

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier:

Product Name :	Rewmar MS650
Registration Number REACH:	Not applicable (mixture)
Product type REACH:	Mixture

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

1.2.1 Relevant identified uses

Sealing compound, Adhesive

1.2.2 Uses advised against

No uses advised against known

1.3 Details of the supplier of the safety data sheet:

Supplier of safety data sheet

Rewmar Limited
51 Somers Road
Rugby
CV22 7DG
Tel.: +44 333 800 1966
Fax: +44 1926 633850
technical@rewmar.co.uk

1.4 Emergency telephone number

01926 633823 (office hours only 9.00 – 17.00hrs)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture:

2.1.1 Classification according to Regulation EC No 1272/2008

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Not classified as dangerous according to the criteria of directive(s) 67/548/EEC and/or 1999/45/EC

2.2 Label elements:

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

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Not classified as dangerous in compliance with Directive 67/548/EEC and/or Directive 1999/45/EC

2.3 Other hazards:

CLP

No other hazards known

DSD/DPD

No other hazards known

Section 3. Composition/information on ingredients

3.1 Substances:

Not applicable

3.2 Mixtures:

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to DSD/DPD	Classification according to CLP
3-trimethoxysilyl)propylamine 01-2119510159-45	13822-56-5 237-511-5	1%<C<3%	Xi; R38 - 41	Skin Irrit. 2; H315 Eye Dam. 1; H318

(1) For R-phrases and H-statements in full: see heading 16

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

Section 4. First aid measures

4.1 Description of first aid measures:

General:

If you feel unwell, seek medical advice.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Rinse with water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

No effects known.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

Section 5. Fire-fighting measures

5.1 Extinguishing media:

5.1.1 Suitable extinguishing media:

Polyvalent foam. ABC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2 Special hazards arising from the substance or mixture:

Upon combustion: formation of CO, CO₂ and small quantities of sulphur oxides

5.3 Advice for firefighters:

5.3.1 Instructions:

No specific fire-fighting instructions required.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2 Environmental precautions:

Contain leaking substance. Use appropriate containment to avoid environmental contamination

6.3 Methods and material for containment and cleaning up:

Scoop solid spill into closing containers. Clean contaminated surfaces with a soap solution. Wash clothing and equipment after handling.

6.4 Reference to other sections:

See heading 13.

Section 7. Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1 Precautions for safe handling:

Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities:

7.2.1 Safe storage requirements:

Store in a dry area. Store at room temperature. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

Heat sources.

7.2.3 Suitable packaging material:

Synthetic material.

7.2.4 Non suitable packaging material:

No data available

7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer .

Section 8. Exposure controls/Personal protection

8.1 Control parameters:

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

If applicable and available it will be listed below.

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

DNEL - Workers

3-(trimethoxysilyl)propylamine

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	58 mg/m ³	
	Long-term systemic effects dermal	8.3 mg/kg bw/day	

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DNEL - General population

3-(trimethoxysilyl)propylamine

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	17 mg/m ³	
	Long-term systemic effects dermal	5 mg/kg bw/day	
	Long-term systemic effects oral	5 mg/kg bw/day	

PNEC

3-(trimethoxysilyl)propylamine

Compartment	Value	Remark
Fresh water	0.33 mg/l	
Marine water	0.033 mg/l	
Aqua (intermittent releases)	3.3 mg/l	
STP	13 mg/l	
Fresh water sediment	1.2 mg/kg sediment dw	
Marine water sediment	0.12 mg/kg sediment dw	
Soil	0.045 mg/kg soil dw	
Oral	44.4 mg/kg food	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

Insufficient ventilation: wear respiratory protection.

b) Hand protection:

Gloves.

c) Eye protection:

Safety glasses.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical form	Paste
Odour	Characteristic odour
Odour threshold	No data available
Colour	Variable in colour, depending on the composition
Particle size	No data available
Explosion limits	No data available
Flammability	Not easily combustible
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Vapour pressure	No data available
Relative vapour density	No data available
Solubility	water ; insoluble
Relative density	1.7; 20 °C

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Decomposition temperature	No data available
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with explosive properties
pH	No data available

9.2 Other information:

Surface tension	No data available
Absolute density	1700 kg/m ³ ; 20 °C

Section 10. Stability and reactivity

10.1 Reactivity:

Heating increases the fire hazard.

10.2 Chemical stability:

Stable under normal conditions.

10.3 Possibility of hazardous reactions:

No data available.

10.4 Conditions to avoid:

Keep away from naked flames/heat.

10.5 Incompatible materials:

No data available.

10.6 Hazardous decomposition products:

Upon combustion: formation of CO, CO₂ and small quantities of sulphur oxides.

Section 11. Toxicological information

11.1 Information on toxicological effects:

11.1.1 Test results

Acute toxicity

Rewmar MS650 Polymer

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401			Rat (male)	Experimental value	
Dermal	LD50	Equivalent to OECD 402		24 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50	OECD 403		6 h	Rat (male)	Read-across	
Inhalation (vapours)	LC50	OECD 403		6 h	Rat (female)	Read-across	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

Rewmar MS650 Polymer

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Read-across	
Skin	Irritating	OECD 404	3 min-4 h	1; 24; 48; 72; 168 hours	Rat	Calculated value	

In the light of practical experience, the classification for this mixture is less stringent than the one based on the calculation set out

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Conclusion

Not classified as irritating to the skin
Not classified as irritating to the eyes
Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

Rewmar MS650 Polymer
No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406	72 h	24; 48 hours	Guinea pig (male/female)	Experimental value	

Judgement is based on the relevant ingredients

Conclusion

Not classified as sensitizing for inhalation
Not classified as sensitizing for skin

Specific target organ toxicity

Rewmar MS650 Polymer
No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	LOAEL	OECD 408	600 mg/kg bw/day	Liver	Clinical signs; mortality; body weight; food consumption	92 day(s)	Rat (male/female)	Read-across
Oral (stomach tube)	NOAEL	OECD 408	200 mg/kg bw/day	Liver	No effect	92 day(s)	Rat (male/female)	Read-across
Inhalation (aerosol)	IRT (inhalation risk test)	Equivalent to OECD 412	147 mg/m ³ air	Lungs	Lesions in larynx, trachea and lung	4 weeks (6h/day, 5 days/week)	Rat (male)	Read-across

Judgement is based on the relevant ingredients

Conclusion

Not classified sub-chronic toxicity

Mutagenicity (in vitro)

Rewmar MS650 Polymer
No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster ovary (CHO)	No effect	Read-across
Negative with metabolic activation, negative without metabolic activation	OECD 473	Chinese hamster lung fibroblasts	No effect	Read-across
Negative with metabolic activation, negative without metabolic activation	OECD 471	Escherichia coli	No effect	Experimental value
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value

Mutagenicity (in vivo)

Rewmar MS650 Polymer
No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male/female)	Bone marrow	Read-across

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Carcinogenicity

Rewmar MS650 Polymer
No (test)data on the mixture available
3-(trimethoxysilyl)propylamine

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Organ	Effect
Dermal	NOAEL	Not further determined	43.8 mg/week	104 weeks (3 times/week)	Mouse (male/female)	Inconclusive, insufficient data	Skin	No carcinogenic effect

Reproductive toxicity

Rewmar MS650 Polymer
No (test)data on the mixture available
3-(trimethoxysilyl)propylamine

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	EPA OTS 798.4900	100 mg/kg bw/day	14 days (gestation, daily)	Rat	No effect		Read-across
	LOAEL	EPA OTS 798.4900	600 mg/kg bw/day	14 days (gestation, daily)	Rat	Minor skeletal variations	Skeleton	Read-across
	NOAEL	Other	100 mg/kg bw/day	14 day(s)	Rat	No effect		Read-across
	LOAEL	Other	600 mg/kg bw/day	14 day(s)	Rat	Clinical signs; mortality; body weight; food consumption	General	Read-across
	NOAEL	OECD 408	600 mg/kg bw/day	92 day(s)	Rat (male/female)	No effect		Read-across

Conclusion CMR

Not classified for reprotoxic or developmental toxicity
Not classified for mutagenic or genotoxic toxicity
Not classified for carcinogenicity

Toxicity other effects

Rewmar MS650 Polymer
No (test)data on the mixture available

Chronic effects from short and long-term exposure

Rewmar MS650 Polymer

No effects known

Section 12. Ecological information

12.1 Toxicity:

Rewmar MS650 Polymer
3-(trimethoxysilyl)propylamine

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 934 mg/l	96 h	Danio rerio	Semi-static system	Fresh water	Read-across; GLP
Acute toxicity invertebrates	EC50	OECD 202	331 mg/l	48 h	Daphnia magna	Static system	Fresh water	Read-across; GLP
Toxicity algae and other aquatic plants	EC50	EU Method C.3	> 1000 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Read-across; GLP
Toxicity aquatic microorganisms	EC50	Other	43 mg/l	5.75 h	Pseudomonas putida	Static system	Fresh water	Read-across; GLP

Judgement of the mixture is based on the relevant ingredients

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

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12.2 Persistence and degradability:

3-(trimethoxysilyl)propylamine

Biodegradation water

Method	Value	Duration	Value determination
EU Method C.4	67 %; GLP	28 day(s)	Experimental value

Half-life water (t_{1/2} water)

Method	Value	Primary degradation/mineralisation	Value determination
	4 h; pH = 7	Primary degradation	QSAR

Conclusion

Contains non readily biodegradable component(s)

12.3 Bioaccumulative potential:

Rewmar MS650 Polymer

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

3-(trimethoxysilyl)propylamine

Log Kow

Method	Remark	Value	Temperature	Value determination
		0.2	20 °C	QSAR

Conclusion

Does not contain bioaccumulative component(s)

12.4 Mobility in soil:

Rewmar MS650 Polymer

No (test)data on mobility of the components available

12.5 Results of PBT and vPvB assessment:

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6 Other adverse effects:

Rewmar MS650 Polymer

Global warming potential (GWP)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

3-(trimethoxysilyl)propylamine

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

Ground water

Ground water pollutant

Section 13. Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1 Waste treatment methods:

13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 10 (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants other than those mentioned in 08

04 09). Depending on branch of industry and production process, also other waste codes may be applicable. Can be considered as non hazardous waste according to Directive 2008/98/EC.

13.1.2 Disposal methods

Recycle/reuse. Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 02 (plastic packaging).

Section 14. Transport information

Road (ADR)

14.1 UN number:

Transport	Not subject
UN number	

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

14.4 Packing group:

Packaging	
Labels	

14.5 Environmental hazards:

Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
Limited quantities	

Rail (RID)

14.1 UN number:

Transport	Not subject
UN number	

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

14.4 Packing group:

Packaging	
Labels	

14.5 Environmental hazards:

Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
Limited quantities	

Inland waterways (ADN)

14.1 UN number:

Transport	Not subject
UN number	

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

14.4 Packing group:

Packaging	
Labels	

14.5 Environmental hazards:

Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
Limited quantities	

Sea (IMDG)

14.1 UN number:

Transport	Not subject
UN number	

Rewmar MS650 Polymer Adhesive

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

14.4 Packing group:

Packaging	
Labels	

14.5 Environmental hazards:

Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
Limited quantities	

Air (ICAO-TI/IATA-DGR)

14.1 UN number:

Transport	Not subject
UN number	

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

14.4 Packing group:

Packaging	
Labels	

14.5 Environmental hazards:

Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
Passenger and cargo transport: limited quantities: maximum net quantity per packaging	

Section 15. Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
< 1 %	
< 5 g/l	

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

3-(trimethoxysilyl)propylamine	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: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) 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; (c) hazard class 4.1;	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the
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		European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage"; b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'
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15.2 Chemical safety assessment:

No chemical safety assessment is required.

Section 16. Other information

Full text of any R-phrases referred to under headings 2 and 3:

R38 Irritating to skin

R41 Risk of serious damage to eyes

Full text of any H-statements referred to under headings 2 and 3:

H315 Causes skin irritation.

H318 Causes serious eye damage.

(*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive

DPD Dangerous Preparation Directive

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used.