



OUTPUT 06 — COSHH INDEX

● FOR APPROVAL

BAI-COSHH-CDV-COAT-001 · REV 01

COSHH Index

Substances on site, hazard class, controls, PPE and disposal — linked to the task sequence and competency matrix. **Six substances trigger mandatory health surveillance.**

CLIENT	SITE	WORK TYPE	PROGRAMME
Highways Renewal Partners · Tier 1 maintainer	Caldicot Viaduct M48 over Severn corridor · NP26	Bridge coatings Strip, prime, build, finish · 1,800 m ²	12 weeks Containment scaffold + spray

AI-ASSISTED This COSHH index was generated from the materials specification in the Output 01 Intake against Built AI's substance hazard library. Manufacturer SDS for each item attached to the project record. Health surveillance and training requirements pre-flagged. **Final approval rests with the competent occupational health adviser before mobilisation.**

10 SUBSTANCES ON SITE	6 HIGH- HAZARD ITEMS	4 HEALTH SURVEILLANCE REQ	7 TRAINING REQ	10 SDS ON FILE
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HEALTH SURVEILLANCE — REQUIRED FOR 4 SUBSTANCES

The following exposures trigger pre-employment, periodic and post-employment health surveillance under the Control of Substances Hazardous to Health Regulations 2002 (COSHH) and the Control of Lead at Work Regulations 2002 where applicable:

- **Isocyanate exposure** (S03 polyurethane top coat) — pre-employment lung function, periodic spirometry, immediate medical review on respiratory symptoms.
- **Lead exposure** from existing bridge coatings disturbed during S10 abrasive blasting — pre/periodic blood lead testing per CLAW 2002.
- **Solvent exposure** (S01 / S02 / S03 / S06) — periodic biological monitoring during sustained spray campaigns.
- **Skin sensitisers** (S01 / S03 / S04) — periodic skin checks and review on dermatitis symptoms.
- **Respiratory sensitisers** (S03 isocyanates) — symptom-based review at any reported respiratory complaint.

Substances on site

Two-pack zinc-rich epoxy primer

Zinc-rich, solvent-based, high build · spray-applied

S01
DANGER

GHS



4 HAZARDS

SUPPLIER	Hempel — Hempadur Zinc 17360
HAZARD CLASS	Flammable liquid Cat 3 · Skin sensitiser Cat 1 · STOT-RE Cat 2 · Aquatic Acute 1
CONTROLS	Local exhaust ventilation, controlled spray booth, no smoking/hot works during application; isolate spray-painting zones from other operatives.
PPE	Air-fed RPE (BS EN 14594), Type 5/6 spray suit, butyl gloves, full-face protection, hearing protection during spray.
STORAGE	Cool dry store, segregated from oxidising agents; max 1,000 L on site, banded; daily stock check.
DISPOSAL	Empty containers retained for hauler collection; not to UFW; hazardous waste consignment notes required.
TRAINING	REQ
HEALTH SURVEILLANCE	REQ

Two-pack high-build epoxy intermediate

Polyamide-cured epoxy, MIO pigmented, build coat

S02
DANGER

GHS



4 HAZARDS

SUPPLIER	Jotun — Jotamastic 87
HAZARD CLASS	Flammable liquid Cat 3 · Skin/Eye irritant · STOT-SE Cat 3 (respiratory irritation) · Aquatic Chronic 2
CONTROLS	Spray application within enclosure, LEV, no naked flames, area earthed during decanting; no concurrent hot works.
PPE	Air-fed RPE, Type 5/6 spray suit, nitrile/butyl gloves, eye protection.
STORAGE	Cool dry store, segregated; max 1,000 L on site, banded.
DISPOSAL	Empty containers to hazardous waste hauler; off-spec material to licensed disposal.
TRAINING	REQ
HEALTH SURVEILLANCE	ADV

Polyurethane top coat (aliphatic)

Aliphatic polyurethane finish · brush, roller or spray · isocyanate component

S03

ANGER

GHS



4 HAZARDS

SUPPLIER

International — Interthane 990

HAZARD CLASS

Flammable Cat 3 · Resp sensitiser Cat 1 (isocyanates) · Skin sensitiser Cat 1 · Aquatic Chronic 2

CONTROLS

Mandatory air-fed RPE during spray; substitute brush/roller where specified; isolate work area; no untrained personnel to enter; isocyanate-only PPE.

PPE

Air-fed positive-pressure RPE (NOT FFP3), full Type 5/6 suit, butyl gloves, full face/head cover, post-task showering.

STORAGE

Sealed in original containers, segregated from primer activator; max 500 L on site.

DISPOSAL

Empty containers to hazardous waste hauler; symptomatic ops to occupational health.

TRAINING

REQ

HEALTH SURVEILLANCE

REQ

Polyamine activator / hardener

Curing agent for epoxy systems · highly reactive · used in stoichiometric ratio

S04
DANGER

GHS



3 HAZARDS

SUPPLIER

Various — supplied with main pack

HAZARD CLASS

Skin Corr 1B · Eye Damage 1 · Skin sensitiser Cat 1 · STOT-SE Cat 3

CONTROLS

Decant under LEV, no skin contact, eye-wash station within 10 m, dedicated mixing bay segregated from other ops.

PPE

Chemical splash goggles + face shield, butyl gloves, chemical-resistant apron, hard hat with face shield for decanting.

STORAGE

Sealed containers, cool dry store, segregated from epoxy resins until use; banded.

DISPOSAL

Off-spec or contaminated material to hazardous waste hauler — NEVER mix discarded resin with hardener.

TRAINING

REQ

HEALTH SURVEILLANCE

ADV

Surface preparation acid wash

Phosphoric acid-based etch wash · pre-coating prep on bare steel · wipe-applied

S05
DANGER

GHS



2 HAZARDS

SUPPLIER

Multiple suppliers — proprietary

HAZARD CLASS

Skin Corr 1B · Eye Damage 1

CONTROLS

Local PPE during application, application by hand/cloth only — no spraying; eye-wash at point of use; dedicated cleaning station.

PPE

Acid-resistant gloves, chemical splash goggles, apron, long sleeves; hand wash immediately if contact.

STORAGE

Sealed containers, cool dry store; small quantities only on bridge deck — main bulk in laydown.

DISPOSAL

Diluted to neutral pH before disposal as trade effluent under permit; or to hazardous waste hauler.

TRAINING

REQ

HEALTH SURVEILLANCE

ADV

Solvent cleaner / brush wash (aromatic)

Xylene-based solvent · used for spray equipment cleaning · highly flammable

S06

DANGER

GHS



4 HAZARDS

SUPPLIER

Various trade suppliers

HAZARD CLASS

Flammable Cat 2 · Asp tox Cat 1 · STOT-SE Cat 3 · Aquatic Chronic 2

CONTROLS

Use only in dedicated cleaning bay with LEV, no naked flames within 5 m, earthed receiving container, fire extinguisher at hand.

PPE

Type 5/6 suit, butyl gloves, eye protection, FFP3 cartridge RPE for short exposures only — air-fed for prolonged use.

STORAGE

Flame-proof solvent cabinet, max 50 L on site, contained in bunded tray, away from oxidisers.

DISPOSAL

Used solvent collected for licensed hauler — NEVER to drain or surface water.

TRAINING

REQ

HEALTH SURVEILLANCE

REQ

Rust inhibitor / mill scale converter

Phosphoric acid + tannins · spot treatment of light surface rust before priming

S07
WARNING

GHS



2 HAZARDS

SUPPLIER

Various trade suppliers

HAZARD CLASS

Skin Irrit Cat 2 · Eye Irrit Cat 2A

CONTROLS

Brush application only, ventilated workings, no skin contact, eye-wash within reach.

PPE

Nitrile gloves, eye protection, long sleeves.

STORAGE

Sealed containers, cool dry store, normal flammable goods provisions.

DISPOSAL

Empty containers to commercial waste; full containers to hazardous waste hauler.

TRAINING

ADV

HEALTH SURVEILLANCE

NO

Polyurethane sealant / mastic

One-part PU sealant for joint sealing post-coating

S08
WARNING

GHS



1 HAZARDS

SUPPLIER

Multiple suppliers — Sikaflex equivalent

HAZARD
CLASS

Skin sensitiser Cat 1 · Eye Irrit Cat 2

CONTROLS

Standard application — gun applied; ventilated workings; no skin contact during cure.

PPE

Nitrile gloves, eye protection.

STORAGE

Cool dry store, sealed cartridges; no specific bunding.

DISPOSAL

Cured material to general waste; uncured tubes to hazardous waste.

TRAINING

ADV

HEALTH
SURVEILLANCE

NO

Concrete repair mortar

Pre-bagged structural repair mortar for spalling concrete repair

S09
WARNING

GHS



1 HAZARDS

SUPPLIER

Various — Sika MonoTop equivalent

HAZARD
CLASS

Skin Irrit Cat 2 · Eye Irrit Cat 2A · STOT-SE Cat 3 (respiratory dust)

CONTROLS

Mix in dedicated wetting station with LEV; FFP3 RPE during dry handling only.

PPE

FFP3 RPE during decanting/mixing, nitrile gloves, eye protection, long sleeves.

STORAGE

Dry store, sealed bags; pallet-stored on bridge deck during use only.

DISPOSAL

Cured offcuts to inert/construction waste; bag waste to commercial waste stream.

TRAINING

ADV

HEALTH
SURVEILLANCE

NO

Compressed air — abrasive blasting (silica)

Garnet abrasive blasting media — substitute for silica sand · used for surface preparation

S10
WARNING

GHS



2 HAZARDS

SUPPLIER	Multiple — abrasive supplier
HAZARD CLASS	STOT-SE/RE Cat 3 (respiratory dust) · physical injury hazard — HIGH VELOCITY
CONTROLS	Sealed enclosure / containment screen; specialist blasting operative only; air-fed RPE mandatory; segregation from all other ops.
PPE	Air-fed positive-pressure helmet RPE, blast suit, gauntlets, ear defenders, steel toecap.
STORAGE	Sealed bulk bags; pre-blasting check of media for silica content (must be <1% per HSE WIS L153).
DISPOSAL	Spent media swept and removed to licensed disposal — assess for surface lead contamination from existing coatings.
TRAINING	REQ
HEALTH SURVEILLANCE	REQ

CRITICAL REMINDER — ISOCYANATE EXPOSURE

The S03 polyurethane top coat contains isocyanates — a Schedule 3 reportable disease under RIDDOR if occupational asthma develops. **Air-fed RPE is mandatory during spray application; FFP3 cartridge RPE alone is NOT acceptable.** No operative may apply this product without prior occupational health clearance and recorded training. Spray bay segregation must be maintained — no other operatives within the segregation envelope during application.

COSHH INDEX — BUILT AI

Author confirmation

APPROVER — OCCUPATIONAL
HEALTH

I confirm the COSHH index reflects the materials in the approved specification. SDS for each substance are attached to the project record. Health surveillance and training requirements pre-flagged for OH and Training to action.

AUTHOR + ROLE

SIGNATURE + DATE

Health surveillance approval

As OH adviser I confirm that pre-employment, periodic and post-employment health surveillance arrangements have been put in place for the substances triggering REQ status. No operative will be permitted on site without recorded clearance.

OH ADVISER + QUALIFICATION

SIGNATURE + DATE

ABOUT THIS DOCUMENT

RAMS Factory™ Output 06 — COSHH Index. Prepared by Built AI for bridge coating works at Caldicot Viaduct. Demonstration document — all client and site details fictionalised. SDS to be attached to project record before mobilisation.

OUTPUT 06 OF 11

01-05 Intake & method

→ 06 COSHH Index

07-11 Compliance & QA

DOCUMENT CONTROL

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Revision · 01

Date · 02-05-2026

Author · Built AI

Status · For approval