

Qisda Management of Hazardous Substances and Chemicals

Items	Hazardous Substances	Chemical Management
Future Reduction Targets (Next 3-5 Years)	Target Year: 2026.12.11 & 2027.06.30 Withdrawal of the following hazardous substances Target Value: ◆ 6(a)-I Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight ◆ 6(a)-II Lead as an alloying element in batch hot-dip galvanised steel components containing up to 0,2 % lead by weight ◆ 6(b)-I Lead as an alloying element in aluminium containing up to 0,4 % lead by weight, provided it stems from lead-bearing aluminium scrap recycling ◆ 6(b)-II Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight ◆ 6(b)-III Lead as an alloying element in aluminium casting alloys containing up to 0,3 %	● Target Year: 2029 ● Target Value: Starting from 2025, annual chemical usage will be reduced by 2% per year.

	lead by weight provided it stems from lead-bearing aluminium scrap recycling	
Reduction of Hazardous Substances or Chemicals in the Past Three Years	2022.07.21 withdrawal of the following hazardous substances: ◆ 6(b)-II-Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight 2023:NA 2024: NA 2025:NA 2026 (on-going) ◆ 6(a)-I Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight ◆ 6(a)-II Lead as an alloying element in batch hot-dip galvanised steel components containing up to 0,2 % lead by weight ◆ 6(b)-I Lead as an alloying element in aluminium containing up to 0,4 % lead by weight, provided it stems from lead-bearing aluminium scrap recycling	1. Plant S5: Discontinued use of lead-free PCB cleaner; fully replaced with ethanol. 2. Plant S3: Discontinued P188 cleaning agent for MI carrier mask cleaning. 3. Plant DQ9: ① Reduction of lead-free PCB cleaner ② Reduction of conventional ink ③ 100% replacement of solvent-based paint (completed in 2021) 4. Plant S1: Discontinue use of cleaning agents E5611, DCT23, and UP1900 in 2025.

	◆ 6(b)-II Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight ◆ 6(b)-III Lead as an alloying element in aluminium casting alloys containing up to 0,3 % lead by weight provided it stems from lead-bearing aluminium scrap recycling	
Actions Taken in the Past Three Years to Reduce Hazardous Substances or Chemicals	Qisda has consulted the ECHA public website to check for "substances nearing expiration and entering/completing evaluation but not yet updated to RoHS regulations," focusing on the clauses related to Qisda to ensure timely implementation. A year before the deadline in the evaluation report, Qisda confirms the implementation of relevant clauses and notifies suppliers through the GPMSA website to make changes to provide compliant parts.	Plant S5: Replaced highly volatile lead-free PCB cleaner with low-volatility ethanol. • Lead-free PCB cleaner VOC: 749 g/L, monthly usage approx. 500 kg. • Anhydrous ethanol VOC: 677 g/L, monthly usage approx. 100 kg. ① Centralized maintenance station bottle management: shifted from 1 bottle per station to multi-station sharing. ② Streamlined stations, issued per workstation, and collected after shifts.

		Plant S3: ① Low-VOC cleaner EC6008 (VOC: 54 g/L) replaced high-VOC cleaner P188 (VOC: 108 g/L). ② Low-VOC cleaner EC6008 (VOC: 54 g/L) replaced high-VOC cleaner C2700 (VOC: 72 g/L). Plant DQ9: ① Lead-free PCB cleaner usage reduced by 60% (replaced with dry ice cleaning). ② Ink usage reduced by 80% (replaced with UV inks). ③ Solvent-based paint usage reduced by 100% (replaced with water-based paint in 2021). Plant S1: Replaced high-VOC cleaners with low-VOC cleaners: ① R700 (VOC: 49 g/L) replaced DCT23 (VOC: 281 g/L) and UP1900 (VOC: 290 g/L).
--	--	---

		② JB-608 (VOC: 62.4 g/L) replaced E5611 (VOC: 87 g/L).
Collaborations with External Units in the Past Three Years	Qisda' s Suppliers	Qisda' s Suppliers
Risk Assessment Methods	Suppliers provide 3rd party lab test reports through the GPMSA website to confirm compliance with regulations.	Following the Chemical Control Banding (CCB) system, confirm the impact of the chemicals used on the environment and human health.