

Checklist no. 1

Before you pour

SET UP YOUR WORKSPACE

- ☐ Work surface completely cleaned and free of dust
- ☐ Protective cover laid out (silicone mat or chemical-resistant sheeting)
- ☐ At least 3 ft (1 m) of clear space around your work area
- ☐ Surroundings protected from splashes (drop cloths in place, newspaper removed)
- ☐ Good work lighting switched on (at least 1,000 lux)
- ☐ Camera set up before you start mixing

FINISH PREPARING YOUR PROJECT

- ☐ Project fully planned (design, technique, color scheme)
- ☐ All materials you need ready (e.g., silicone molds, objects to embed, wood bases)
- ☐ Materials clean, dry, and at room temperature

OPTIMIZE VENTILATION

- ☐ Ventilation set up for your products and tasks (section 7.4)
- ☐ Airflow checked: away from you, not toward you
- ☐ Cross-ventilation set up (air inlet and outlet defined)
- ☐ Fans positioned correctly (exhaust to the outside)
- ☐ Drafts in the pouring area kept to a minimum (so dust doesn't swirl up)

GET YOUR MATERIALS READY

- ☐ Room temperature measured: 68°F (20°C) is ideal, or as stated in the TDS
- ☐ Humidity confirmed below 60%
- ☐ Resin and hardener stored at room temperature for at least 12 hours, ideally 24 (section 7.3); material temperature checked
- ☐ Product labels checked (batch, expiration date, safety data sheet available)
- ☐ Viscosity checked (warmed if needed in cooler temperatures)
- ☐ Mix ratio double-checked and precision scale ready
- ☐ Pigments and additives prepared and set out in the right order
- ☐ Enough tools ready (several spatulas, cups, stir sticks)
- ☐ Timer or stopwatch within reach to keep track of pot life

PUT ON YOUR PPE

- ☐ Long hair tied back and secured
- ☐ Jewelry, watches, and loose clothing removed
- ☐ Long-sleeved work clothes or a protective apron on
- ☐ Respirator on, with filters chosen for your products and task (chapter 4) and within their service life
- ☐ Respirator seal checked (negative- and positive-pressure checks)
- ☐ Safety goggles on and checked for fog-free vision
- ☐ First pair of nitrile gloves on
- ☐ Second pair of nitrile gloves over the first for longer contact, cleanup, and large pours

BE READY FOR EMERGENCIES

- ☐ IPA cleaner and absorbent material within reach
- ☐ Absorbent cloths or pads ready at hand
- ☐ Eyewash bottle, at least 17 fl oz (500 ml), within 10 seconds' reach; running water nearby for a 15-minute rinse
- ☐ Emergency numbers posted where you can see them or saved in your phone

Checklist no. 2

While you work

MIXING SAFELY

- ☐ Timer started (to keep track of pot life)
- ☐ Components weighed accurately at the specified ratio; scale tared correctly
- ☐ Poured slowly and carefully to avoid splashes
- ☐ Mixed thoroughly for 3 minutes (3-3 mixing method)
- ☐ Poured into a clean, dry, reusable mixing cup (double-cup method)
- ☐ Mixed again for another 3 minutes with a timer
- ☐ Residue from the bottom and sides of the cup carefully worked in
- ☐ Air bubbles avoided with calm, circular movements
- ☐ Temperature of the mix monitored

POURING SAFELY

- ☐ Even, controlled pour, pour depth respected
- ☐ Surface not touched while pouring
- ☐ Pouring area kept free of dust and particles
- ☐ Pour kept under watch while you work; in an emergency, your safety comes first
- ☐ Pouring in layers: correct waiting times observed
- ☐ Heat buildup watched closely
- ☐ Tools placed on a silicone mat or in a tray after use
- ☐ Spills cleaned up right away so nothing leaves marks or sticks
- ☐ Air bubbles removed deliberately, e.g., with a heat gun, but without overheating

KEEP CHECKING

- ☐ Gloves changed immediately at any sign of wear or holes
- ☐ Ventilation running continuously and effectively
- ☐ Drafts controlled so dust doesn't swirl up
- ☐ If in doubt, stop working immediately and review your measures

Checklist no. 3

After you pour

RIGHT AFTER POURING

- ☐ WORK SURFACE CHECKED SYSTEMATICALLY FOR DRIPS, SPLASHES, AND SPILLS
- ☐ RESIN AND HARDENER CONTAINERS CLOSED AIRTIGHT RIGHT AWAY AND STORED SAFELY
- ☐ TOOLS (SPATULAS, STIR STICKS, ETC.) PLACED IN CLEANING SOLUTION
- ☐ MIXING CUPS: LEFTOVER MATERIAL EITHER SET ASIDE TO CURE OR DISPOSED OF CORRECTLY AS HAZARDOUS WASTE
- ☐ TOOLS AND SURFACES CLEANED ONLY WITH PRODUCTS SUITABLE FOR EPOXY RESIN (E.G., DIPON IPA CLEANER), NEVER ON SKIN, NO HOUSEHOLD CLEANERS

MANAGE YOUR WASTE PROPERLY

- ☐ LIQUID RESIN AND HARDENER LEFTOVERS COLLECTED SEPARATELY IN LABELED CONTAINERS THAT CAN BE CLOSED
- ☐ CONTAMINATED DISPOSABLES (CLOTHS, PAPER, WOODEN SPATULAS) SORTED ACCORDING TO LOCAL REGULATIONS
- ☐ REUSABLE TOOLS CLEANED RIGHT AWAY; NEVER SEAL A WARM OR STILL-REACTING MIXTURE IN A CONTAINER (SECTION 10.5)
- ☐ CURED LEFTOVERS COLLECTED SEPARATELY (THEY CAN BE REUSED, E.G., AS FILLER OR PRACTICE PIECES)
- ☐ EMPTY CONTAINERS KEPT SEPARATE BY TYPE FOR HAZARDOUS WASTE DISPOSAL
- ☐ ABSORBENT MATERIAL (E.G., CAT LITTER OR A COMMERCIAL ABSORBENT, NOT SAWDUST) CONTAMINATED WITH RESIN? → TREAT IT AS HAZARDOUS WASTE!

SECURE YOUR WORKSPACE

- ☐ VENTILATION LEFT RUNNING FOR AT LEAST 2 HOURS, LONGER IF THE PRODUCT REQUIRES IT
- ☐ ACCESS TO THE ROOM RESTRICTED WHILE THE RESIN CURES (OFTEN 24 TO 48 HOURS; CHECK THE TDS)
- ☐ CURING AREA PROTECTED FROM DUST, INSECTS, AND CONTAMINATION
- ☐ ROOM TEMPERATURE MONITORED FOR THE BEST POSSIBLE CURE

CLEAN UP AND DISPOSE OF PPE

- ☐ FIRST PAIR OF GLOVES PEELED OFF CAREFULLY WITHOUT TOUCHING YOUR SKIN
- ☐ SECOND PAIR OF GLOVES ALSO DISPOSED OF, OR, IF YOU USE THICKER NITRILE GLOVES, CLEANED AND DRIED
- ☐ CLOTHES CHANGED OR STORED SEPARATELY (IF YOU SUSPECT CONTAMINATION)
- ☐ HANDS AND FOREARMS WASHED THOROUGHLY WITH MILD SOAP AND LUKEWARM WATER
- ☐ RESPIRATOR AND GOGGLES TAKEN OFF LAST, ONCE YOU HAVE LEFT THE WORK AREA; FILTERS CHECKED VISUALLY
- ☐ FACE WASHED; GLASSES OR EYE PROTECTION CLEANED WITH A SUITABLE CLEANER

KEEP RECORDS

- ☐ MATERIALS, AMOUNTS, AND MIX RATIOS NOTED
- ☐ SPECIAL FEATURES, PROBLEMS, OR IDEAS FOR IMPROVEMENT WRITTEN DOWN
- ☐ CURE TIME AND ROOM CONDITIONS RECORDED
- ☐ IN-PROGRESS AND FINAL RESULTS PHOTOGRAPHED
- ☐ LESSONS LEARNED NOTED FOR FUTURE PROJECTS

Checklist no. 4

Special safety checklist

BASIC FIRE PROTECTION

- ☐ FIRE EXTINGUISHER (SUITABLE FOR THE RISKS PRESENT; FOAM MAY SUIT CLASS A/B RISKS IN SMALL ROOMS, BUT CHECK THE LABEL FOR ELECTRICAL SUITABILITY; IN THE US, LOOK FOR AN ABC-RATED MULTIPURPOSE EXTINGUISHER)
- ☐ FIRE BLANKET
- ☐ SMOKE DETECTOR (MAINTAINED REGULARLY)
- ☐ CARBON MONOXIDE DETECTOR (RECOMMENDED IF YOU USE GAS TORCHES OR FUEL-BURNING HEATERS)
- ☐ ESCAPE ROUTE PLAN POSTED WHERE YOU CAN SEE IT
- ☐ ESCAPE ROUTE KEPT CLEAR
- ☐ FLAMMABLE MATERIALS STORED IN SUITABLE SAFETY CONTAINERS
- ☐ NO OVERLOADED POWER STRIPS
- ☐ VENTILATION AND, IF NEEDED, EXTRACTION
- ☐ ELECTRICAL DEVICES INSPECTED REGULARLY
- ☐ NO OPEN FLAMES NEAR VOLATILE VAPORS (WATCH OUT FOR BUNSEN BURNERS, GAS TORCHES, TEA LIGHTS)
- ☐ DEVICES NO LONGER NEEDED SWITCHED OFF AND UNPLUGGED; VENTILATION AND CURING CONTROLS LEFT RUNNING

EMERGENCY KIT

- ☐ EYEWASH BOTTLE (STERILE, E.G., SALINE SOLUTION)
- ☐ BURN GEL OR HYDROGEL DRESSING (HEAT BURNS: COOL UNDER COOL RUNNING WATER FOR 20 MINUTES; CHEMICAL BURNS: RINSE AND GET MEDICAL HELP RIGHT AWAY; DON'T PULL OFF RESIN STUCK TO THE SKIN)
- ☐ DRESSINGS (STERILE GAUZE PADS, GAUZE BANDAGES, ADHESIVE BANDAGES)
- ☐ DISPOSABLE GLOVES
- ☐ SKIN CLEANSING WIPES
- ☐ EMERGENCY NUMBERS AT HAND (US: 911 AND POISON HELP 1-800-222-1222; UK: 999 AND NHS 111; ELSEWHERE, YOUR LOCAL EMERGENCY NUMBER)
- ☐ TWEEZERS, SCISSORS
- ☐ PERSONAL MEDICATIONS (E.G., FOR ALLERGIES, ASTHMA)
- ☐ IF VAPORS MAKE YOU FEEL UNWELL: STOP WORK, MOVE TO FRESH AIR, AND SEEK MEDICAL ADVICE RIGHT AWAY
- ☐ IF RESIN OR HARDENER IS SWALLOWED: DON'T INDUCE VOMITING; FOLLOW SECTION 4 OF THE SDS. US: CALL POISON HELP (1-800-222-1222) RIGHT AWAY, OR 911 IF LIFE-THREATENING. UK: CALL 999 OR GO TO A&E; NHS 111 CAN ADVISE IF YOU'RE UNSURE WHETHER IT'S HARMFUL

PPE CHECKLIST

- ☐ SKIN PROTECTION: ALWAYS WEAR NITRILE GLOVES AND REPLACE THEM REGULARLY
- ☐ RESPIRATORY PROTECTION: HALF-FACE OR FULL-FACE RESPIRATOR WITH THE RIGHT FILTERS
- ☐ PROTECTIVE CLOTHING: LONG SLEEVES, HEAVY FABRICS
- ☐ SAFETY GOGGLES AGAINST SPLASHES
- ☐ KEEP VENTILATION RUNNING AS DESCRIBED IN SECTION 7.4
- ☐ WORK AREA CLEAN, UNNECESSARY MATERIALS REMOVED