

DIAMOND PASTE oil soluble / DIAMOND SUSPENSION oil-soluble

Revision date: 06.06.2023	Product code:		Page 1 of 11
SECTION 1: Identification of	the substance/mixture and of the compar	ny/undertaking	
1.1. Product identifier			
DIAMOND PASTE oil solu	ble / DIAMOND SUSPENSION oil-soluble		
1.2. Relevant identified uses of t	he substance or mixture and uses advised ag	<u>gainst</u>	
Use of the substance/mixture)		
Abrasive			
Uses advised against			
Any non-intended use.			
1.3. Details of the supplier of the	<u>e safety data sheet</u>		
Company name:	Schmitz-Metallographie GmbH		
Street:	Kaiserstraße 100		
Place:	D-52134 Herzogenrath		
Telephone:	02407 / 568296-0	Telefax:02407 / 568296-9	
E-mail:	info@schmitz-metallographie.de		
Contact person:	Herr Füllmann		
E-mail:	info@schmitz-metallographie.de		
Internet:	www.schmitz-metallographie.de		
1.4. Emergency telephone	02407 / 568296-0 (Mo-Fr 9:00 - 16:00)		
number:			
Furthern Information			

Further Information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

FUH210

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

Safety data sheet available on request.

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: none

2.3. Other hazards

The substances in the mixture (> 0.1%) do not meet the PBT/vPvB criteria according to REACH, annex XIII. This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria. This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria. No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of diamond and medicinal white oils.

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	



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	Classification (Regulation (EC) No 1272/2008)			
8042-47-5	White mineral oil (petroleum)	White mineral oil (petroleum)		
	232-455-8		01-2119487078-27	
	Asp. Tox. 1; H304	Asp. Tox. 1; H304		

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	EC No Chemical name				
	Specific Conc. Limits, M-factors and ATE					
8042-47-5	47-5 232-455-8 White mineral oil (petroleum)		80 - 90 %			
	inhalation: LC50 = >5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg					

Further Information

Product does not contain listed SVHC substances > 0.1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

See sections 2 and 11

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. Alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide (CO). Carbon dioxide (CO2). Sulphur dioxide (SO2)..

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

See protective measures under point 7 and 8.

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

For containment

Take up mechanically.

Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion

Usual measures for fire prevention. Dust clouds may present an explosion hazard.

Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink or smoke. Wash hands before breaks and after work.

Further information on handling

Avoid generation of dust. General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. Recommended storage temperature: 20 °C Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection



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8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
1333-86-4	Carbon black (Inhalable Fraction)	-	3		TWA (8 h)	
7782-42-5	Graphite (all forms except fibres) (Respirable Fraction)	-	2		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
8042-47-5	White mineral oil (petroleum)			
Worker DNEL,	long-term	inhalation	systemic	164,56 mg/m³
Worker DNEL,	long-term	dermal	systemic	217,05 mg/kg bw/day
Consumer DNE	EL, long-term	inhalation	systemic	34,78 mg/m ³
Consumer DNE	EL, long-term	dermal	systemic	93,02 mg/kg bw/day
Consumer DNE	EL, long-term	oral	systemic	25 mg/kg bw/day

Additional advice on limit values

Air limit values: (Dust, general) 10 mg/ m3 ; E: Inhalable Dust fraction Air limit values: (Dust, general) 1,25 mg/ m3 ; Respirable Dust fraction

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Dust should be exhausted directly at the point of origin.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses. EN 166

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves. Suitable material: FKM (fluororubber). - Thickness of glove material: 0,4 mm Breakthrough time >= 8 h Butyl rubber. - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm Breakthrough time >= 8 h PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it. Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Protective clothing.



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Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

- Respiratory protection necessary at:
- -Exceeding exposure limit values

-Insufficient ventilation and Generation/formation of dust

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). type: P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Thermal hazards

Material handled at elevated temperature may cause thermal burns by contact with molten product.

Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

9.1. Information on basic physical and cher	nical properties	
Physical state:	Paste	
Colour:	black/light yellow	
Odour:	odourless	
Odour threshold:	not determined	
		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and	not determined	
boiling range:		
Flammability:	not determined	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	256 °C	DIN ISO 2592
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
pH-Value:	not determined	
Viscosity / kinematic:	>20 mm²/s	estimated
(at 40 °C)		
Water solubility:	insoluble	
Solubility in other solvents		
not determined		
Dissolution rate:	not relevant	
Partition coefficient n-octanol/water:	SECTION 12: Ecological information	
Dispersion stability:	not relevant	
Vapour pressure:	not determined	
(at 20 °C)		
Density (at 15 °C):		DIN 51757
Bulk density:	not determined	
Relative vapour density:	not relevant	
Particle characteristics:	not determined	
9.2. Other information		
Information with regard to physical haza	ard classes	
Explosive properties		
not explosive.		
Sustaining combustion:	Not sustaining combustion	
Self-ignition temperature		



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Solid:	not determined	
Gas:	not relevant	
Oxidizing properties		
none		
Other safety characteristics		
Evaporation rate:	not applicable	
Solvent separation test:	not applicable	
Solvent content:	not determined	
Solid content:	not determined	
Sublimation point:	not determined	
Softening point:	not determined	
Pour point:	not determined	
Viscosity / dynamic:	71 mPa⋅s	
(at 20 °C)		
Flow time:	not applicable	
Further Information		
No information available.		

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions. Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide Carbon dioxide (CO2). Sulphur dioxide (SO2)..

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name
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	Exposure route	Dose		Species	Source	Method
8042-47-5	5 White mineral oil (petroleum)					
	oral I		> 5000	Rat	ECHA Dossier	OECD 401



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dermal	LD50 mg/kg	> 2000	Rabbit	ECHA Dossier	OECD 402	
inhalation (4 h) dust/mist	LC50	>5 mg/l	Rat			

Irritation and corrosivity

Based on available data, the classification criteria are not met. Irritant effect on the skin: Not an irritant.

Irritant effect on the eye: Not an irritant.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

White mineral oil (petroleum):

In-vitro mutagenicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative.; Literature information: ECHA Dossier; Carcinogenicity: Method: (oral.) OECD Guideline 453 Combined Chronic Toxicity / Carcinogenicity Studies); Species: Rat; Length of test: 2 years; Result: NOAEL = 1200 mg/kg; Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test); Species: Rat ; Results: NOAEL >= 1000 mg/kg. Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rat; Results: NOAEL >= 5000 mg/kg; Literature information: ECHA Dossier

STOT-single exposure

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

STOT-repeated exposure

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

White mineral oil (petroleum):

Subchronic oral toxicity: Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) Species: Rat ; Results: NOAEL = 20000 ppm. Literature information: ECHA Dossier; Subchronic dermal toxicity: Method: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study); Species: Rat.; Results: NOAEL >2000 mg/kg; Literature information: ECHA Dossier

Aspiration hazard

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

Specific effects in experiment on an animal

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance (> 0,1%) that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No data available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
8042-47-5	White mineral oil (petroleum)						
	Acute fish toxicity	LC50 mg/l	> 10000	96 h	Lepomis macrochirus	ECHA Dossier	
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna	ECHA Dossier	OECD 202



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12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation	-		
8042-47-5	White mineral oil (petroleum)			
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	31,3%	28	
	Product is not easily biodegradable.			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
8042-47-5	White mineral oil (petroleum)	> 6

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

12.7. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

120112 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; spent waxes and fats; hazardous waste

List of Wastes Code - used product

120112 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; spent waxes and fats; hazardous waste

List of Wastes Code - contaminated packaging



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150203 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; absorbents, filter materials, wiping cloths and protective clothing; absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. 14.4. Packing group: Inland waterways transport (ADN) 14.1. UN number or ID number: No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. 14.4. Packing group: Marine transport (IMDG) 14.1. UN number or ID number: No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: No dangerous good in sense of this transport regulation. 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation. 14.4. Packing group: No dangerous good in sense of this transport regulation. Air transport (ICAO-TI/IATA-DGR) No dangerous good in sense of this transport regulation. 14.1. UN number or ID number: No dangerous good in sense of this transport regulation. 14.2. UN proper shipping name: 14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation. 14.4. Packing group: No dangerous good in sense of this transport regulation. 14.5. Environmental hazards ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

refer to chapter 6 - 8 14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	not determined
2004/42/EC (VOC):	not determined
Information according to 2012/18/EU	Not subject to 2012/18/EU (SEVESO III)
(SEVESO III):	

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878) This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [CLP]. REACH 1907/2006 Appendix XVII, No (mixture): not relevant

National regulatory information

Water hazard class (D):

1 - slightly hazardous to water



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15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: White mineral oil (petroleum)

SECTION 16: Other information

Changes

Rev. 1,0 Initial release 03.12.2014 Rev. 2,0; 23,04.2018, Changes in chapter: 1-16. Rev. 3,0; 04,01.2021, Changes in chapter: 12, 16. Rev. 3,1; 06.06.2023, Changes in chapter: 1 - 16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) CAS: Chemical Abstracts Service CLP: Classification, Labelling and Packaging of substances and mixtures DNEL: Derived No Effect Level d: day(s) EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European LIst of Notified Chemical Substances ECHA: European Chemicals Agency EWC: European Waste Catalogue IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) h. pon LOAEL: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect concentration LC50: Lethal concentration. 50 percent LD50: Lethal dose, 50 percent NOAEL: No observed adverse effect level NOAEC: No observed adverse effect concentration NLP: No-Longer Polymers N/A: not applicable OECD: Organisation for Economic Co-operation and Development PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) REACH: Registration, Evaluation, Authorisation of Chemicals SVHC: substance of very high concern TRGS: Technische Regeln für Gefahrstoffe **UN: United Nations** VOC: Volatile Organic Compounds WGK: Water Hazard Class (Germany)

Relevant H and EUH statements (number and full text)

H304	May be fatal if swallowed and enters airways.
EUH210	Safety data sheet available on request.



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Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)