

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.05.2016

Version number 3

Revision: 13.05.2016

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

1.1 Product identifier

Trade name: Collodion Adhesive Pharma 11%/13%

Article number:

CSL020 COLLODION PHARMA 13%,
CSL024 COLLODION PHARMA 11%,

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

Application of the substance / the mixture

Primary pharmaceutical product
Use as artificial skin film

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Sussmann & Steinhauser GmbH
Glasschleiferstr. 14
D - 87600 Kaufbeuren
Telefon +49 (0) 8341 / 62087
Telefax +49 (0) 8341 / 65475
email: info@hasulith.de

Further information obtainable from:

Competent staff person for Material Safety Data Sheet
Herbert Steinhauser
info@hasulith.de

1.4 Emergency telephone number: Giftnotruf München: Telefon +49 (0) 89 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

STOT SE 3 H336 May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02



GHS07

Signal word Danger

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Hazard-determining components of labelling:

diethyl ether

Hazard statements

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H336 May cause drowsiness or dizziness.

Precautionary statements

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

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P261 Avoid breathing mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Additional information:

EUH019 May form explosive peroxides.

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures**Description:** Mixture: consisting of the following components.**Dangerous components:**

CAS: 60-29-7 EINECS: 200-467-2 Index number: 603-022-00-4	diethyl ether ⚠ Flam. Liq. 1, H224; ⚠ Acute Tox. 4, H302; STOT SE 3, H336	40-80%
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5	ethanol ⚠ Flam. Liq. 2, H225	20-60%
Index number: 603-037-00-6	cellulose nitrate ⚠ Expl. 1.1, H201	11-13%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures**General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air; consult doctor in case of complaints.**After skin contact:** Generally the product does not irritate the skin.**After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.**After swallowing:** Call for a doctor immediately.**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media**Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

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For safety reasons unsuitable extinguishing agents: Water with full jet
5.2 Special hazards arising from the substance or mixture No further relevant information available.
5.3 Advice for firefighters
Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
 Wear protective equipment. Keep unprotected persons away.
6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up:
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Dispose contaminated material as waste according to item 13.
 Ensure adequate ventilation.
 Do not flush with water or aqueous cleansing agents
6.4 Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
 Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.
 Prevent formation of aerosols.
Information about fire - and explosion protection:
 Keep ignition sources away - Do not smoke.
 Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
 Store in a cool location.
 Product should not be transported or stored in the long term above 22 °C.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
 Keep container tightly sealed.
 Do not seal receptacle gas tight.
 Store in cool, dry conditions in well sealed receptacles.
 Protect from heat and direct sunlight.
Storage class: 3
7.3 Specific end use(s)
 Primary pharmaceutical product
 Use as artificial skin film

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

60-29-7 diethyl ether

WEL (Great Britain)	Short-term value: 620 mg/m ³ , 200 ppm
	Long-term value: 310 mg/m ³ , 100 ppm

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EL (Great Britain)	Short-term value: 500 ppm Long-term value: 400 ppm
EV (Great Britain)	Short-term value: 1.515 mg/m ³ , 500 ppm Long-term value: 1.210 mg/m ³ , 400 ppm
PEL (Great Britain)	Long-term value: 1200 mg/m ³ , 400 ppm
TLV (Great Britain)	Short-term value: 1520 mg/m ³ , 500 ppm Long-term value: 1210 mg/m ³ , 400 ppm
64-17-5 ethanol	
WEL (Great Britain)	Long-term value: 1920 mg/m ³ , 1000 ppm
EL (Great Britain)	Short-term value: 1000 ppm
EV (Great Britain)	Long-term value: 1.900 mg/m ³ , 1.000 ppm
PEL (Great Britain)	Long-term value: 1900 mg/m ³ , 1000 ppm
REL (Great Britain)	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV (Great Britain)	Short-term value: 1880 mg/m ³ , 1000 ppm

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls**Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

Nitrile rubber, NBR

Eye protection:

Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value: Not determined.

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Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 36.4 °C (ISO 918)

Flash point: < -22 °C (DIN EN ISO 3679)

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 170 °C

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: May form explosive peroxides.

Explosion limits:

Lower: 1.7 Vol %
Upper: 36.0 Vol %

Vapour pressure at 20 °C: 587 hPa

Density at 23 °C: 0.803 g/cm³ (DIN EN ISO 12185)

Relative density Not determined.

Vapour density Not determined.

Evaporation rate Not determined.

Solubility in / Miscibility with water: Fully miscible.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic at 23 °C: 4500 mPas
Kinematic at 23 °C: 5600 mm²/s

Solvent separation test: 0 % (UN Prüfung L.1 (32.5.1))

9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Danger of explosion.

Possible formation of peroxide.

Forms explosive gas mixture with air.

10.4 Conditions to avoid Extreme temperatures and direct sunlight.

10.5 Incompatible materials:

Risk of explosion when exposed to:

air -> peroxidation; powerful oxidants; oxygen; nitric acid; sulphuric acid; bromine; chlorine; hydrogen peroxide; active oxygen; sulphur (heat)

The substance may react dangerously with:

uranyl acetate, zircon tetrachloride; bromicide; sodium peroxide; aluminium ethylate; sulfuryle chloride.

10.6 Hazardous decomposition products: Ethane, ethylene, ethanol, ethanal, methane, carbon monoxide, hydrogen

SECTION 11: Toxicological information

11.1 Information on toxicological effects**Acute toxicity**

Harmful if swallowed.

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LD/LC50 values relevant for classification:**60-29-7 diethyl ether**

Oral	LD50	1215 mg/kg (rat)
Inhalative	LC50/4 h	73000 mg/l (rat)

Primary irritant effect:**Skin corrosion/irritation** Based on available data, the classification criteria are not met.**Serious eye damage/irritation** Based on available data, the classification criteria are not met.**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)****Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure**

May cause drowsiness or dizziness.

STOT-repeated exposure Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:** No further relevant information available.**12.2 Persistence and degradability** No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.**European waste catalogue**

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste Codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN-Number****ADR, IMDG, IATA** UN1133**14.2 UN proper shipping name****ADR, IMDG, IATA** ADHESIVES

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14.3 Transport hazard class(es)

ADR, IMDG, IATA



Class 3 Flammable liquids.
Label 3

14.4 Packing group

ADR, IMDG III
IATA II

14.5 Environmental hazards:**Marine pollutant:** No**14.6 Special precautions for user** Not applicable.

Warning: Flammable liquids.

EMS Number: F-E,S-D**Stowage Category** A**Transport/Additional information:** Product should not be transported or stored in the long term above 22 °C.**ADR**

Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

Transport category 3
Tunnel restriction code E

IMDG

Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation": UN 1133 ADHESIVES, 3, III**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H201 Explosive; mass explosion hazard.

H224 Extremely flammable liquid and vapour.

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*H225 Highly flammable liquid and vapour.**H302 Harmful if swallowed.**H336 May cause drowsiness or dizziness.***Department issuing SDS: 10064/237****Contact:***Dr. Stieglitz**Herbert Steinhauser**Telefon: +49 (0) 8341 / 62087***Abbreviations and acronyms:***RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)**ICAO: International Civil Aviation Organisation**ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**SVHC: Substances of Very High Concern**Expl. 1.1: Explosives – Division 1.1**Flam. Liq. 1: Flammable liquids – Category 1**Flam. Liq. 2: Flammable liquids – Category 2**Acute Tox. 4: Acute toxicity – Category 4**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3**** Data compared to the previous version altered.**

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