Safety data sheet
according to regulation (EG) Nr. 1907/2006

Product name	Methyl acetate 80%		EU/EN
MSDS number	80X611	**Revision Date**	Sep.03.2009
Revision Number	0.01	**Issuing date**	Sep.03.2009

1. Identification of the substance/preparation and the company/undertaking

Product name
Methyl acetate 80%

Manufacturer, importer, supplier

Sekisui Specialty Chemicals Europe S.L.
Crta. N-340, Km.1157
Apartado 1388
43080 Tarragona, SPAIN

For information, telephone +1-972-443-8901
www.sekisui-sc.com

Emergency telephone number
For Chemical Emergency: Spill Leak Fire Exposure or Accident
Call CHEMTREC Day or Night
INTERNATIONAL, CALL +1 703-527-3887 (collect calls accepted)

End use:
Chemical intermediate (including monomers)

2. Hazards identification

Indication of danger
Toxic
Highly flammable

R-phrase(s)

R11 - Highly flammable.
R36 - Irritating to eyes.
R66 - Repeated exposure may cause skin dryness or cracking.
R67 - Vapors may cause drowsiness and dizziness.
R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

3. Composition/information on ingredients

Components	CAS-No	EC-No.	Classification	Percent %
Methyl acetate	79-20-9	201-185-2	F;R11 R66 R67 Xi;R36	> 79.5

3. Composition/information on ingredients

Methanol	67-56-1	200-659-6	F;R11 T;R23/24/25- 39/23/24/25	< 20
Acetaldehyde	75-07-0	200-836-8	Carc. Cat.3;R40 F+;R12 Xi;R36/37	< 0.1

4. First aid measures

General Information Remove contaminated, soaked clothing immediately and dispose of safely. Pay attention to own protection. In any case show the physician the Safety Data Sheet.

Inhalation Keep at rest. Move to fresh air. Call a physician immediately.

Skin Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Eyes Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion Rinse with plenty of water. If conscious, drink plenty of water. If swallowed, do not induce vomiting - seek medical advice.

Notes to physician

Main symptoms Vapours may cause irritation to the eyes, respiratory system and the skin, Inhalation of high vapour concentrations can cause CNS-depression and narcosis.

Treatment Treat symptomatically. In case of lung irritation first treatment with dexametason aerosol (spray). In case of choking: adminsitration of activated charcoal and a saline laxative agent.. In case of choking: gastroscopy inclusive of aspiration and acidosis compensation..

5. Fire-fighting measures

Suitable extinguishing media
foam. Dry chemical. carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons
Do not use a solid water stream as it may scatter and spread fire.

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases
Under conditions giving incomplete combustion, hazardous gases produced may consist of
carbon monoxide
carbon dioxide (CO2)
Vapors are heavier than air and may spread along floors

Special protective equipment for fire-fighters
self-contained breathing apparatus (EN 133).

Environmental precautions
Water streams should not be directed to the liquid, as this will cause the liquid to boil and generate more vapor.. Dike and collect water used to fight fire.

Other Information
Cool containers / tanks with water spray.

6. Accidental release measures

Personal precautions
Avoid contact with the skin and the eyes. Keep away from heat and sources of ignition. Provide adequate ventilation.

Environmental precautions
Prevent further leakage or spillage. Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning Up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Dispose of in accordance with local regulations.

7. Handling and storage

Handling

Advice on safe handling
Provide sufficient air exchange and/or exhaust in work rooms.

Protection - fire and explosion:
Keep away from sources of ignition - No smoking. Take necessary action to avoid static electricity discharge. Ground and bond containers when transferring material. In case of fire, emergency cooling with water spray should be available.

Storage

Technical measures/Storage conditions
Keep tightly closed in a dry, cool and well-ventilated place. Handle and open container with care.

German storage class
3A: Flammable liquids.

8. Exposure controls / personal protection

Components	EU TWA	
Methanol	260 mg/m^3	200 PPM

Methanol
Skin Designation Can be absorbed through the skin.

National occupational exposure limits (Germany)

Components	TRGS 900 (AGW)		STEL Factor
Methyl acetate	610 mg/m^3	200 PPM	4
Methanol	270 mg/m^3	200 PPM	4

Methanol

Skin designation Components of the product may be absorbed into the body through the skin

ACGIH Exposure Limits

Components	TWA
Methyl acetate	200 PPM
Methanol	200 PPM

Components	STEL
Methyl acetate	250 PPM
Methanol	250 PPM

Engineering measures General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (for example fans, switches, and grounded ducts) should be used in mechanical ventilation systems.

Personal protective equipment

General advice Do not breathe vapors or spray mist. Avoid contact with skin and eyes. Use only in an area equipped with a safety shower. Hold eye wash fountain available.

Hygiene measures When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

Respiratory protection In appearance of aerosol or vapor protection required (gas filter AX) .

Eye protection Tightly fitting safety goggles. In addition to goggles, wear a face shield if there is a reasonable chance for splash to the face. Equipment should conform to EN 166.

skin protection impervious clothing

Hand protection Chemicals resistant gloves
- **Suitable material** butyl-rubber
- **Type** Butoject (Company KCL) or comparable article; or refer to glove manufacturer's recommendation
- **Evaluation** according to EN 374: level 5
- **Material thickness** approx 0.7 mm
- **Break through time** 240 min

9. Physical and chemical properties

Appearance
- **Form** liquid
- **Colour** colourless
- **Odor** ester-like

Flash point	-15.5°C
Method	DIN EN ISO 13736
Boiling point/range	54 - 57 °C @ 1013 hPa (calculated)
Density	0.90 g/ml @ 20°C
Water solubility	miscible

10. Stability and reactivity

Stability	Stable under normal conditions of handling, use and transportation.
Conditions to avoid	Avoid any source of ignition.. Avoid contact with heat, sparks, open flame, and static discharge..
Thermal decomposition	No decomposition if used as directed. If heated to thermal decomposition the following decomposition products may occur depending on the conditions. carbon oxides.

11. Toxicological information

Methanol

Oral	LD50: > 5000 mg/kg, rat
Dermal	LD50: > 5000 mg/kg, rabbit
Inhalation	LC50: > 5 mg/l, rat, 4h
Skin irritation	irritating
Skin Sensitization	nonsensitizer
Species	guinea pig
Method	Maximization
Eye Irritation	irritant
Species	rabbit eye
Carcinogenic effects	No evidence of carcinogenicity
Species	rats
Study	inhalation lifetime study
Carcinogenic Effects	No evidence of carcinogenicity
Species	mice
Study	inhalation lifetime study
in vitro Mutagenicity	Ames test - negative with and without metabolic activation Mouse lymphoma cell gene-mutation - positive with metabolic activation CHO cell sister-chromatid-exchange (SCE) - negative without metabolic activation In vitro cell transformation - negative with and without metabolic activation
in vivo Mutagenicity	Positive and negative results
Reproductive toxicity	Some indication of reproductive toxicity in animals at non-physiological levels
Developmental effects	Some indication of developmental toxicity in animals at non-physiological levels

11. Toxicological information

Methyl acetate

Oral	LD50: > 5000 mg/kg, rat
Dermal	LD50: > 2000 mg/kg, rat
Inhalation	LC50: > 49 mg/l, rat, 4h
Skin irritation	Non-irritant
Species	rabbit
Method	OECD 404
Eye Irritation	irritant
Species	rabbit eye
Method	OECD 405
in vitro Mutagenicity	Ames test - negative with and without metabolic activation Method: OECD 471
in vivo Mutagenicity	Mutagenicity (micronucleus test) - negative rat Inhalation

12. Ecological information

Methanol

Toxicity to fish	LC50: 28 g/l (96h)
Species	Pimephales promelas (Fathead minnow)
Method	Flow-through
	LC50: 15.4 g/l (96h)
Species	Lepomis macrochirus (Bluegill sunfish)
Method	Flow-through
Toxicity to daphnia	EC50: 24.5 g/l (48h)
Species	Daphnia magna
Toxicity to algae	EC50: 7.1 mg/l (48h)
Species	Selenastrum capricornutum (green algae)
Biodegradation	48 % (5d)
Bioconcentration factor (BCF)	<10
Bioaccumulation	Bioaccumulative potential - low

Methyl acetate

Toxicity to fish	LC50: > 250 mg/l (96h)
Species	Brachidanio rerio (zebra fish)
Method	OECD 203
Toxicity to daphnia	EC50: > 1000 mg/l (48h)
Species	Daphnia magna
Method	OECD 202
Toxicity to algae	EC50: > 120 mg/l (72h)
Species	Scenedesmus subspicatus
Method	OECD 201
Biodegradation	70 % (28d)
Method	OECD 301 D

13. Disposal considerations

13. Disposal considerations

Product information Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal..

Uncleaned empty packaging Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse..

14. Transport information

ADR/RID

UN/ID No.	UN 1993
Proper Shipping Name	Flammable liquid, n.o.s.
Hazard Inducer	(Methyl acetate / Methanol)
	Special provision 640D
Hazard Class	3
Packing group	II
Tunnel Restriction Code	(D/E)
Hazard Number	33

ADNR ADNR: Container and Tanker

UN/ID No.	UN 1993
Proper Shipping Name	Flammable liquid, n.o.s.
Hazard Inducer	(Methyl acetate / Methanol)
	Special provision 640D
Hazard Class	3
Packing group	II

ICAO/IATA

UN-No.	UN 1993
Proper Shipping Name	Flammable liquid, n.o.s.
Hazard Inducer	(Methyl acetate / Methanol)
Hazard Class	3
Packing group	II

IMDG

UN/ID No.	UN 1993
Proper Shipping Name	Flammable liquid, n.o.s.
Hazard Inducer	(Methyl acetate / Methanol)
Hazard Class	3
Packing group	II
EmS Code	S-E, F-E

15. Regulatory information

Labelling in accordance with EC directives

The product is classified and labelled in accordance with EC Directive 1999/45/EC and its amendments

Contains Methyl acetate, Methanol

Symbol(s)

T - Toxic
F - Highly flammable.

R-phrase(s)

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S-phrase(s)

S 9 - Keep container in a well-ventilated place.
S16 - Keep away from sources of ignition - No smoking.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29 - Do not empty into drains.
S33 - Take precautionary measures against static discharges.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

Water Hazard Class (WGK):
WGK Class 1
WGK Source Classification based on addendum 4, No. 3 (VwVwS)

16. Other information

R-phrase(s)

Methyl acetate
R11 - Highly flammable
R36 - Irritating to eyes
R66 - Repeated exposure may cause skin dryness or cracking
R67 - vapors may cause drowsiness and dizziness
Methanol
R11 - Highly flammable
R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed
R39/23/24/25 - Also toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
Acetaldehyde
R12 - Extremely flammable
R40 - Limited evidence of a carcinogenic effect
R36/37 - Irritating to eyes and respiratory system

For further information, see:
For more information, other material safety data sheets or technical data sheets, please consult the Sekisui Specialty Chemicals home page at www.sekisui-sc.com
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Other Information:
- Observe national and local legal requirements

Changes against the previous version are marked by ***

Sources of key data used to compile the datasheet
Information contained in this safety data sheet is based on Sekisui Specialty Chemical owned data and public sources deemed valid or acceptable. The absence of data elements required by ANSI or 1907/2006 indicates, that no data meeting these requirements is available.

Further information
This information is based on our present state of knowledge. It shall describe our products regarding safety requirements and shall not be construed as a guarantee or statement of condition and/or quality.