

COSHH ASSESSMENT — WELDING FUME

COSHH — SUBSTANCE ASSESSMENT

Arc welding, oxy-fuel and disc cutting of steel — including galvanised and coated

KD-COSHH-WF-009 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: Arc and MIG welding, oxy-fuel cutting and hot grinding of structural steel — worst indoors, in enclosures, and on galvanised, painted or contaminated steel where the coating joins the fume.

THE HARM: All welding fume is classified carcinogenic — the days of "it is just mild steel" are over. Galvanised steel adds metal-fume fever; some coatings add worse. Acute effects range from irritation to metal-fume fever; long-term, lung cancer and neurological effects from some alloys.

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

Coatings removed from the weld zone before welding — grinding back galvanising and paint beats breathing it

Local exhaust ventilation (fume extraction) for indoor welding as the default control, positioned at the plume, checked and maintained

RPE in addition wherever LEV cannot capture the plume — face-fitted FFP3 as minimum, powered air for sustained indoor work

Position matters: head out of the plume, work upwind outdoors

Adjacent workers protected or excluded — the plume does not respect trade boundaries

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

Health surveillance for regular welders — lung function and questionnaires; metal-fume fever symptoms recorded and investigated, not shrugged off.

6 STORAGE, SPILLAGE AND DISPOSAL

Gas cylinders upright, secured, valves protected; fume extraction filters changed per the manufacturer with RPE worn.

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	2026-08-31	first-issue	First issue.	— not yet approved —
D1	2026-08-31	material	Actions the internal H&S director review. Lead reframed under CLAW 2002 and ACOP L132 with the COSHH reg 5 disapplication stated and limits prompted from CLAW; the silica harm line corrected to the defensible after-asbestos formulation; titles shortened so the header band prints in full.	— not yet approved —
A0	2026-08-31	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.