

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SSK-15 / SSK-15/X

Product code: 2041

Revision date: 21.02.2021

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

1.1. Product identifier

SSK-15 / SSK-15/X

Further trade names

#2041 SSK-15 FLUX
#3859 EO-FF-SSK15 EO-FLUX-DOSIERFLASCHE 50ML
#3866 COMPACT-FLUX-PEN SSK-15 MIT 3 ML FLUSSMITTEL
#6119 SSK-15/X SPECIAL FLUX

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

Use of the substance/mixture

Fluxes
Industrial use of processing aids.

Uses advised against

Use of intermediate

1.3. Details of the supplier of the safety data sheet

Company name:	EMIL OTTO	
	Flux- und Oberflächentechnik GmbH	
Street:	Eltviller Landstrasse 22	
Place:	D-65346 Eltville-Erbach	
Telephone:	+49 6123 7046-0 /-28	Telefax: +49 6123 7046-15
e-mail:	info@emilotto.de	
Contact person:	André Bremser	Telephone: +49 6123 7046-28
e-mail:	andre.bremser@emilotto.de	
Internet:	www.emilotto.de	
Responsible Department:	Laborleitung	
	Betrieblich verantwortliche Person (WHG, REACH, Gefahrstoffe, Gefahrgut)	
	24h: 00491777879007	

1.4. Emergency telephone number:

0049613119240 (Giftinfo Mainz)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Flammable liquid: Flam. Liq. 2
Serious eye damage/eye irritation: Eye Irrit. 2

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Respiratory or skin sensitisation: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

propan-2-ol; isopropyl alcohol; isopropanol
rosin; colophony

Signal word: Danger

Pictograms:



Hazard statements

H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.
P270 Do not eat, drink or smoke when using this product.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P243 Take action to prevent static discharges.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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P312	Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use In case of fire: Use extinguishing powder or sand to extinguish. to extinguish.
P233	Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to Consult the appropriate local waste disposal expert about waste disposal..

Additional advice on labelling

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

2.3. Other hazards

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Single packagings <125 ml = Restricted to professional users.

Classification according to Regulation (EC) No 1272/2008 [CLP]

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Contains: Alcohol.

Contains: resin.

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			70-100 %
	200-661-7	603-117-00-0		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
8050-09-7	rosin; colophony			5-10 %
	232-475-7	650-015-00-7		
	Skin Sens. 1; H317			
110-15-6	Succinic acid			1-4 %
	203-740-4			
	Eye Irrit. 2; H319			
124-04-9	adipic acid			1-4 %
	204-673-3	607-144-00-9		
	Eye Irrit. 2; H319			

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

Further Information

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

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After ingestion

Rinse mouth immediately and drink plenty of water.

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

Rinse mouth immediately and drink plenty of water.

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

Treat symptomatically. No known symptoms to date.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

In case of fire, use sand, extinguishing powder or alcohol resistant foam.

Unsuitable extinguishing media

. D powder.

5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13 Treat the recovered material as prescribed in the section on waste disposal.

See protective measures under point 7 and 8.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Further information on handling

Avoid contact with skin and eyes.
Do not spray on naked flames or any incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Always close containers tightly after the removal of product. Keep container tightly closed. Protect against direct sunlight.

7.3. Specific end use(s)

Surface active agent
Further information: refer to Technical Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL
8050-09-7	Rosin-based solder flux fume	-	0.05		TWA (8 h)	WEL
		-	0.15		STEL (15 min)	WEL

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Additional advice on limit values

Use appropriate respiratory protection.

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Additional protection measures for the hands:

Hand protection: DIN EN 374

-CR (polychloroprenes, Chloroprene rubber).

Thickness of glove material: : 0,65mm

penetration time (maximum wearing period): : >120min.

-NBR (Nitrile rubber):.

Thickness of glove material: : 0,4mm

penetration time (maximum wearing period): : >480min.

Breakthrough times and swelling properties of the material must be taken into consideration.

Take recovery periods for skin regeneration.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

Use gloves only once.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Before using check leak tightness / impermeability.

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

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Respiratory protection

In case of inadequate ventilation wear respiratory protection. [In case of inadequate ventilation] wear respiratory protection. Use appropriate respiratory protection. Use only respiratory protection equipment with CE-symbol including four digit test number. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!
Filtering device (full mask or mouthpiece) with filter::A

Environmental exposure controls

No special measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	amber
Odour:	Alcohol.
pH-Value:	not applicable etc.:

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	approx. 80 °C
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
:	not determined
Flash point:	12 °C
Sustaining combustion:	No data available

Flammability

Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	3 vol. %
Upper explosion limits:	12 vol. %
Ignition temperature:	not determined
Auto-ignition temperature	
Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

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Oxidizing properties

Not oxidising.

Vapour pressure: 48 hPa
 (at 20 °C)

Vapour pressure: 236 hPa
 (at 50 °C)

Density (at 20 °C): approx. 0,83 g/cm³

Bulk density: not determined

Water solubility: slightly soluble

Solubility in other solvents

Soluble in: Alcohol.

Partition coefficient: not determined

Viscosity / dynamic: not determined

Viscosity / kinematic: not determined

Flow time: not determined

Vapour density: not determined

Evaporation rate: not determined

Solvent separation test: not determined

Solvent content: approx. 80%

9.2. Other information

Solid content: <20%

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable0 Ignition hazard. No risks worthy of mention.

10.2. Chemical stability

Stability and reactivity: Yes.

In contact with water do not emit flammable gases.

10.3. Possibility of hazardous reactions

Reacts violently with peroxides.

Alkali metals.

10.4. Conditions to avoid

Keep away from heat.

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10.5. Incompatible materials

Alkali metals.

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

Further information

No special measures are necessary. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
110-15-6	Succinic acid				
	oral	LD50 2260 mg/kg	Rat		
124-04-9	adipic acid				
	oral	LD50 ca. 5700 mg/kg	Rat		
	inhalation (4 h) aerosol	LC50 > 7,7 mg/l	Rat		

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
124-04-9	adipic acid					
	Acute fish toxicity	LC50 230 mg/l	96 h	Leuciscus idus		
	Acute algae toxicity	ErC50 31 mg/l	72 h	Desmodesmus subspicatus	IUCLID	
	Acute crustacea toxicity	EC50 86 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

12.3. Bioaccumulative potential

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
124-04-9	adipic acid	0,081

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

This substance does not meet the criteria for classification as PBT or vPvB.

Further information

Avoid release to the environment.

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

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140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent mixtures; hazardous waste

List of Wastes Code - used product

140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent mixtures; hazardous waste

List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (propan-2-ol; isopropyl alcohol; isopropanol)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Classification code: F1
Special Provisions: 274 601 640C
Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (propan-2-ol; isopropyl alcohol; isopropanol)
14.3. Transport hazard class(es): 3

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14.4. Packing group:

Hazard label:

II

3



Classification code:

F1

Special Provisions:

274 601 640C

Limited quantity:

1 L

Excepted quantity:

E2

Marine transport (IMDG)

14.1. UN number:

UN 1993

14.2. UN proper shipping name:

FLAMMABLE LIQUID, N.O.S. (propan-2-ol; isopropyl alcohol; isopropanol)

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3



Special Provisions:

274

Limited quantity:

1 L

Excepted quantity:

E2

EmS:

F-E, S-E

Segregation group:

IMDG-Code segregation group not applicable

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:

UN 1993

14.2. UN proper shipping name:

FLAMMABLE LIQUID, N.O.S. (propan-2-ol; isopropyl alcohol; isopropanol)

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3



Special Provisions:

A3

Limited quantity Passenger:

1 L

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Passenger LQ:	Y341	
Excepted quantity:	E2	
IATA-packing instructions - Passenger:		353
IATA-max. quantity - Passenger:		5 L
IATA-packing instructions - Cargo:		364
IATA-max. quantity - Cargo:		60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Combustible liquid. Do not allow uncontrolled discharge of product into the environment.

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

not applicable etc.:

Other applicable information

Discharge into the environment must be avoided.

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	86,7 %
2004/42/EC (VOC):	84,5 %

Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

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IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H336	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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