SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006.

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

1.1. Product identifier
SPECIAL GLUE
1.2. Relevant identified uses of the substance or mixture and uses advised against:
For liner repair.
1.3. Details of the supplier of the safety data sheet:
Swim & Fun Scandinavia ApS
Ledreborg Allé 128K Phone.: +45 7022 6856
DK-4000 Roskilde www.swim-fun.com
Responsible person for the safety data sheet (e-mail): info@swim-fun.com
1.4. Emergency telephone:
Telephone + 44 844 892 0111 (24 hrs.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:
Highly flammable and irritating liquid with long-term effects. Vapours may cause drowsiness or dizziness.
CLP (1272/2008): Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 EUH066
2.2. Label elements:

DANGER

Contents: Ethyl acetate, butan-2-one, methyl acetate and acetone.
H225: Highly flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271: Use only outdoors or in a well-ventilated area.
P501: Dispose of contents/container according to local regulations.
EUH066: Repeated exposure may cause skin dryness or cracking.

Note: The Label elements are reduced on the packaging in accordance with CLP, Annex I, 1.5.2 (Article 29 paragraph. 2) due to a content of less than 125 ml.

Packaging <125 ml:

DANGER

H336: May cause drowsiness or dizziness.
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P271: Use only outdoors or in a well-ventilated area.
P501: Dispose of contents/container according to local regulations.
EUH066: Repeated exposure may cause skin dryness or cracking.
2.3. Other hazards: None known.
PBT/vPvB: The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures:

% w/w	Substance	CAS-no.	EC-no.	Index-no.	REACH-reg.	Classification
30-50	Ethyl acetate	141-78-6	205-500-4	607-022-00-5	-	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 EUH066
12-22	Butan-2-one	78-93-3	201-159-0	606-002-00-3	-	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 EUH066
8-18	Methyl acetate	79-20-9	201-185-2	607-021-00-X	-	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 EUH066
8-16	Acetone	67-64-1	200-662-2	606-001-00-8	-	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336 EUH066

Wording of hazard statements - see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures:

Inhalation: Move the affected person to fresh air. **Mild cases**: Keep at rest. If needed: get medical attention. **Severe cases**: Place the person in recovery position and keep warm. If respiration has stopped, administer artificial respiration. Seek medical advice immediately.

Skin contact: Remove contaminated clothing and wash with soap and water. In case of skin irritation: Seek medical advice.

Eye contact: Flush with water or physiological salt water, holding eye lids open, remember to remove contact lenses, if any. If irritation persists: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. **Do not induce vomiting.** If needed: get medical attention

Burns: Flush with water until pain ceases. Remove cloth that is not burnt to the skin. If needed seek medical attention, continue to flush on the way.

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

Irritation of eyes with pain and redness. Headache, dizziness, coughing, laboured breathing and indisposition.
Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system (including brain damage).

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

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media:

Use water spray (never water jet), dry chemical, foam or carbon dioxide.

5.2. Special hazards arising from the substance or mixture:

Do not breathe smoke fumes. In case of fire, the product may form hazardous decomposition products such as oxides of carbon.

5.3. Advice for firefighters:

Remove containers if possible or keep containers cool by spraying with water. When entering burning area: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment - see section 8. Remove sources of ignition. Ventilate area.

6.2. Environmental precautions:

Do not empty into drains - see section 12. Inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up:

Absorb spilled liquid with inert material and place in a suitable container for disposal. Flush area of spill with plenty of water. Further handling of spillage - see section 13.

6.4. Reference to other sections:

See above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:
Avoid breathing vapours and spray. Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Change contaminated clothes immediately. After use wash with plenty of soap and water. Required access to plenty of water, eyewash fountain and emergency shower. Flammable, do not use near fire or sparks. Do not smoke.
7.2. Conditions for safe storage, including any incompatibilities:
Properly sealed container, in a cool and well-ventilated area. Fireproof.
Professional storage: Storage must be in compliance with all regulatory requirements pertaining to flammable liquids.
Store securely and out of reach of unauthorized personnel and separated from food, feed etc.
7.3. Specific end use(s):
See section 1.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters:
Occupational exposure limits (EH40/2007):

Substance	8-hour TWA	15-min STEL	Comments
Ethyl acetate	200 ppm	400 ppm	-
Butan-2-one	200 ppm = 600 mg/m^3	300 ppm = 899 mg/m^3	Sk.
Methyl acetate	200 ppm = 616 mg/m^3	250 ppm = 770 mg/m^3	-
Acetone	500 ppm = 1210 mg/m3	1500 ppm = 3620 mg/m3	-

Sk.: Can be absorbed through the skin
DNEL/PNEC: No CSR.
8.2. Exposure controls:
Appropriate engineering controls: Provide efficient ventilation.
Personal protective equipment:
Inhalation: The product contains substances whose vapours do not allow effective filtration by carbon filters. In case of insufficient ventilation: Use a self-contained breathing apparatus (EN14594). The filter has a limited lifetime and must be changed. Read the instruction.
Skin: Wear protective gloves of e.g. butyl rubber (EN374). It has not been possible to find data for breakthrough time. In case of spill on the glove, it is recommended to change it after use.
Eyes: Safety goggles (EN166) when there is risk of splashes.
Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Appearance:	Clear to pale yellow liquid
Odour:	Characteristic
Odour threshold:	Not determined
pH:	Not determined
Melting point/freezing point (°C):	-73,5
Initial boiling point and boiling range (°C):	70-80
Flash point (°C):	-5
Evaporation rate:	Not determined
Upper/lower flammability or explosive limits (vol.-%):	1,2-7,5
Vapour pressure (hPa at 20 °C):	Not determined
Relative density (g/cm^3 at 25°C):	0,75-0,85
Solubility (in water):	Not miscible
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition temperature (°C):	408
Viscosity:	Not determined
Explosive properties:	Not determined.
Oxidising properties:	Not relevant
9.2. Other information:	None relevant

SECTION 10: Stability and reactivity

10.1. Reactivity:
No available data.
10.2. Chemical stability:
Stable under normal conditions - see section 7. Combustible.
10.3. Possibility of hazardous reactions:
Vapours can be set on fire by sparks or hot surfaces. Vapours may form explosive mixtures with air and can travel along the ground to an ignition source and flash back to vapour source.
10.4. Conditions to avoid:
Formation of sparks, glows, and strong heat.
10.5. Incompatible materials:
Oxidisers. Alkali.
10.6. Hazardous decomposition products:
In case of extensive heating the mixture may form hazardous decomposition product such as oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects:

Hazard class	Data	Test	Litt. source
Acute toxicity:			
Inhalation	LC_{50} (rat) = 503124 mg/m^3/2h (Acetone)	No info	Supplier
	LC_{50} (rat) = 45000 mg/m^3/2h (Ethyl acetate)	No info	Supplier
	LC_{50} (rat) = 23520 mg/m^3/2h (Butan-2-one)	No info	Supplier
	LC_{50} (rat) = 5760 mg/m^3/8h (Methyl acetate)	No info	Supplier
Dermal	LD_{50} (rabbit) = 20000 mg/kg (Acetone)	No info	Supplier
	LD_{50} (rabbit) = 4940 mg/kg (Ethyl acetate)	No info	Supplier
	LD_{50} (rabbit) = 6480 mg/kg (Butan-2-one)	No info	Supplier
	LD_{50} (rabbit) = 5000 mg/kg (Methyl acetate)	No info	Supplier
Oral	LD_{50} (rat) = 5800 mg/kg (Acetone)	No info	Supplier
	LD_{50} (rat) = 5620 mg/kg (Ethyl acetate)	No info	Supplier
	LD_{50} (rabbit) = 3400 mg/kg (Butan-2-one)	No info	Supplier
	LD_{50} (rabbit) = 5450 mg/kg (Methyl acetate)	No info	Supplier
Corrosion/irritation:	No skin or eye irritation, rabbit (Ethyl acetate)	~Draize, OECD 405	ECHA
	Serious eye irritation, no skin irritation, rabbit (Acetone)	Draize, No info	IUCLID
	Serious eye irritation, no skin irritation, rabbit (Butan-2-one)	OECD 404, 405	IUCLID
	Eye irritation, no skin irritation, rabbit (Methyl acetate)	OECD 404, 405	ECHA
Sensitization:	No skin sensitisation, guinea pig (Acetone, Ethyl acetate, Butan-2-one)	Several	IUCLID
CMR:	Ingen genotoxicity or cancerogenic effects (Acetone)	No info	IUCLID
	Ingen CMR effects (Ethyl acetate)	Several	ECHA
	Ingen genotoxicity (Methyl acetate)	OECD 471	ECHA

Information on likely routes of exposure: Skin, lungs and gastrointestinal tract.
Symptoms:

Inhalation: Irritation of the respiratory tract. Headache, dizziness, coughing, laboured breathing and indisposition.

Skin: May cause irritation, degreases skin. Can be absorbed through the skin and cause symptoms as described under “Ingestion”.

Eyes: Irritation with redness, pain and blurred vision. Ethyl acetate vapours in the eyes causes burning and tearing, and can cause inflammation of the cornea. Contact lenses can be influenced by the vapours of acetone.

Ingestion: Can have an irritating effect on the mouth and the gastrointestinal tract. Can be absorbed through the gastrointestinal tract and cause symptoms as described under “Ingestion”.

Chronic effects: Prolonged or frequent exposure to vapours of volatile organic compounds may result in damage on liver, kidneys, blood or central nervous system (including brain damage). Long term or repeated skin contact with splashes and vapours may degrease the skin and cause red, dry, cracked and thickened skin.

SECTION 12: Ecological information

12.1. Toxicity:

Aquatic	Data	Test (Media)	Litt. source
Fish	LC_{50} (Oncorhynchus mykiss, 96h) = 5540 mg/l (Acetone)	No info	Merck
	LC_{50} (Pimephales promelas, 96h) = 230 mg/l (Ethyl acetate)	US EPA method E03-05	ECHA
	LC_{50} (Fisk, 96h) = >100 mg/l (Butan-2-one)	No info (FW)	IUCLID
	LC_{50} (Danio rerio, 96h) = 250 – 305 mg/l (Methyl acetate)	OECD 203	ECHA
Daphnia	EC_{50} (Daphnia magna, 48h) = 6100 mg/l (Acetone)	No info (FW)	Merck
	EC_{50} (Daphnia magna, 24h) = 3090 mg/l (Ethyl acetate)	DIN 38412 pt 11	ECHA
	EC_{50} (Daphnia magna, 48h) = >100 mg/l (Butan-2-one)	No info (FW)	IUCLID
	EC_{50} (Daphnia magna, 48h) = 1026,7 mg/l (Methyl acetate)	OECD 202	ECHA
Algae	NOEC (Microcystis aeruginosa, 8d) = 530 mg/l(Acetone)	DIN 38412 pt 9	ECHA
	NOEC (Desmodesmus sub. 72h) = >100 mg/l (Ethyl acetate)	OECD 201	ECHA
	EC_{50} (Alger, 72h) = >100 mg/l (Butan-2-one)	No info (FW)	IUCLID
	EC_{50} (Desmodesmus sub. 72h) = > 120 mg/l (Methyl acetate)	OECD 201	ECHA

12.2. Persistence and degradability:
Ethyl acetate, acetone and methyl acetate are rapidly degradable (OECD 301).
12.3. Bioaccumulative potential:
Acetone, butan-2-one and methyl acetate: Log K_{ow} <1 – Ingen bioakkumulering
Ethyl acetate: >1 Log K_{ow} <3 – Moderate bioaccumulative.
12.4. Mobility in soil:
Ethyl acetate and butan-2-one: Log $K_{oc} \leq 10$ – large mobility in soil.
12.5. Results of PBT and vPvB assessment:
The ingredients are not considered PBT/vPvB according to criteria in Annex XIII.
12.6. Other adverse effects:
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods:
Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.
EWC-code:
08 04 09 (mixture itself) and 15 02 02 (Paper towel, inert material etc. contaminated with the mixture)

SECTION 14: Transport information

14.1. UN-no.: 1133
14.2. UN proper shipping name: ADHESIVE containing flammable liquid
14.3. Transport hazard class(es): 3
14.4. Packing group: III
14.5. Environmental hazards: No.
14.6. Special precautions for user: None.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not relevant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
Must not be used by persons under 18 years of age.
The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC).
15.2. Chemical Safety Assessment:
No CSR.

SECTION 16: Other information

Hazard statement mentioned in section 2 and 3:
H225: Highly flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
EUH066: Repeated exposure may cause skin dryness or cracking.
Abbreviations:
CMR = Carcinogenicity, mutagenicity and reproductive toxicity.
CSR = Chemical Safety Report
DNEL = Derived No-Effect Level
EC_{50} = Effect Concentration 50 %
FW = Fresh Water
LC_{50} = Lethal Concentration 50 %
LD_{50} = Lethal Dose 50 %
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative, Toxic
PNEC = Predicted No-Effect Concentration
vPvB = very Persistent, very Bioaccumulative
Literature:
ECHA= European Chemical Agency Registration dossier
IUCLID = International Uniform ChemicaL Database Information
RTECS = Register of Toxic Effects of Chemical Substances
Training advice:
No special training is required. However, the user should be well instructed in the execution of the task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.
Changes since the previous edition:
Not relevant.

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