

SAFETY DATA SHEET

M-Line Rosin Solvent

www.vpgsensors.com




ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830
AS AMENDED BY UK REACH REGULATIONS SI 2019/758

Date of issue: 11/04/2025
Version: 5.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier**
Product name M-Line Rosin Solvent
CAS No. Mixture
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified Use(s) Welding and soldering products (with flux coatings or flux cores), flux products.
Uses advised against Anything other than the above.
- 1.3 Details of the supplier of the safety data sheet**
Company Identification VISHAY MEASUREMENTS GROUP UK LTD
Stroudley Road
Basingstoke
Hampshire
RG24 8FW
United Kingdom
Telephone +44 (0) 1256 462131
Fax +44 (0) 1256 471441
E-mail (competent person) mm.uk@vpgsensors.com
- 1.4 Emergency telephone number**
National Poisons Information Service (United Kingdom) +44 (0) 3448 920111
NHS 24 111
Emergency Phone No. (00-1) 703-527-3887
Languages spoken All official European languages.
- 24 hr. emergency phone number
Healthcare Professionals ONLY
Members of Public
CHEMTREC (24 hours)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
- 2.1.1 The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain**
Flam. Liq. 2; H225
Asp. Tox. 1; H304
Skin Irrit. 2; H315
Eye Irrit. 2; H319
STOT SE 3; H336
STOT RE 2; H373
Repr. 2; H361d
Aquatic Chronic 3; H412
- 2.2 Label elements**
According to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain
- Product name M-Line Rosin Solvent
Contains: Toluene and 2-Propanol
- Hazard Pictogram(s)
- 
- Signal Word(s) DANGER
- Hazard Statement(s) H225: Highly flammable liquid and vapour.

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	H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness. H373: May cause damage to organs through prolonged or repeated exposure. H361d: Suspected of damaging the unborn child. H412: Harmful to aquatic life with long lasting effects.
Precautionary Statement(s)	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233: Keep container tightly closed. P235: Keep cool. P370+P378: In case of fire: Use dry powder to extinguish. P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331: Do NOT induce vomiting.
Supplemental information	None Known
2.3 Other hazards	Not classified as PBT or vPvB. Does not cause endocrine disruption.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Classification: The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain

Chemical identity of the substance	%W/W	CAS No.	EC No.	UK-REACH Registration No.	Hazard classification
Toluene	45 - 55	108-88-3	203-625-9	Not yet assigned in the supply chain	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Repr. 2; H361d STOT RE 2; H373 Aquatic Chronic 3; H412
2-Propanol	45 - 55	67-63-0	200-661-7	Not yet assigned in the supply chain	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336

For full text of H phrases see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Inhalation

Skin contact

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Avoid all contact. Avoid breathing vapours. Ensure adequate ventilation. Wear suitable respiratory protective equipment if exposure to high levels of material are likely. Do not use mouth-to-mouth resuscitation. Contaminated clothing should be laundered before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. IF exposed or concerned: Get medical advice/attention.
IF ON SKIN: Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin

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	Eye contact	irritation occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye irritation develops or persists.
	Ingestion	IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Immediately call a POISON CENTER/doctor. Rinse mouth. Drink two glasses of water. Do not give milk or alcoholic beverages. Do not give anything by mouth to an unconscious person.
4.2	Most important symptoms and effects, both acute and delayed	May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure: Central nervous system.
4.3	Indication of any immediate medical attention and special treatment needed	Treat symptomatically IF SWALLOWED: Do NOT induce vomiting, if vomiting does occur, have victim lean forward to reduce risk of aspiration. Latency of several hours is possible. Give a slurry of activated charcoal in water to drink. (240mL Water / 30 g Activated charcoal).

SECTION 5: FIREFIGHTING MEASURES

5.1	Extinguishing media Suitable extinguishing media	As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or waterspray.
	Unsuitable extinguishing media	Do not use water jet. Direct water jet may spread the fire.
5.2	Special hazards arising from the substance or mixture	Highly flammable liquid and vapour. May decompose in a fire giving off toxic fumes. Carbon dioxide and Carbon monoxide. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. Sealed containers may rupture explosively if hot.
5.3	Advice for firefighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment and emergency procedures	Caution - spillages may be slippery. Ensure adequate ventilation. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. Do not breathe vapour. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See Section: 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
6.2	Environmental precautions	Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. In confined spaces, sewers, etc., the vapours may collect to form explosive mixtures with air. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.
6.3	Methods and material for containment and cleaning up	Ensure suitable personal protection (including respiratory protection) during removal of spillages. Contain spillages. Use non-sparking equipment when picking up flammable spill. Use waterspray to 'knock down' vapour. Adsorb spillages onto sand, earth or any suitable adsorbent material. Do NOT absorb in saw-dust or other combustible absorbents. Transfer to a container for disposal. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste.
6.4	Reference to other sections	See Section: 8, 13

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SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Do not breathe vapour. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.
- 7.2 Conditions for safe storage, including any incompatibilities** Ground/bond container and receiving equipment. Keep only in original container. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from direct sunlight.
- Storage temperature Ambient. Keep at temperature not exceeding (°C): 25
Storage life Stable under normal conditions
Incompatible materials Strong oxidising agents, Acids (Nitric acid and Sulphuric acid), Halogens and halogenated compounds.
- 7.3 Specific end use(s)** See Section: 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
8.1.1 Occupational exposure limits

SUBSTANCE	CAS No.	LTCL (8 hr TWA ppm)	LTCL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Toluene	108-88-3	50	191	100	384	Sk
2-Propanol	67-63-0	400	999	500	1250	-

Source: WEL: Workplace Exposure Limit (UK HSE EH40)

Notations:

Sk: Can be absorbed through skin.

- 8.1.2 Biological limit value** Not established
- 8.1.3 PNECs and DNELs** Not established
- 8.2 Exposure controls**
- 8.2.1 Appropriate engineering controls** Ensure adequate ventilation Or Use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit.
- 8.2.2 Individual protection measures, such as personal protective equipment** General hygiene measures for the handling of chemicals are applicable. Keep good industrial hygiene. Avoid all contact. Avoid breathing vapours. Wash hands before breaks and after work. Keep work clothes separately. Do not eat, drink or smoke at the work place. IF exposed: Flush with fresh water if contact with skin or eyes.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

Skin protection

Hand protection:

Wear impervious gloves (EN374). At least protective index 2, corresponding > 30 minutes of permeation time according to EN 374) Gloves should be changed

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regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Recommended: Nitrile rubber (Minimum thickness 0.38mm, breakthrough time >240 min), PVC (Minimum thickness 1.3mm, breakthrough time >60 min)

Body protection:

Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection



In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment. A suitable mask with filter type A (EN141 or EN405) may be appropriate.

Thermal hazards

Not applicable

8.2.3 Environmental exposure controls

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear Colourless Liquid
Odour	Benzene-like Odour
Odour threshold	Not available
pH	Not available
Melting point/freezing point	Not available
Initial boiling point and boiling range	82°C
Flash point	4°C [Closed cup]
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable - Liquid
Upper/lower flammability or explosive limits	Flammable Limits (Lower) (%v/v): 1.2 Flammable Limits (Upper) (%v/v): 7.1
Vapour pressure	36 mmHg @ 30°C
Vapour density	3 (Air = 1)
Relative density	0.8 (H ₂ O = 1)
Solubility(ies)	Not available
Partition coefficient: n-octanol/water	Not applicable - Mixture
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	< 20,5 mm ² /s (Worst case assumption) (Kinematic viscosity)
Explosive properties	Vapours can form explosive mixtures with air.
Oxidising properties	Not oxidising.

9.2 Other information

Volatile Organic Compound Content	825 g/L
Evaporation rate	2.8 (BuAC = 1)

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Highly flammable liquid and vapour. Vapour is explosive in air at temperatures higher than the flash point. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. Hazardous polymerisation will not occur.

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10.4	Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from direct sunlight. Keep at temperature not exceeding (°C): 25
10.5	Incompatible materials	Strong oxidising agents, Acids (Nitric acid and Sulphuric acid), Halogens and halogenated compounds.
10.6	Hazardous decomposition products	May decompose in a fire giving off toxic fumes. Carbon dioxide and Carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects	
	Acute toxicity - Ingestion	Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LD50 > 2000 mg/kg bw/day
	Acute toxicity - Inhalation	Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20 mg/l. (Vapour)
	Acute toxicity - Skin contact	Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LD50 > 2000 mg/kg bw/day
	Skin corrosion/irritation	Mixture: Skin Irrit. 2: H315: Causes skin irritation.
		Toluene Skin Irrit. 2: H315: Causes skin irritation.
		Irritating to skin. (rabbit) (EU Method B.4)
		ECHA registration dossier
		Propan-2-ol Skin Irrit. 2: H315: Causes skin irritation.
		EU ECHA Registration Endpoint summary: Irritating to skin. (rabbit)
	Serious eye damage/irritation	Mixture: Eye Irrit. 2: Causes serious eye irritation.
		Propan-2-ol Eye Irrit. 2; H319: Causes serious eye irritation.
		Test Result: Irritating to eyes. (rabbit) (OECD 405) ECHA Registration Endpoint summary
	Respiratory or skin sensitisation	Mixture: Based upon the available data, the classification criteria are not met.
	Germ cell mutagenicity	Mixture: Based upon the available data, the classification criteria are not met.
	Carcinogenicity	Mixture: Based upon the available data, the classification criteria are not met.
	Reproductive toxicity	Mixture: Repr. 2; H361d: Suspected of damaging the unborn child.
		Toluene NOAEC: 600 ppm (Ono A et al, 1996)
	STOT - single exposure	Mixture: STOT SE 3; H336: May cause drowsiness or dizziness.
		Toluene Narcotic effects – (rat) (OECD 403)
		Propan-2-ol Narcotic effects – (rat) (OECD 403)
	STOT - repeated exposure	STOT RE 2: May cause damage to organs through prolonged or repeated exposure.
		Toluene NOAEL 625 mg/kg bw/day (EU Method B.26)
		ECHA registration dossier
		Propan-2-ol NOAEL 5000 ppm (OECD 451)
		ECHA registration dossier
	Aspiration hazard	Asp. Tox. 1; H304: May be fatal if swallowed and enters airways.
		Toluene Hydrocarbon. Kinematic Viscosity 0.56 mPa s @20°C
		ECHA registration dossier
11.2	Other information	None Known

SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Mixture: Aquatic Chronic 3; H412: Harmful to aquatic life with long lasting effects. Estimated Mixture LC50 >10 - ≤ 100 mg/l (Fish)
		Toluene Aquatic Chronic 3; H412: Harmful to aquatic life with long lasting effects. 40 day Chronic toxicity to aquatic organisms NOEC: 1.4mg/L (Fish)
		ECHA registration dossier
12.2	Persistence and degradability	The product is biodegradable.
		Toluene Readily biodegradable.
		Propan-2-ol Readily biodegradable.

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12.3	Bioaccumulative potential	The product has low potential for bioaccumulation.
	Toluene	The substance has low potential for bioaccumulation.
	Propan-2-ol	The substance has low potential for bioaccumulation.
12.4	Mobility in soil	The product is predicted to have high mobility in soil. May evaporate quickly.
	Toluene	The substance has high mobility in soil. Partially soluble.
	Propan-2-ol	The substance has high mobility in soil. Miscible with water.
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None Known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	This material and its container must be disposed of as hazardous waste. Dispose of wastes in an approved waste disposal facility. Waste classification according to Directive 2008/98/EC (Waste Framework Directive): HP 3 Flammable HP 4 Irritant — skin irritation and eye damage HP 5 Specific Target Organ Toxicity/Aspiration Toxicity HP 10 Toxic to reproduction HP 14 Ecotoxic
13.2	Additional information	Dispose of contents in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

14.1	UN number	ADR/RID	IMDG	IATA/CAO
14.2	UN proper shipping name	UN 1993	UN 1993	UN 1993
		FLAMMABLE LIQUID	FLAMMABLE LIQUID	FLAMMABLE LIQUID
		N.O.S (Toluene / 2-Propanol)	N.O.S (Toluene / 2-Propanol)	N.O.S (Toluene / 2-Propanol)
14.3	Transport hazard class(es)	3	3	3
14.4	Packing group	II	II	II
14.5	Environmental hazards	Not classified	Not classified as a Marine Pollutant.	Not classified
14.6	Special precautions for user	See Section: 2		
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	No information available.		

SECTION 15: REGULATORY INFORMATION

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

15.1.1 EU regulations

Use restriction according to REACH annex XVII, no.:

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

Directive 2010/75/EU on industrial emissions

Restrictions of occupation:

To follow:

Product: Entry number:: 3
Toluene: Entry number:: 3 40, 48, 75
Propan-2-ol: Entry number:: 3 40, 75
P5c

Solvent VOC-value:

VOC-value %W/W	Temperature	Method
100	20 °C	calculated

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.

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

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GB Regulations

GB Mandatory classification and labelling list

Toluene: Listed

Propan-2-ol: Listed

15.1.2 National regulations

Germany

Water hazard class (WGK)

strongly hazardous to water (WGK 3)

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Not applicable – V1.0

References: Existing Safety Data Sheet (SDS),

Harmonised Classification(s) for 2-Propanol (CAS No. 67-63-0) and Toluene (CAS No. 108-88-3).

Existing ECHA registration(s) for 2-Propanol (CAS No. 67-63-0) and Toluene (CAS No. 108-88-3).

GB Mandatory classification and labelling list: 2-Propanol (CAS No. 67-63-0) and Toluene (CAS No. 108-88-3).

Literature References:

1. Ono A, Sekita K, Ogawa Y, Hirose A, Suzuki S, Saito M, Naito K, Kaneko T, Furuya T, Kawashima K, Yasuhara K, Matsumoto K, Tanaka S, Inoue T and Kurokawa Y, 1996, Reproductive and developmental toxicity studies of toluene II. Effects of inhalation exposure on fertility in rats, Journal of Environmental Pathology Toxicology and Oncology 15, 9-20

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Compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

Classification of the substance or mixture. The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain	Classification procedure
Flam. Liq. 2; H225	Flash Point [Open cup] Test Result/ Boiling Point (°C)
Asp. Tox. 1; H304	Threshold Calculation, Expert judgement, Worst case assumption
Skin Irrit. 2; H315	Threshold Calculation
Eye Irrit. 2; H319	Threshold Calculation
STOT SE 3; H336	Threshold Calculation
STOT RE 2; H373	Threshold Calculation
Repr. 2; H361d	Threshold Calculation
Aquatic Chronic 3; H412	Summation Calculation

Legend

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AND	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived no effect level
EU	European Union
EC	European Community
ECHA	European Chemicals Agency
EN	European Standard
EC50	Effect concentration; 50 %
EL50	Effective loading rate; 50 %
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC50	Lethal concentration at which 50% of the population is killed
LD50	Lethal dose at which 50% of the population is killed
LTEL	Long term exposure limit

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NOAEC	No observed adverse effect concentration
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TWA	Time Weighted Average
STEL	Short term exposure limit
vPvB	very Persistent and very Bioaccumulative
UN	United Nations
VOC	Volatile organic compounds

Hazard classification / Classification code:

Flam. Liq. 2; Flammable Liquid, Category 2
Asp. Tox. 1; Aspiration hazard, Category 1
Skin Irrit. 2; Skin corrosion/irritation, Category 2
Eye Irrit. 2; Eye Irritation, Category 2
STOT SE 3; Specific target organ toxicity — single exposure, Category 3
Repr. 2; Reproductive toxicity, Category 2
STOT RE 2; Specific target organ toxicity — repeated exposure, Category 2
Aquatic Chronic 3; Hazardous to the aquatic environment, Chronic , Category 3

Hazard Statement(s)

H225: Highly flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H361d: Suspected of damaging the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.
H412: Harmful to aquatic life with long lasting effects.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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Annex to the extended Safety Data Sheet (eSDS) - Not applicable

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