

KERR

Material Safety Data Sheet

in accordance with Community Regulation 2006/1907/EC (R.E.A.Ch.)

Revision Date: 22th April 2009

SECTION 1

Product & Company identification

1.1 Product name

VACUFILM

1.2 Uses/Application:

Surface Tension Reducing Agent.

1.3 Company (Name, address and info phone number)

KERR ITALIA S.r.l.

Via Passanti, 332

84018 Scafati (SA) - Italy

Free phone: 00-800-41-050-505

1.4 Emergency phone (according to communitarian directive 99/45/EC, article 17)

+39.081.8508.325 (08.00-17.00, European time, GMT+1)

E-mail address: safety@kerrhawe.com

SECTION 2

Hazard identification

2.1 Hazard classification (according to communitarian directives 67/548/EEC & 99/45/EC)

Highly flammable.

2.2 Other hazard

None.

SECTION 3

Composition/Information on Ingredients

(according to communitarian directives 67/548/EEC, 99/45/EC & 2001/58/EC)

3.1 Hazardous ingredients

HAZARDOUS INGREDIENTS	%	HAZARD SYMBOLS	RISK PHRASES	CAS N.	EINECS N.
Ethyl Alcohol	80-90	F	11	64-17-5	200-578-6

3.2 Other non-hazardous ingredients

None.

SECTION 4**First aid measures**

- 4.1 Treatment for eye contact: Wash immediately with plenty of water for at least 15 minutes. If irritation persists, consult a physician.
- 4.2 Treatment for skin contact: Wash with soap and water.
- 4.3 Treatment for inhalation (breathing): Remove to fresh air.
- 4.4 Treatment for ingestion (swallowing): Do not give liquids if victim is unconscious. Contact a physician.

SECTION 5**Fire-fighting Measures**

- 5.1 Suitable extinguishing media: Alcohol foam, dry chemical, carbon dioxide, water spray.
- 5.2 Forbidden extinguishing media: Unknown.
- 5.3 Special fire fighting measures: None.
- 5.4 Unusual fire and explosion hazards: None.
- 5.5 Special protection equipment: Sealed overall.

SECTION 6**Accidental Release Measures**

- 6.1 Personal Precautions: Use precautions listed in other sections.
- 6.2 Environmental Precautions: None.
- 6.3 Reclaiming Methods: Eliminate all ignition sources. Small spills may be collected with absorbent material and transferred to a suitable container for disposal.

SECTION 7**Handling and Storage** (according to article 5 of communitarian directive 98/24/EC)

- 7.1 Handling Precautions: Keep away from ignition source. Use precautions listed in following section.
- 7.2 Precautions in case of Fire and Explosion: Extinguish all ignition sources.
- 7.3 Storage Conditions: Keep container closed, in a cool and dry place and away from heat, sparks and open flame.
- 7.4 Suggested container(s): Original sealed containers provided by manufacturer.
- 7.5 Indication for Combined Storage: Avoid contact with oxidizing agents.
- 7.6 Environmental precautions: Do not allow product to reach sewers and rivers.
- 7.7 Other Precautions: Use according to directions.

SECTION 8	
Exposure controls/personal protection	
<i>8.1 Exposure Limits:</i>	<u>TWA/TLV</u> : 1000 ppm (Ethyl alcohol)
<i>8.2 Exposure control measures</i>	
<i>8.2.1 Precautionary Measures:</i> (according to communitarian directives 89/686/EEC & article 4 of 98/24/EC)	
Ventilation:	<u>Local Exhaust Ventilation</u> : Recommended to keep exposure under TLV. <u>Special Ventilation</u> : None. <u>Mechanical (General) Ventilation</u> : None. <u>Other Ventilation</u> : None.
Respiratory Protection:	Not needed.
Hands Protection:	Neoprene or nitrile impervious gloves.
Eyes Protection:	Safety glasses approved.
Skin Protection:	Handle in accordance with good personal hygiene and safety practices.
Other Protective Equipments:	Eyewash. It would be better use a lab coat.
<i>Measures listed in this paragraph are to be considered as indications and NOT prescriptions (89/656/EEC)</i>	
<i>8.2.2 Environment exposure control measures</i> Not Applicable.	

SECTION 9	
Physical and Chemical Properties	
<i>9.1 General information</i>	
<u>Appearance</u> : Clear, pink liquid.	<u>Odour</u> : Fragrant, fruity odour.
<i>9.2 Information related to health, safety and environment</i>	
<u>pH</u> : Not determined (N/D)	<u>Relative density</u> : Not applicable (N/A)
<u>Boiling point</u> : 74°C	<u>Specific gravity</u> : ~ 0,79 g/ml @ 20°C
<u>Flash point</u> : 7,8°C (TCC)	<u>Solubility</u> : Soluble (in water)
<u>Flammability</u> : Yes.	<u>Partition coefficient n-octanol/water</u> : N/A
<u>Lower Explosivity Limit (L.E.L.)</u> : 4,3	<u>Viscosity</u> : N/D
<u>Upper Explosivity Limit (U.E.L.)</u> : 19	<u>Vapour density (air = 1)</u> : 1,59
<u>Oxidizing properties</u> : None	<u>Evaporation rate (n-butane = 1)</u> : 1,9
<u>Vapour pressure</u> : 100 mm Hg	<u>Melting point</u> : N/A
<i>9.3 Other information (according to communitarian directive 94/9/EC):</i>	
<u>Miscibility</u> : N/D	<u>Conducibility</u> : N/A
<u>Solubility in Lipids</u> : N/D	<u>Gases Group</u> : N/A

SECTION 10
Stability and Reactivity

Stability: Stable.

10.1 Conditions to avoid: Heat and ignition sources.

10.2 Materials to avoid (incompatibility): Oxidizing materials can cause a reaction.

10.3 Hazardous decomposition products: Combustion will produce carbon dioxide and sometime carbon monoxide.

Other precautions:

Hazardous Polymerization Products: Will not occur.

Safety significance in case of change in physical appearance: None.

Stabilizers: The product does not contain stabilizers.

SECTION 11
Toxicological Information

CMR effects (Carcinogenicity, Mutagenicity and toxicity for reproduction):

No.

Effects and hazards of eye contact: May cause a mild irritation.

Effects and hazards of skin contact: May cause a mild irritation.

Effects and hazards of Inhalation (Breathing): May cause irritation of the throat.

Effects and hazards of Ingestion (Swallowing): May be poisonous for ingestion of large quantities.

Effects for prolonged Exposure: Unknown.

Toxic-kinetic effects: Unknown.

Effects on metabolism: Unknown.

SECTION 11
(Continued)
Toxicological data for ingredients:

Ethyl Alcohol	LC ₅₀ (inhalation mouse/4hrs)	39g/m ³
	LC ₅₀ (inhalation rat/10hrs)	20000ppm
	LD _{L0} (intraperitoneal dog)	3000mg/Kg
	LD ₅₀ (intraperitoneal guinea pig)	3414mg/Kg
	LD ₅₀ (intraperitoneal hamster)	5068mg/Kg
	LD ₅₀ (intraperitoneal mammal)	4300mg/Kg
	LD ₅₀ (intraperitoneal mouse)	933mg/Kg
	LD ₅₀ (intraperitoneal rat)	3750mg/Kg
	LD ₅₀ (intraperitoneal rabbit)	963mg/Kg
	LD _{L0} (intravenous cat)	3945mg/Kg
	LD _{L0} (intravenous chicken)	8216mg/Kg
	LD _{L0} (intravenous dog)	1600mg/Kg
	LD ₅₀ (intravenous mouse)	1973mg/Kg
	LD ₅₀ (intravenous rat)	1440mg/Kg
	LD ₅₀ (intravenous rabbit)	2374mg/Kg
	LD _{L0} (oral cat)	6000mg/Kg
	LD _{L0} (oral child)	2000mg/Kg
	LD _{L0} (oral dog)	5500mg/Kg
	LD ₅₀ (oral guinea pig)	5560mg/Kg
	LD _{L0} (oral human)	1400mg/Kg
	TD _{L0} (oral man)	700mg/Kg
	TD _{L0} (oral man)	50mg/Kg
	TD _{L0} (oral man)	1430mg/Kg
	LD ₅₀ (oral mouse)	7500mg/Kg
	LD ₅₀ (oral rat)	7060 mg/Kg
	LD ₅₀ (oral rabbit)	6300mg/Kg
	TD _{L0} (oral woman)	6300mg/Kg
	LD _{L0} (subcutaneous chicken)	5g/Kg
	LD _{L0} (subcutaneous dog)	6000mg/Kg
	LD _{L0} (subcutaneous frog)	7100mg/Kg
	LD _{L0} (subcutaneous infant)	19440mg/Kg
	LD _{L0} (subcutaneous mouse)	4g/Kg
LD _{L0} (subcutaneous pigeon)	5g/Kg	
LD _{L0} (skin rabbit)	20g/Kg	

SECTION 12**Ecological Information**

This product has not known ecological hazardous effects.

12.1 Eco-toxicity: Not available

12.2 Mobility: Not available

12.3 Persistence and degradability: Not available

12.4 Bioaccumulative potential: Not available

12.5 Results of PBT (Persistent Bio-Toxicity) assessment: Not available

12.6 Other adverse effects: Not available

Aquatic toxicity data for ingredients:

Ethyl Alcohol	EC ₅₀ /48 hours (daphnia magna):	> 10 mg/l
	IC ₅₀ /72 hours (algae):	5000 mg/l
	LC ₅₀ (fishes):	> 10000 mg/l

SECTION 13**Disposal considerations**

Dispose of in accordance of local regulations.

SECTION 14**Transport information**14.1 Sea transportation (IMDG)

UN number: 1170 Class: 3 Packing group: II EMS-No: F-E, S-D

Stowage/segregation: Category (A); Limited Quantity: 1 Lt

Proper shipping name: Ethanol (Ethyl alcohol) or Ethanol (Ethyl alcohol) solution

14.2 Air transportation (ICAO/IATA)

UN number: 1170 Class: 3 Packing group: II Label: 3 (Flammable liquid)

Maximum quantities: 5 Lt (Passenger Aircraft); 60 Lt (Cargo Aircraft only)

Limited Quantity: 1 Lt Proper shipping name: Ethanol (Ethyl alcohol) or Ethanol (Ethyl alcohol) solution

14.3 Transportation by Road/Railway (RID/ADR)

UN number: 1170 Class: 3 Packing group: II; Hazard identific. n°: 33 Label: 3

Limited Quantity LQ4: (3lt/30 Kg for combined, 1lt/20Kg for bandaged trays/pallets).

Proper shipping name: Ethanol (Ethyl alcohol) or Ethanol (Ethyl alcohol) solution

SECTION 15 (Classification according to communitarian directives 67/548/EEC & 99/45/EC)**Regulatory information**Risk phrases

11 Highly flammable.

Safety phrases

- 2 Keep out of the reach of children.
 7 Keep container tightly closed
 16 Keep away from sources of ignition. – No smoking

SECTION 16**Other information**16.1 (Other) Risk phrases

None.

16.1.1 (Other) Safety phrases

None.

16.2 Sources of key data used to compile the Safety Data Sheet:European Chemicals Bureau (ECB – www.ecb.jrc.it)European chemical Substances Information System (ESIS - www.ecb.jrc.it/esis)A.C.G.I.H. (www.acgih.org)N.I.O.S.H. (www.cdc.gov/niosh/)O.S.H.A. (www.osha.gov/)U.E. (www.europa.eu/index_it.htm)I.A.R.C. (www.iarc.fr/)N.T.P. (www.ntp.niehs.nih.gov)European Community Directives:

67/548/EEC:	Classification, packaging and labelling of dangerous substances.
99/45/EC:	Directive concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.
2001/58/EC:	Second amendment of directive 91/155/EEC for the definition of a detailed arrangement of specific information relating to dangerous preparations (art. 14 of 99/45/EC) and substances (art. 27 of 67/548/EEC).
89/656/EEC:	Directive on the minimum health and safety requirements for the use by workers of personal protective equipment at the workplace (third individual directive within the meaning of Article 16 (1) of Directive 89/391/EEC).
89/686/EEC:	Approximation of the laws of the Member States relating to personal protective equipment.
94/9/EC:	Approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres
98/24/EC:	Protection of the health and safety of workers from the risks related to chemical agents at work.

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(R.E.A.Ch.)

CAUTION: PRODUCT FOR PROFESSIONAL USE

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