



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Asplit® LF Solution**

Revision date: 19.04.2017

Product code: 00359-1183

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H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.

**Precautionary statements**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe vapour.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.

**2.3. Other hazards**

Vapours may form explosive mixture with air.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

Mixture containing following substances with additives

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
98-01-1	2-Furaldehyde			25 - 35 %
	202-627-7	605-010-00-4	01-2119486861-27	
	Carc. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H351 H301 H331 H312 H315 H319 H335			
98-00-0	Furfuryl alcohol			3 - 5 %
	202-626-1	603-018-00-2	01-2119493965-18	
	Carc. 2, Acute Tox. 3, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, STOT RE 2; H351 H331 H302 H312 H319 H335 H373			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.  
In the event of persistent symptoms receive medical treatment.  
Take away from danger area and lay down affected person.

**After inhalation**

Move to fresh air in case of accidental inhalation of vapours.  
Seek medical treatment immediately.

**After contact with skin**

Wash off immediately with soap and plenty of water.  
Consult a doctor if skin irritation persists.

**After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Consult (eye) doctor immediately.

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**After ingestion**

- Do not induce vomiting.
- Summon a doctor immediately.
- Rinse out mouth and give plenty of water to drink.
- Never give anything by mouth to an unconscious person.
- Induce vomiting only upon the advice of a physician.

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

- Harmful in contact with skin.
- Toxic if swallowed or if inhaled.
- Causes serious eye irritation.
- Causes skin irritation.
- May cause respiratory irritation.
- Suspected of causing cancer.

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

- Treat symptoms.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

- Alcohol-resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>), water-spray.

**Unsuitable extinguishing media**

- Full water jet.

**5.2. Special hazards arising from the substance or mixture**

- Fire may produce:
  - carbon monoxide and carbon dioxide
  - Irritant/corrosive, flammable as well as toxic distillation gases (carbonization gases).

**5.3. Advice for firefighters**

- Wear self-contained breathing apparatus and protective suit.

**Additional information**

- Cool containers at risk with water spray jet.
- Collect contaminated firefighting water separately, must not be discharged into the drains.
- Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

- In case of vapour formation use respirator.
- Ensure adequate ventilation.
- Remove persons to safety.
- Use personal protective clothing.
- Keep away sources of ignition.

**6.2. Environmental precautions**

- Do not discharge into the drains/surface waters/ground water.
- Do not discharge into the subsoil/soil.

**6.3. Methods and material for containment and cleaning up**

- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
- Shovel into suitable container for disposal.

**6.4. Reference to other sections**

- Observe protective instructions (see Sections 7 and 8).
- Information for disposal see section 13.

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**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

- Keep container tightly closed.
- Vapours are heavier than air and spread along ground.
- Use only in thoroughly ventilated areas.
- Provide suitable extraction at the processing machines.

**Advice on protection against fire and explosion**

- Keep away from heat and sources of ignition.
- Take measures against electrostatically charging.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

- Keep container tightly closed in a dry, cool and well-ventilated place.

**Advice on storage compatibility**

- Incompatible with oxidizing agents.

**Further information on storage conditions**

- Keep away from food, drink and animal feeding stuffs.

**7.3. Specific end use(s)**

- Bonding material for furane resine laminate

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
98-01-1	2-Furaldehyde (furfural)	2	8		TWA (8 h)	WEL
		5	20		STEL (15 min)	WEL

**8.2. Exposure controls****Appropriate engineering controls**

- Ensure adequate ventilation, especially in confined areas.
- Pay attention to explosion protection guidelines.

**Protective and hygiene measures**

- Do not inhale vapours.
- Wash hands before breaks and immediately after handling the product.
- When using do not eat, drink or smoke.
- Treat subsequently with skin cream.
- Remove and wash contaminated clothes before re-use.

**Eye/face protection**

- Tightly fitting goggles (EN 166).
- Eye wash bottle with pure water (EN 15154).

**Hand protection**

- Protective gloves resistant to chemicals made off viton, minimum coat thickness 0,7 mm, permeation resistance (wear duration) approx. 30 minutes, i.e. protective glove <Vitoject 890> made by www.kcl.de. This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
- Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.



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#### Skin protection

Long sleeved clothing (EN 368).  
Solvent-resistant apron (EN 467).

#### Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid  
Colour: Dark brown  
Odour: Characteristic

#### Test method

pH-Value: 4,5 (200 g/l)

#### Changes in the physical state

Initial boiling point and boiling range: > 170 °C  
Flash point: 67 °C  
Lower explosion limits: n.d.  
Upper explosion limits:  
Ignition temperature: > 315 °C  
Vapour pressure: 1,4 hPa  
(at 20 °C)  
Density: 1,21 g/cm<sup>3</sup>  
Water solubility: Miscible  
(at 20 °C)  
Flow time: < 40 6 DIN/ISO 2431

### 9.2. Other information

No data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No decomposition if stored and applied as directed.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reactions with oxidizing agents.

### 10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.  
Vapour/air mixtures are explosive at intensive warming.  
Heating can release vapours which can be ignited.  
Avoid temperatures above 25°C .

### 10.5. Incompatible materials

oxidizing agents

### 10.6. Hazardous decomposition products

Irritant/corrosive, flammable as well as toxic distillation gases (carbonization gases).  
Carbon monoxide and carbon dioxide

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**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Toxic if swallowed or if inhaled.  
Harmful in contact with skin.  
No toxicological data available.

**Irritation and corrosivity**

Causes skin irritation.  
Causes serious eye irritation.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing cancer. (2-Furaldehyde ; Furfuryl alcohol)  
Germ cell mutagenicity: 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 respiratory irritation. (2-Furaldehyde )

**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.

**Additional information on tests**

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

**SECTION 12: Ecological information****12.1. Toxicity**

Ecological data are not available.

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

**12.6. Other adverse effects**

Hazardous water pollutant.

**Further information**

Do not flush into surface water or sanitary sewer system.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

Can be incinerated, when in compliance with local regulations.  
Where possible recycling is preferred to disposal.

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**Waste disposal number of waste from residues/unused products**

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

**Contaminated packaging**

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

Packaging that cannot be cleaned should be disposed of like the product.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

**14.1. UN number:** UN 2810  
**14.2. UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (2-Furaldehyde, Furfuryl alcohol)  
**14.3. Transport hazard class(es):** 6.1  
**14.4. Packing group:** III  
Hazard label: 6.1



Classification code: T1  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E1  
Transport category: 2  
Hazard No: 60  
Tunnel restriction code: E

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 2810  
**14.2. UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (2-Furaldehyde, Furfuryl alcohol)  
**14.3. Transport hazard class(es):** 6.1  
**14.4. Packing group:** III  
Hazard label: 6.1



Classification code: T1  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E1

**Marine transport (IMDG)**

**14.1. UN number:** UN 2810  
**14.2. UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (2-Furaldehyde, furfuryl alcohol)  
**14.3. Transport hazard class(es):** 6.1  
**14.4. Packing group:** III  
Hazard label: 6.1

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Marine pollutant: No  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E1  
EmS: F-A, S-A

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 2810  
**14.2. UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (2-Furaldehyde, furfuryl alcohol)  
**14.3. Transport hazard class(es):** 6.1  
**14.4. Packing group:** III  
Hazard label: 6.1



Limited quantity Passenger: 2 L  
Passenger LQ: Y642  
Excepted quantity: E1  
IATA-packing instructions - Passenger: 655  
IATA-max. quantity - Passenger: 60 L  
IATA-packing instructions - Cargo: 663  
IATA-max. quantity - Cargo: 220 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The transport takes place only in approved and appropriate packaging.

### SECTION 15: Regulatory information

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

##### EU regulatory information

2004/42/EC (VOC): 30 %

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 2 - water contaminating

##### Additional information

Consider Chemical prohibition regulation.

#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

### SECTION 16: Other information



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**Abbreviations and acronyms**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
IMDG = International Maritime Code for Dangerous Goods  
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization  
MARPOL = International Convention for the Prevention of Pollution from Ships  
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals  
CAS = Chemical Abstract Service  
EN = European norm  
ISO = International Organization for Standardization  
DIN = Deutsche Industrie Norm  
PBT = Persistent Bioaccumulative and Toxic  
vPvB = Very Persistent and very Bio-accumulative  
LD = Lethal dose  
LC = Lethal concentration  
EC = Effect concentration  
IC = Median immobilisation concentration or median inhibitory concentration

**Relevant H and EUH statements (number and full text)**

H301	Toxic if swallowed.
H301+H331	Toxic if swallowed or if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

**Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*