cause genetic defects. Category 1B, H340

May cause cancer. Category 1A, H350

Suspected of damaging fertility. Category 2, H361f

STOT Repeated Exposure, Causes damage to organs through prolonged or repeated exposure. Category 1, H372

Toxic to aquatic life with long lasting effects. Category 2, H411

Notes: For the full text of the H sentences mentioned in this Section, see Section 16

2.2- Label elements (according to EC 1272/2008):

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

GHS Pictograms



GHS02



GHS04



GHS07



GHS08



GHS09

Signal word Danger

Contains n-hexane, Isopropyl alcohol, Butane

Hazard statements

H220 Extremely flammable gas

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- H225 Highly flammable liquid and vapour
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness
- H340 May cause genetic defects.
- H350 May cause cancer.
- H361f Suspected of damaging fertility
- H372 Causes damage to organs through prolonged or repeated exposure
- H411 Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash contact zones thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

- P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.
- P264 Wash ... thoroughly after handling. [... (to be specified)].
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302 + P352 IF ON SKIN: Wash with plenty of water.
- P321 Specific treatment (see ... on this label).
- P332 + P313 If skin irritation occurs: Get medical advice/attention.
- P362 + P364 Take off contaminated clothing and wash it before reuse.

2.3- Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage $\geq$ than 0.1%.
The product does not contain substances with endocrine disrupting properties in concentration $\geq$ 0.1%.

3- COMPOSITION/INFORMATION ON INGREDIENTS

3.1- Substances

Not applicable.

3.2- Mixtures

Description of the mixture:

Chemical Name	EC No.	CAS No.	%	Classification
n-hexane	203-777-6	110-54-3	60	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Asp. Tox. 1, H304 STOT SE 3, H336 STOT RE 1, H372 Aquatic Chronic 2, H411 Rep. 2, H361f
Isopropyl alcohol	200-661-7	67-63-0	10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

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Chemical Name	EC No.	CAS No.	%	Classification
Butane	203-448-7	106-97-8	15	Pressurized Gas 1, H220 Muta 1B, H340 Canc. 1A, H350
Propane	200-827-9	74-98-6	15	Basınçlı Gaz 1, H220

Notes: The full text for all H-statements is displayed in section 16.

4- FIRST AID MEASURES

4.1- Description of first aid measures

After inhalation

Immediately remove the exposed person to fresh air. Rinse the nose and mouth with water. Keep them in a comfortable position to allow easy breathing. If breathing becomes difficult, oxygen may be administered to the exposed person by appropriately trained personnel. If symptoms persist, consult a physician immediately.

After skin contact

Remove contaminated clothing and shoes. Immediately wash skin thoroughly with soap and plenty of water for at least 15 minutes. If skin irritation occurs: Seek medical advice/attention. Wash contaminated clothing before reuse.

After eye contact

Carefully rinse eyes with plenty of water, including under the eyelids, for several minutes. Do not rub your eyes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Seek medical advice/attention.

After ingestion

If swallowed, rinse the patient's mouth with clean water and then drink plenty of water or milk. DO NOT induce vomiting. Never give anything by mouth if unconscious. Consult a doctor.

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

No data available.

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

No specific treatment recommended. Treat symptomatically.

5- FIRE FIGHTING MEASURES

5.1- Extinguishing Media

Suitable extinguishing media

Foam, dry chemicals, carbon dioxide and water mist must be used. Large fires should be reported to the appropriate authorities. Care should always be taken to create an escape route in the fire.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2- Special hazards arising from the substance or mixture

Use water spray to keep containers exposed to fire cool. Toxic gases such as carbon monoxide, carbon dioxide, etc. may be released. Avoid breathing gases, vapors, fumes, and decomposition products.

5.3- Advice for firefighters

Avoid breathing fire vapors. In the event of a fire, wear a self-contained breathing apparatus suitable for use in confined spaces and full protective clothing. Wear a protective face mask, protective gloves, boots, and a safety helmet.

If possible, fight the fire from a protected location. Contain, collect, and dispose of extinguishing water in accordance with regulations. Remove the container from the fire area if this can be done without risk.

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Containers should be kept cool by spraying with water.

5.4- Other information

Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. Vapors can spread along the ground and collect in low or confined areas. Containers may explode when heated.

6- ACCIDENTAL RELEASE MEASURES

6.1- Personal precautions, protective equipment and emergency procedures

Do not attempt to respond without appropriate protective equipment. Avoid contact with skin and eyes. Provide good ventilation. Avoid breathing vapors/spray.

6.1.1- For non-emergency personnel:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

6.1.2- For emergency responders:

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2- Environmental precautions

In case of leakage, dam up. If possible, eliminate the leak without risk. Avoid release to the environment. Contain the leak if you can do so without risk. Prohibit entry to the area until cleanup is complete. Ventilate the area. Do not allow to enter soil, water, or sewer system.

6.3- Methods and material for containment and cleaning up

Provide appropriate personal protection. Clean up the spill with dry sand or a similar absorbent material (Chemizorb, vermiculite, sand, diatomite, sawdust, or a similar inert material). Flush the spill area with water. Dispose of collected material or solid waste in accordance with local regulations.

6.4- Reference to other sections

For information on safe handling see section 7, for information on personal protection equipment see section 8, for disposal-related information see section 13.

7- HANDLING AND STORAGE

7.1- Precautions for safe handling

Provide good ventilation in the workplace. Follow industrial hygiene standards and common rules to prevent inhalation, ingestion, exposure to the skin during use of chemicals. Remove contaminated clothing and wash before using again. Do not eat, drink or smoke when using this product. Do not come into contact with food, drinks or animal feed.

7.2- Conditions for safe storage, including any incompatibilities

Store in a well-ventilated, dry and cool place. Keep containers tightly closed. Protect containers from physical damage and keep them closed and upright. Keep it in its original package. Make sure that the package cap is tightly closed. Comply with local regulations.

7.3- Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

8- EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1- Control parameters

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Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
n-hexane	TWA: 50 ppm Skin	(Vacated) TWA: 50 ppm (Vacated) TWA: 180 mg/m ³ TWA: 500 ppm TWA: 1800 mg/m ³	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m ³
Isopropyl Alcohol	TWA: 20 ppm STEL: 400 ppm	TWA: 400 ppm TWA: 980 mg/m ³	TWA: 400 ppm TWA: 980 mg/m ³ IDLH: 2000 ppm (10% LEL)

DNEL Values

Substance	Community	Effects	Exposure	Value
n-hexane	Workers	Systemic effects	Long term / Inhalation	75 mg/m ³
n-hexane	Workers	Systemic effects	Long term / Dermal	11 mg/kg/day
n-hexane	General Population	Systemic effects	Long term / Inhalation	16 mg/m ³
n-hexane	General Population	Systemic effects	Long term / Dermal	5,3 mg/kg/day
n-hexane	General Population	Systemic effects	Long term / Oral	4 mg/kg/day
Isopropyl Alcohol	Workers	Systemic effects	Long term / Inhalation	500 mg/m ³
Isopropyl Alcohol	Workers	Systemic effects	Short term / Inhalation	1.000 mg/m ³
Isopropyl Alcohol	Workers	Systemic effects	Long term / Dermal	888 mg/kg/day
Isopropyl Alcohol	General Population	Systemic effects	Long term / Inhalation	89 mg/m ³
Isopropyl Alcohol	General Population	Systemic effects	Short term / Inhalation	178 mg/m ³
Isopropyl Alcohol	General Population	Systemic effects	Long term / Dermal	319 mg/kg/day
Isopropyl Alcohol	General Population	Systemic effects	Long term / Oral	26 mg/kg/day
Isopropyl Alcohol	General Population	Systemic effects	Short term / Oral	51 mg/kg/day

Source: ECHA (European Chemicals Agency) Website

PNEC Values

n-hexane	No data available: testing technically not possible.
Isopropyl Alcohol	No hazard identified.

Source: ECHA (European Chemicals Agency) Website

8.2- Exposure controls

8.2.1- Appropriate engineering controls:

Keep away from food, drink, and animal feed. Immediately remove contaminated or contaminated clothing. Wash your hands at the end of work and after breaks. Do not eat or drink any food while using this product.

Provide an eye and/or body wash shower near the work area.

8.2.2- Individual protective measures, such as personal protective equipment:

Eye/face protection:

Use safety goggles or protective face masks that have been tested and approved in accordance with standards such as EN 166 (EU). Contact lenses should not be worn.



Hand protection:

Use protective gloves.

When selecting gloves, consider puncture resistance, permeability rates, and degradation. Selected protective gloves must comply with EN 374 standards.



Glove material:

Gloves made of butyl rubber and/or PVA.

Body Protection:

Not required.

Respiratory protection:

For nuisance exposure, use gas mask filters type ABEK P2 (EU EN 143).

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Hygiene measures

Wash your hands after each shift change and before eating, smoking, and using the restroom. Do not eat, drink, or smoke while in use.

8.2.3- Environmental Exposure Controls

The provisions of existing legislation for the protection of the environment must be fully implemented.

9- PHYSICAL AND CHEMICAL PROPERTIES

9.1- Information on basic physical and chemical properties

Properties	Value	Information
Physical state	: Liquid, gas	
Colour	: Colourless, clear	
Odour	: Solvent odour	
pH Value	: Not applicable	@ 20°C
Melting point/freezing point (°C)	: < 56	@ 760 mmHg
Boiling point or initial boiling point and boiling range	: No data available	@ 760 mmHg
Evaporation rate (butylacetate=1)	: No data available	
Flammability	: Not applicable	
Relative vapour density	: No data available	
Density and/or Relative density, g/cm ³	: 0.70-0.75	@ 20 °C
Flash point (°C)	: Aerosol	
Lower flammability or explosive limits, %	: 1.8	
Upper flammability or explosive limits, %	: 9.5	
Vapor pressure, bar, (25°C)	: 3.5-4.5	
Solubility in water	: Insoluble in water.	
Partition coefficient: n-octanol/water (log)	: Not applicable.	Product is a mixture.
Auto-ignition temperature (°C)	: > 200	
Decomposition temperature (°C)	: No data available	
Viscosity, mPa's	: No data available	@ 20°C
Particle size	: Not applicable	
Particle size distribution	: Not applicable	

9.2- Other information:

9.2.1- Information with regard to physical hazard classes:

No data available

9.2.2- Other safety characteristics:

Explosive properties : No explosive properties.
Oxidising property : No oxidizing property.

10- STABILITY AND REACTIVITY

10.1- Reactivity

Extremely flammable aerosol. Under pressure: may explode under heat.

10.2- Chemical stability

Stable under recommended handling and storage conditions.

10.3- Possibility of hazardous reactions

No harmful reactions are to be expected when the product is handled and stored properly.

10.4- Conditions to avoid

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Avoid contact with hot surfaces. Heat. Prohibit flames and sparks. Eliminate all ignition sources.

10.5- Incompatible materials

No additional information available.

10.6- Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11- TOXICOLOGICAL INFORMATION

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

Acute toxicity

n-hexane (CAS# 110-54-3)	
LD50 oral (rat)	24 mg/kg bw
LD50 dermal (rabbit)	> 5 mL/kg bw
LC50 inhalation (rat)	73.860 ppm 4 h
Isopropyl Alcohol (CAS# 9000-90-2)	
LD50 oral (rat)	5,84 mg/kg bw
LD50 dermal (rabbit)	16,4 mg/kg bw
LC50 inhalation (rat)	> 10.000 mg/m ³ air 6 h
Butane (CAS# 106-97-8)	
LC50 inhalation (rat)	1.443 mg/L air 15 min.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or Skin Sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

Reproductive toxicity

Suspected of damaging fertility

Specific Target Organ Toxicity (Single Exposure)

May cause drowsiness or dizziness

Specific Target Organ Toxicity (Repeated Exposure)

Causes damage to organs through prolonged or repeated exposure

Aspiration Hazard

Based on available data, the classification criteria are not met.

11.2- Information on other hazards

11.2.1- Endocrine disrupting properties

No test data is available for the mixture.

11.2.2- Other information

No test data is available for the mixture.

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12- ECOLOGICAL INFORMATION

The product is classified as environmentally hazardous. Toxic to aquatic life with long lasting effects. Category 2, H411.

12.1- Toxicity

n-hexane (CAS# 110-54-3)		
LC50 Fish	12,51 mg/l (96 h)	(Oncorhynchus mykiss)
EC50 Aquatic invertebrates	21,85 mg/l (48 h)	(Daphnia magna)
NOELR Algae	2.077 mg/l (72 h)	(Raphidocelis subcapitata))
Isopropyl Alcohol (CAS# 9000-90-2)		
LC50 Fish	9640 mg/l (96 h)	(Pimephales promelas)
EC50 Aquatic invertebrates	527 mg/l (48 h)	(Daphnia magna)
EC50 Algae	13 mg/l (72 h)	(Chlorella vulgaris)
Butane (CAS# 106-97-8)		
LC50 Fish	49,9 mg/l (96 h)	
EC50 Aquatic invertebrates	69,43 mg/l (48 h)	(Daphnia sp.)
EC50 Algae	19,37 mg/l (96 h)	

12.2- Persistence and degradability

No additional information available.

12.3- Bioaccumulative potential

No additional information available.

12.4- Mobility in soil

No additional information available.

12.5- Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6- Endocrine disrupting properties

No data available.

12.7- Other adverse effects

No additional information available.

13- DISPOSAL CONSIDERATIONS

13.1- Waste treatment methods

Residual waste

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14- TRANSPORT INFORMATION

Land transport (ADR/RID)

- 14.1- UN number UN1950
- 14.2- UN proper shipping name AEROSOLLER, flammable

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14.3-	Transport hazard class(es)	2	 
14.4-	Packing Group		
14.5-	Environmental hazard	Hazardous.	
14.6-	Special precautions for user		
	Labels	2.1	
	Limited Quantity (ADR/RID)	1 L	
	Exceptional amount (ADR/RID)	E0	
	Special provisions	190, 327, 625, 344	
	Classification code (ADR/RID)	5F	
	Tunnel code	2 (D)	
	Orange plate		
14.7-	Maritime transport in bulk according to IMO instruments	Not applicable.	
	Sea transport (IMDG Code)		
14.1-	UN number	UN1950	 
14.2-	UN proper shipping name	AEROSOLLER, flammable	
14.3-	Transport hazard class(es)	2.1	
14.4-	Packing Group		
14.5-	Environmental hazard	Hazardous.	
	Marine pollutant	Yes	
14.6-	Special precautions for user		
	Limited Quantity (IMDG)	1 L	
	Exceptional amount (IMDG)	E0	
	Special provisions	63, 190, 277, 327, 344, 381, 959	
	EmS No (Fire)	F-D	
	N*FS (Spill)	S-U	
14.7-	Maritime transport in bulk according to IMO instruments	Not applicable.	
	Air transport (ICAO-IATA/DGR)		
14.1-	UN number	UN1950	
14.2-	UN proper shipping name	AEROSOLLER, flammable	
14.3-	Transport hazard class(es)	2.1	
14.4-	Packing Group		
14.5-	Environmental hazard	Hazardous.	
14.6-	Special precautions for user		
	Special provisions	A145, A167, A802	
14.7-	Maritime transport in bulk according to IMO instruments	Not applicable.	

15- REGULATORY INFORMATION

- 15.1- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Regulation (EC) No 1907/2006, (REACH),
 - Commission Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006,

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- Regulation (EC) No 1272/2008 (CLP),
- Commission Directive 2006/15/EC,
- Commission Directive 2000/39/EC.
- ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

15.2- Chemical safety assessment

A chemical safety assessment has not been performed for this product.

16- OTHER INFORMATION

Full text of any H-statements not written out in full under Sections 2 to 15

H220	Extremely flammable gas
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness
H340	May cause genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility
H372	Causes damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

List of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the international Carriage of Dangerous Goods by Inlands Waterways
ADR	European Agreement Concerning the Int. Carriage of Dangerous Goods by Road
CAS No	Chemical Abstract Service Index Number
CLP	Regulation of Classification, Labelling and Packaging of Chemicals
EC No	European Commission Number
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Code for Dangerous Goods
LD50	Dosage producing 50% mortality
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PBT	Persistent, Bioaccumulative, Toxic
REACH	Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals in the European Union
RID	International Rule for Transport of Dangerous Substances by Railway
STEL	Short Term Exposure Limit
STOT	Specific target organ toxicity
TWA	Time Weighted Average
vPvB	Very Persistent, Very Bioaccumulative

Other Information:

Date Prepared : Nov.14th, 2025
Version No : 1.0

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Revision Date : -
Organized by : Gültekin Başköylü (Chemist)

Training Recommendation for Use:

In addition to health, safety and environmental training programs for employees, employees must be ensured that they read, understand and implement the requirements of this SDS to ensure the protection of human health and the environment.

Sources of information:

- ECHA and related EU directives,
- UN ADR, IMDG, IATA lists,
- Safety data sheets for raw materials and product components,
- Other helpful resources.

Classification Calculation Methods

- Chemical and physical hazards: Product classification is inferred from the criteria determined according to the REACH Directive (1907/2006), Annex I, Part 2. Data for the evaluation of chemical-physical properties are given in Chapter 9.
- Health hazards: Product classification is based on the calculation methods set out in Annex 1, Section 3 of the REACH Directive (1907/2006), unless otherwise stated in Chapter 11.
- Environmental hazards: Product classification is based on the calculation methods set out in Annex 1, Section 4 of the REACH Directive (1907/2006), unless otherwise stated in Chapter 12.

Disclaimer

This information relates to a specific product and is not available for use in combination with any process or with any other material. Do not use on other application(s) without consulting the manufacturer. Information about the product in this Safety Data Sheet has been compiled from knowledge of the individual components. The data given here is based on current knowledge and experience. This Safety Data Sheet analyzes the product in terms of safety requirements and does not give any guarantee of the properties for the product. Usage of the information remains under the sole responsibility of the user.

Editor's note:

This SDS has been drawn up based on the information and documents received from the product owner company. The preparer of the SDS cannot be held responsible for the erroneous arrangement of the prepared SDS due to incomplete or incorrect information and documents, and for the material and moral damages that the product owner company may encounter due to this reason.