

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

1.1 Product identifier

Trade name: : MP014026
Other Means of Identification : Rosin Flux Pen

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

No further relevant information available.

Application of the substance / the mixture

Soldering flux for electrical and electronic applications.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Premier Farnell
150 Armley Road
Leeds LS12 2QQ
Tel. : +44 (0) 8701 202530

Emergency telephone number

+44 1865 407333

Section 2: Hazard(s) Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms



GHS02 GHS07

Signal word : Danger

Hazard-determining components of labelling:

butanol

Hazard statements

H225 : Highly flammable liquid and vapour.
H319 : Causes serious eye irritation.
H335-H336 : May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statements

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.
P280	: Wear protective gloves.
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.
P405	: Store locked up.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Determination of endocrine-disrupting properties




Endocrine Disruptor substance $\geq 0.1\%$ = none

Section 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 78-92-2	butanol	25–28%
EINECS: 201-158-5	 Flam. Liq. 3, H226;  Eye Irrit. 2, H319; STOT SE 3, H335-H336	
CAS: 64-17-5	ethanol	23–26%
EINECS: 200-578-6	 Flam. Liq. 2, H225	

Non - hazardous components and components below classification threshold

65997-05-9 Rosin, polymerized	45–51%
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Additional information: For the wording of the listed hazard phrases refer to section 16.

Section 4: First-Aid Measures

4.1 Description of first aid measures

After inhalation	: Supply fresh air; consult doctor in case of complaints.
After skin contact	: Generally the product does not irritate the skin.
After eye contact	: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing	: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Vapors are heavier than air. Vapors may travel to sources of ignition near the ground. They can cause flash fire or ignite explosively.

5.3 Advice for firefighters

Protective equipment: No special measures required.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7: Handling and Storage

7.1 Precautions for safe handling No special precautions are necessary if used correctly.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

7.3 Specific end use(s) No further relevant information available.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

78-92-2 butanol

WEL Short-term value: 462 mg/m³, 150 ppm

Long-term value: 308 mg/m³, 100 ppm

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Respiratory protection: Not required.

Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Tightly sealed goggles

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	: Fluid
Colour	: According to product specification
Odour	: Characteristic
Odour threshold	: Not determined.
Melting point/freezing point	: Undetermined.
Boiling point or initial boiling point and boiling range	: 78°C (64-17-5 ethanol)
Flammability	: Highly flammable.
Lower and upper explosion limit	
Lower	: 3 Vol %

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Upper	: 16 Vol %
Flash point	: 13°C (64-17-5 ethanol)
Auto-ignition temperature	: 390°C (78-92-2 butanol)
Decomposition temperature	: Not determined.
pH	: Not determined.
Viscosity:	
Kinematic viscosity	: Not determined.
Dynamic	: Not determined.
Solubility	
water	: Fully miscible.
Partition coefficient n-octanol/water (log value)	: Not determined.
Vapour pressure at 20°C	: 59 hPa (64-17-5 ethanol)
Vapour pressure at 50°C	: 280 hPa
Density and/or relative density	
Density at 20°C	: 0.93 g/cm ³
Relative density	: Not determined.
Vapour density	: Not determined.
9.2 Other information	
Appearance:	
Form	: Fluid
Important information on protection of health and environment, and on safety.	
Ignition temperature	: Product is not selfigniting.
Explosive properties	: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Solvent content:	
Organic solvents	: 48–54 %
VOC (EC)	: 48–54 %
Solids content	: 0.0 %
Change in condition	
Evaporation rate	: Not determined.
Information with regard to physical hazard classes	
Explosives	: Void
Flammable gases	: Void
Aerosols	: Void
Oxidising gases	: Void
Gases under pressure	: Void
Flammable liquids	: Highly flammable liquid and vapour.
Flammable solids	: Void
Self-reactive substances and mixtures	: Void
Pyrophoric liquids	: Void
Pyrophoric solids	: Void

Self-heating substances and mixtures	: Void
Substances and mixtures, which emit flammable gases in contact with water	: Void
Oxidising liquids	: Void
Oxidising solids	: Void
Organic peroxides	: Void
Corrosive to metals	: Void
Desensitised explosives	: Void

Section 10: Stability and Reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

Section 11: Toxicological Information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

L D / LC50 values relevant for classification:

78-92-2 butanol

Oral LD50 6,480 mg/kg (rat)

64-17-5 ethanol

Oral LD50 7,060 mg/kg (rat)

Inhalative LC50/4 h 20,000 mg/l (rat)

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Causes serious eye irritation.

Respiratory or skin sensitisation

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

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

Carcinogenicity 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. May cause drowsiness or dizziness.

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.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

Section 12: Ecological Information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

HP3 Flammable

HP4 Irritant - skin irritation and eye damage

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

Section 14: Transport Information

14.1 UN number or ID number

ADR, IMDG, IATA : UN1987

14.2 UN proper shipping name

ADR : 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), BUTANOLS)

IMDG : ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), BUTANOLS)

IATA : Alcohols, n.o.s. (ETHANOL, BUTANOLS)

14.3 Transport hazard class(es)

ADR, IMDG, IATA



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Class : 3 Flammable liquids.

Label : 3

14.4 Packing group

ADR, IMDG, IATA : II

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user : Warning: Flammable liquids.

Hazard identification number (Kemler

code) : 33

EMS Number : F-E,S-D

Stowage Category : B

14.7 Maritime transport in bulk according

to IMO instruments : Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ) : 1L

Excepted quantities (EQ) : Code: E2
Maximum net quantity per inner packaging: 30ml
Maximum net quantity per outer packaging: 500ml

Transport category : 2

Tunnel restriction code : D/E

IMDG

Limited quantities (LQ) : 1L

Excepted quantities (EQ) : Code: E2
Maximum net quantity per inner packaging: 30ml
Maximum net quantity per outer packaging: 500ml

UN "Model Regulation" : UN 1987 ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), BUTANOLS), 3, II

Section 15: Regulatory Information

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

Poisons Act

Regulated explosives precursors

None of the ingredients is listed.

Regulated poisons

None of the ingredients is listed.

Reportable explosives precursors

None of the ingredients is listed.

Reportable poisons

None of the ingredients is listed.

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

Section 16: Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

Department issuing SDS: Product safety department.

Contact: sds@mgchemicals.com

Date of previous version: 01.11.2023

Version number of previous version: 5

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised 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 (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

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LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

*** Data compared to the previous version altered.**

Part Number

MP014026

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