



MATERAIL SAFETY DATA SHEET

Safety data sheet according to Regulation (EC) No1907/2006

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SF0505 LIQUID FLUX

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

1.1 Product identifier

Product Name : SF0505 Liquid Flux

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

Intended use : Liquid flux

1.3 Details of the supplier of the safety data sheet

Company Name : Kurtel Lehim Teli San. Ve Tic. Ltd. Şti.

Adress : Eski İstanbul İzmit Yolu, Balçık Mah. Organize Cad. No:2 GEBZE/KOCAELİ

Phone : +90 262 751 28 57-58

Fax : +90 262 751 28 56

E-Posta : kurtel@kurtel.com

1.4 Emergency phone number

National Poison information center 114

2. SECTION : Hazards identification

2.1 Classification of the substance or mixture

Classification(CLP):

Flammable liquids Category 2

H225 Highly flammable liquid and vapor

Serious eye irritation Category 2

H319 Causes serious eye irritation

Specific target organ toxicity -single exposure Category 3

H336 May cause drowsiness or dizziness

Target organ: Central Nervous System



Classification (DPD):

F- Highly flammable

R11- Highly flammable

Xi: irritant

R36 Irritating to eyes

R67 Vapours may cause drowsiness and dizziness.

2.2 Label elements**Label elements (CLP)**

Hazards pictogram



Signal word

Tehlike

Hazard statement

H225- Highly flammable liquid and vapor

H319- Causes serious eye irritation

H336- May cause drowsiness or dizziness.

Precautionary statement

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Önlem

P261 Dumanını solumaktan kaçının.

Precautionary statement Response

P337+P313 If eye irritation persist Get medical advice/attention

Label elements (DLP)

F- Highly Flammable



Risk phrases:

R11 Highly flammable

R67 Vapours may cause drowsiness and dizziness

Safety phrases:

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.

S51 use only in well-ventilated areas.

2.3 Other hazards

Avoid breathing fumes given out during soldering

Flux fumes may irritate the nose, throat and lungs and may after prolonged/repeated exposure give an allergic reaction. After handling solder wash hands with soap and water before eating, drinking or smoking.

Keep out of reach of children

3. SECTION : Composition / information on ingredients

Mixture

Declaration of the ingredients according to CLP(EC) No 1272/2008

Hazardous components	EC No	Cas No	Content	Classification
Propan-2-ol	200-661-7	67-63-0	%85-100	Flammable Liq. 2 H225 Eye Irritation 2 H319 STOT SE 3 H336

For full text of the H- statements and other abbreviations see Sec. 16

Substances without classification may have community workplace exposure limits available.

Declaration of ingredients according to DPD(EC) No 1999/45

Hazardous components	EC No	Cas No	Content	Classification
Propan-2-ol	200-661-7	67-63-0	%85-100	F- Highly flam. R11 Xi Irritant R36 R67

For full text of the R-phrases and other abbreviations see Sec. 16

Substances without classification may have community workplace exposure limits available.

4. SECTION : First aid measures**4.1 Description of first aid measures***Inhalation: Move to fresh air. If symptoms persist, seek medical advice.**Skin contact: Immediately wash skin thoroughly with soap and water**Obtain medical attention if irritation persists.**Eye contact: Rinse immediately with plenty of running water. Seek medical attention if necessary.**Ingestion: Do not induce vomiting. Seek medical advice*

4.2 Most important symptoms and effects both acute and delayed

Eye; irritation, conjunctivitis.

Respiratory; Irritation, coughing, shortness of breath, chest tightness.

Prolonged or repeated contact may cause skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures.

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

Suitable extinguishing media : Alcohol-resistant foam

Extinguishing media which must not be used for safety reasons : Water jet

5.2 Special hazards arising from the substance or mixture

Can form explosive gas/air mixtures.

The flux medium will give rise to irritating fumes

Oxides of carbon

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing such as turn-out gear.

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

Avoid contact with skin and eyes. Wear protective equipment.

6.2 Environmental precautions

Do not let product enter drains. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Remove all sources of ignition. For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4 Referances to other sections

See advice in section 8

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

Use only in well-ventilated areas. Keep away from sources of ignition. No smoking. Avoid skin and eye contact. See advice Sec. 8. Take measures to prevent the build-up of electronic charges.

Hygiene measures:

Do not eat, drink or smoke while working

Good industrial hygiene practices should be observed.

After handling solder wash hands with soap and water before eating, drinking or smoking.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated place.

Keep away from sources of ignition.

Refer to technical data sheet.

7.3 Specific end uses

Only liquid flux.

8. SECTION : Exposure controls/personal protection**8.1 Control parameters****Occupational****Exposure Limits**

Valid for
Turkey

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Propan-2-ol 67-63-0 [ISO-PROPYLALCOHOL]	200	500	Maximum allowable concentration (MAK):		TR MAK

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Propan-2-ol 67-63-0	aqua (freshwater)		140,9 mg/l				
Propan-2-ol 67-63-0	aqua (marine water)		140,9 mg/l				
Propan-2-ol 67-63-0	sediment (freshwater)				552 mg/kg		
Propan-2-ol 67-63-0	sediment (marine water)				552 mg/kg		
Propan-2-ol 67-63-0	soil				28 mg/kg		
Propan-2-ol 67-63-0	aqua (intermittent releases)		140,9 mg/l				
Propan-2-ol 67-63-0	sewage treatment plant (STP)		2251 mg/l				
Propan-2-ol 67-63-0	oral				160 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Propan-2-ol 67-63-0	Workers	dermal	Long term exposure - systemic effects		888 mg/kg	
Propan-2-ol 67-63-0	Workers	inhalation	Long term exposure - systemic effects		500 mg/m3	
Propan-2-ol 67-63-0	General population	dermal	Long term exposure - systemic effects		319 mg/kg	
Propan-2-ol 67-63-0	General population	inhalation	Long term exposure - systemic effects		89 mg/m3	
Propan-2-ol 67-63-0	General population	oral	Long term exposure - systemic effects		26 mg/kg	

Biological Exposure Indices:

None

8.1. Exposure controls:**Engineering controls:**

Ensure adequate ventilation, especially in confined areas.

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be

considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Protective eye equipment should conform to EN166.

Skin protection:

Wear suitable protective clothing.



Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.
Personal protective equipment should conform to the relevant EN standard.

9. SECTION : Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid, clear

Odor: Alcohol

pH: Not applicable

Initial boiling point : 82 °C

Flash point : 12 °C

Vapour pressure (25 °C): 6,6 kPa

Density (25 °C): 0,800 g/cm³

Bulk density : No data available / not applicable

Viscosity: No data available / not applicable

Solubility: miscible

Solidification tempratur: No data available / not applicable

Flammability: No data available / not applicable

Melting point: No data available / not applicable

Auto-igniton temperature: No data available / not applicable

Explosive limits: lower % 2,00 (V)

Upper %12,00 (V)

Partition coefficient: Not determined

Evaporation rate: No data available / not applicable

Vapor denstiy: No data available / not applicable

Oxidising properties: No data available / not applicable

9.2 Other information

No data available/ not applicable

10. SECTION : Stability and reactivity**10.1 Reactivity**

Reaction with strong oxidants. Dissolves aluminium and zinc slowly with formation of hydrogen.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

See section reactivity

10.4 Conditions to avoid

Stable under normal conditions of storage and use

10.5 Incompatible materials

See section reactivity

10.6 Hazardous decomposition products

Oxides of carbon

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

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

STOT-single exposure:

May cause drowsiness or dizziness.

Oral toxicity:

May cause irritation to the digestive tract.

Ingestion of large quantities may cause liver or kidney damage.

Inhalative toxicity:

Fumes evolved at soldering temperatures will irritate the nose, throat and lungs. Prolonged or repeated exposure to flux

fumes may result in sensitisation in sensitive workers.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Fumes emitted during soldering may irritate the eyes.

Causes serious eye irritation.

Acute oral toxicity

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Propan-2-ol 67-63-0	LD50	5.840 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Propan-2-ol 67-63-0	LC50	72,6 mg/l		4 h	rat	not specified

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Propan-2-ol 67-63-0	LD50	12.870 mg/kg	dermal		rabbit	not specified

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Propan-2-ol 67-63-0	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Propan-2-ol 67-63-0	moderately irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Propan-2-ol 67-63-0	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Propan-2-ol 67-63-0	negative with metabolic activation	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Propan-2-ol 67-63-0	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequency of treatment	Route of application	Method
Propan-2-ol 67-63-0		rat	male/female	104 w 6 h/d, 5 d/w	inhalation: vapour	OECD Guideline 451 (Carcinogenicity Studies)

Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
Propan-2-ol 67-63-0	NOAEL P = 853 mg/kg	One generation study oral: drinking water		rat	OECD Guideline 415 (One-Generation Reproduction Toxicity Study)
	NOAEL P = 500 mg/kg NOAEL F1 = 1.000 mg/kg	Two generation study oral: gavage		rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Propan-2-ol 67-63-0		inhalation: vapour	at least 104 w6 h/d, 5 d/w	rat	not specified

12. SECTION : Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1 Toxicity

Ecotoxicity:

Do not empty into drains / surface water / ground water.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Propan-2-ol 67-63-0	LC50	> 9.640 - 10.000 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Propan-2-ol 67-63-0	EC50	> 1.000 mg/l	Algae	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	1.000 mg/l	Algae	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Propan-2-ol 67-63-0	EC50	> 1.000 mg/l	Bacteria	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Propan-2-ol 67-63-0	NOEC	30 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

12.1. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Propan-2-ol 67-63-0	readily biodegradable	aerobic	70 - 84 %	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)

12.2. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

The product evaporates readily.

Bioaccumulative potential:

Octanol/Water distribution coefficient: Not determined

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Propan-2-ol 67-63-0	0,05					OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Propan-2-ol 67-63-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available

13. SECTION : Disposal Considerations**13.1 Waste treatment Method****Product disposal:**

Dispose of as hazardous waste in compliance with local and national regulations.
Incineration under controlled conditions is recommended.

Disposal of uncleaned packages:

Dispose of as unused product.

Waste code

14 06 03 - other solvents and solvent mixtures

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

14. SECTION : Transport information**14.1. UN number**

ADR	1219
RID	1219
ADN	1219
IMDG	1219
IATA	1219

14.2. UN proper shipping name

ADR	ISOPROPANOL (solution)
RID	ISOPROPANOL (solution)
ADN	ISOPROPANOL (solution)
IMDG	ISOPROPANOL (solution)
IATA	Isopropanol (solution)

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packing group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable
	Tunnelcode: (D/E)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

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

not applicable

15. SECTION : Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

VOC content (2010/75/EC)	90 - 100 %
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15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

16. SECTION : Other information**SDS Author:**

Name and contact: Efe BAYAR
efe@kurtel.com

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.