

Safety Data Sheet

Adhesor / Adhesor Fine (liquid)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : Adhesor / Adhesor Fine (liquid)

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

Relevant identified uses

Main use category : Professional use

Function or use category : Dental materials

Uses advised against

No additional information available

1.3. Details of the supplier of the safety datasheet

Supplier

Kerr Italia S.r.l.
 Via Passanti, 332
 84018 Scafati (SA) - Italy
 T +39-081-850-8311
[E-mail: safety@kavokerr.com](mailto:safety@kavokerr.com)

Manufacturer

SpofaDental a.s.
 Markova 238
 CZ-506 46 Jicin Czech Republic
 T +420 493 583 204

Contact person : safety@kavokerr.com - tel. +41 91 610 06 00 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Skin Corr. 1B H314

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazardous ingredients : phosphoric acid ... %, orthophosphoric acid ... %

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) : P260 - Do not breathe vapours, fume, mist
 P280 - Wear eye protection, protective gloves, protective clothing
 P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Extra phrases : The product is seen as a medical device and therefore not subject to labelling (EU-regulation 1907/2006, article 2, paragraph 6c)

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
phosphoric acid ... %, orthophosphoric acid ... % (Note B)	(CAS No) 7664-38-2 (EC no) 231-633-2 (EC index no) 015-011-00-6 (REACH-no) 01-2119485924-24	50 - 75	Skin Corr. 1B, H314

Specific concentration limits:

Name	Product identifier	Specific concentration limits
phosphoric acid ... %, orthophosphoric acid ... %	(CAS No) 7664-38-2 (EC no) 231-633-2 (EC index no) 015-011-00-6 (REACH-no) 01-2119485924-24	(10 =<C < 25) Eye Irrit. 2, H319 (10 =<C < 25) Skin Irrit. 2, H315 (C >= 25) Skin Corr. 1B, H314

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries : Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation : Inhalation of vapours may cause respiratory irritation.

Symptoms/injuries after ingestion : May perforate the oesophagus or the digestive tract. If ingested may cause corrosion of gastrointestinal tract.

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

Treat symptomatically. In all cases of doubt, or when symptoms persist, seek medical attention.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Non flammable.
Explosion hazard	: Product is not explosive.
Hazardous decomposition products in case of fire	: Phosphorus oxides. Hazardous vapours may be released. Carbon oxides (CO, CO ₂).

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper personal protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

General measures	: Ensure adequate ventilation, especially in confined areas. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact. Avoid all eye and skin contact and do not breathe vapour and mist. Use personal protective equipment as required.
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For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect all waste in suitable and labelled containers and dispose according to local legislation.
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Wash off with plenty of water.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Precautions for safe handling	: Do not eat, drink or smoke when using this product. Provide good ventilation in process area to prevent formation of vapour. Do not breathe vapours. Avoid contact with skin and eyes.
Hygiene measures	: Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep container closed when not in use. Store in original container. Keep cool. Protect from sunlight. Store in a well-ventilated place.
Incompatible materials	: Metals. alkalis. Hydroxide.

7.3. Specific end use(s)

Consult the supplier for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)		
United Kingdom	Local name	Orthophosphoric acid
United Kingdom	WEL TWA (mg/m ³)	1 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Gloves. Safety glasses. Avoid all unnecessary exposure.

Hand protection	: Wear suitable gloves. Neoprene or nitrile rubber gloves. Layer thickness : 0,7mm. Breakthrough time : 8 (> 480 minutes). STANDARD EN 374
Eye protection	: Chemical goggles or face shield. STANDARD EN 166
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Respiratory protection not applicable. In case of insufficient ventilation, wear suitable respiratory equipment. Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust. Standard EN 149



Other information	: Do not eat, drink or smoke during use. Remove contaminated clothing. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment. For even minor contact, immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water.
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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: clear.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Non flammable.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with : metallic oxide. Hydroxide. with the release of heat.

10.4. Conditions to avoid

None to our knowledge.

10.5. Incompatible materials

metals. alkalis. Hydroxide.

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Acute toxicity : Not classified
 If swallowed, seek medical advice immediately and show this container or label
 Vapours are irritating to the respiratory system
 Causes burns

phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
LD50 oral rat	1530 mg/kg
LD50 dermal rabbit	2740 mg/kg
LC50 inhalation rat (mg/l)	> 0.85 mg/l 1h

Skin corrosion/irritation : Causes severe skin burns and eye damage.
 Serious eye damage/irritation : Serious eye damage, category 1, implicit
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified
 Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : Not classified
 Specific target organ toxicity (repeated exposure) : Not classified
 Aspiration hazard : Not classified

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity**

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
LC50 fish 1	138 mg/l
EC50 Daphnia 1	3.4 mg/l (12 hours - Daphnia pulex)

12.2. Persistence and degradability

Adhesor / Adhesor Fine (liquid)	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

Adhesor / Adhesor Fine (liquid)	
Bioaccumulative potential	No data.
phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
Log Pow	< 0
Bioaccumulative potential	No bioaccumulation.

12.4. Mobility in soil

Adhesor / Adhesor Fine (liquid)	
Ecology - soil	No data available.

12.5. Results of PBT and vPvB assessment

Adhesor / Adhesor Fine (liquid)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

Other adverse effects : None to our knowledge.
 Additional information : No other effects known. Avoid release to the environment

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Regional legislation (waste) : Dispose as hazardous waste.
 Waste treatment methods : Recover the product with absorbent material. Dispose of contents/container in accordance with licensed collector's sorting instructions.






Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to an authorised waste collection point.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 18 01 06* - chemicals consisting of or containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1805	1805	1805	1805	1805
14.2. UN proper shipping name				
PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID SOLUTION	Phosphoric acid, solution	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION
Transport document description				
UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III, (E)	UN 1805 PHOSPHORIC ACID SOLUTION, 8, III			
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : C1

Limited quantities (ADR) : 5I

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T4

Portable tank and bulk container special provisions (ADR) : TP1

Tank code (ADR) : L4BN

Vehicle for tank carriage : AT

Transport category (ADR) : 3

Special provisions for carriage - Packages (ADR) : V12

Hazard identification number (Kemler No.) : 80

Orange plates :



Tunnel restriction code (ADR) : E

EAC code : 2R

- Transport by sea

Special provisions (IMDG) : 223

Limited quantities (IMDG) : 5L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P001, LP01

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Miscible in water. Mildly corrosive to most metals.

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3
ERG code (IATA)	: 8L

Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	phosphoric acid ... %, orthophosphoric acid ... %
3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Adhesor / Adhesor Fine (liquid) - phosphoric acid ... %, orthophosphoric acid ... %

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

National regulations

EC-regulation2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: OTHER INFORMATION

Data sources	: EC-regulation2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits. Classification according to Regulation (EC) No. 1272/2008 [CLP].
Other information	: None.
Date of issue	: 18/05/2016
Revision date	: 23/12/2019
Supersedes	: 18/05/2016
Version	: 1.1
Indication of changes	: Updated section 1.3

Full text of H- and EUH-statements:

Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H314	Causes severe skin burns and eye damage

The information in this safety data sheet is based on information from the manufacturer/supplier, present European and national legislation, and presupposes that the product is used within the specified area of application.