

COSHH ASSESSMENT — SOLDERING FLUX AND SOLDER

COSHH — SUBSTANCE ASSESSMENT

Plumbing and electrical soldering — fluxes, solders and the fume from both

KD-COSHH-SO-037 Rev A0

COSHH 2002 reg 6: exposure is assessed BEFORE the work starts; reg 7: it is prevented, or adequately controlled, working down the hierarchy — eliminate, substitute, engineer, then RPE last. This assessment covers the substance family below; it is completed against the actual products (their safety data sheets alongside) and the actual task, and briefed to the people exposed. The current workplace exposure limit, where one applies, comes from EH40 and the SDS on the day — write it in below.

1 ASSESSMENT DETAILS

SITE / PROJECT

TASK ASSESSED

PRODUCTS IN USE (SDS TO HAND)

ASSESSED BY

DATE

2 THE SUBSTANCE — WHAT IT IS AND WHAT IT DOES

WHERE IT IS MET: Soldering copper pipework and electrical joints: acid and rosin fluxes, lead-free and, on old systems, leaded solder. The exposure is flux fume at the joint, held close to the face in tight spaces, and the flux itself on skin.

THE HARM: Rosin (colophony) flux fume is a recognised cause of occupational asthma; acid fluxes burn skin and eyes and their fume irritates. Leaded solder adds lead to the hands — soft-soldering temperatures make little fume, so the route is hand to mouth, and hygiene is the control. The torch adds a fire risk and the hot works permit.

3 EXPOSURE — ROUTES, PEOPLE, LIMIT

Inhalation — dust, fume, vapour or mist

Ingestion — hand to mouth

Skin and eye contact

Others affected — adjacent trades, occupiers, public

WHO IS EXPOSED, HOW LONG, HOW OFTEN

WEL / LIMIT (FROM EH40 AND THE SDS TODAY)

4 CONTROLS — IN THE REG 7 HIERARCHY, ALL IN PLACE BEFORE WORK STARTS

Lead-free solder and low-fume flux as the default; leaded solder only where the specification requires it and then under the lead assessment

Head kept out of the fume; extraction or ventilation for repeated joints in enclosed spaces

Gloves and eye protection for flux handling; flux washed off skin and off the joint

No eating, drinking or smoking with flux or solder on the hands

Torch work under the hot works permit — the joint in a joist void is exactly where fires start

SITE-SPECIFIC CONTROLS FOR THIS TASK

RPE WORN (TYPE, AND FACE-FIT WHERE TIGHT-FITTING)

OTHER PPE FOR THIS SUBSTANCE

5 HEALTH SURVEILLANCE, HYGIENE AND FIRST AID

Respiratory symptoms in regular solderers investigated — rosin asthma is preventable and RIDDOR-reportable when diagnosed.

6 STORAGE, SPILLAGE AND DISPOSAL

Flux and solder in original containers; acid flux away from tools and metals it corrodes; empties to the hazardous stream per the SDS.

WHERE IT IS STORED ON THIS SITE

SPILL RESPONSE AT THE WORK

7 SIGN-OFF AND BRIEFING

The assessment is complete when the people exposed have been briefed on it. Reassess when the product, task, quantity or location changes — not on an anniversary.

ASSESSOR — PRINTED NAME

SIGNATURE

DATE

WORKFORCE BRIEFED (DATE / RECORD REF)

R REVISION HISTORY

Every revision of this document, and every review that found nothing to change. The revision on the front of this sheet is the one you are holding — check kubitdocs.com for the current one before use.

Rev	Date	Class	What changed	Authorised by
D0	2026-09-01	first-issue	First issue.	— not yet approved —
A0	2026-09-01	review	Approved for issue by the author. Content unchanged from the reviewed draft; the draft status strip is removed. No independent third-party review has been carried out.	Author — director, UK principal contractor, SMSTS. Not an independent review.

Class: first-issue · material (the law, a control, a field or the scope changed — past buyers are notified) · editorial (wording or layout only) · review (checked, nothing changed) · withdrawal. Revision prefix D = draft, not approved and not for sale; A = approved for issue by the person named, on the date shown.