

SAFE USE INSTRUCTION

According to Reg. EC N° 1907/2006 (REACH) Art.33

This Safe use instruction satisfies the requirement to communicate information on substances in articles as per Article 33 of Regulation (EC) N°1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation Authorisation and Restriction of Chemicals. This Safe use instruction is mandatory if the substance in an SVHC identified in accordance with REACH ART. 59(1) in a concentration above 0,1% weight/weight

SUBSTANCE: Cadmium

EC number: 231-152-8, CAS number: 7440-43-9

Cadmium is a Substance of very high concern (SVHC) included in the Candidate list for Authorization, due to these properties of concern:

- Carcinogenic - Article 57(a)
- Specific target organ toxicity after repeated exposure - Article 57(f)

1. SAFE USE CONDITIONS

Normal use	Stable under normal use; no expected hazardous emissions.
Handling Assembly Disassembly	It is recommended that appropriate Personal Protective Equipment (PPE) to be used when handling, assembling/disassembling articles though these activities may cause some very minor transfer of residue onto unprotected skin
Plating mechanical removal	Any mechanical removal of cadmium plating shall be done with an adequate ventilation/other engineering controls to prevent release/to control dispersion from source towards the worker and using the appropriate PPE. Attention: mechanical removal techniques may generate hazardous particulates that must be disposed in accordance with applicable laws and regulations
Plating chemical removal	Any chemical removal of cadmium plating shall be done with an adequate proper ventilation/other engineering controls to prevent release/to control dispersion from source towards the worker and using the appropriate PPE. Attention: stripping may use of chemical techniques that can generate hazardous waste that must be disposed in accordance with applicable laws and regulations
Disposal	It is recommending to participate in end-of-life take back programs if available or reuse and recycle material when possible. Otherwise disposal shall be made according to applicable regulations



2. EXPOSURE CONTROL

Engineering Controls	<p>Technical conditions and measures at process level (source) to prevent release/to control dispersion from source towards the worker:</p> <ul style="list-style-type: none">• Process enclosures or semi-enclosures where appropriate.• Local exhaust ventilation/dust collection in the work areas with potential dust generation, dust capturing and removal techniques to limit airborne dust concentrations to the lowest level <p>Dust control: cadmium in dust needs to be measured in the workplace air (static or individual) according to national regulations.</p> <p><i>For more details, please refer to “Management of the risk related to the chronic occupational exposure to cadmium and its compounds” (ICdA 2018.2 revision):</i> https://www.cadmium.org/doc/news_18/2018-2-icda-guidance-document.pdf</p>																																																
Personal Protective Equipment (PPE)	<p>Skin: Protective clothing to avoid contact with exposed skin may include coveralls, gloves and head/face covering. Disposable/single use protective clothing is recommended.</p> <p>Eyes: Safety glasses and/or goggles are recommended.</p> <p>Respiratory protection: respiratory protection devices with adequate efficiency levels shall be worn</p> <p><i>For more details, please refer to “Management of the risk related to the chronic occupational exposure to cadmium and its compounds” (ICdA 2018.2 revision):</i> https://www.cadmium.org/doc/news_18/2018-2-icda-guidance-document.pdf</p>																																																
Monitoring	<p>An exposure assessment comply should be conducted to determine if the exposure level for each task is lower than:</p> <ul style="list-style-type: none">• for workplace referring to EU value Occupational Exposure Limits (OEL): <table><tr><th rowspan="2">Region</th><th rowspan="2">Legislation</th><th colspan="3">Long-term Exposure Limit (LT-EL) Values</th><th colspan="3">Short-term Exposure Limit (ST-EL) Values</th><th rowspan="2">Skin Designation</th><th rowspan="2">Dermal Sensitization</th><th rowspan="2">Respiratory Sensitization</th><th rowspan="2">Work Sector</th><th rowspan="2">Effective Date</th><th rowspan="2">Expiration Date</th></tr><tr><th>mg/m³</th><th>ppm</th><th>l/ml</th><th>mg/m³</th><th>ppm</th><th>l/ml</th></tr><tr><td>European Union</td><td>CMD - Carcinogens and Mutagens Directive</td><td>0.001</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>11 July 2027</td><td></td></tr><tr><td>European Union</td><td>CMD - Carcinogens and Mutagens Directive</td><td>0.004</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>11 July 2027</td></tr></table>	Region	Legislation	Long-term Exposure Limit (LT-EL) Values			Short-term Exposure Limit (ST-EL) Values			Skin Designation	Dermal Sensitization	Respiratory Sensitization	Work Sector	Effective Date	Expiration Date	mg/m³	ppm	l/ml	mg/m³	ppm	l/ml	European Union	CMD - Carcinogens and Mutagens Directive	0.001										11 July 2027		European Union	CMD - Carcinogens and Mutagens Directive	0.004											11 July 2027
Region	Legislation			Long-term Exposure Limit (LT-EL) Values			Short-term Exposure Limit (ST-EL) Values									Skin Designation	Dermal Sensitization	Respiratory Sensitization	Work Sector	Effective Date	Expiration Date																												
		mg/m³	ppm	l/ml	mg/m³	ppm	l/ml																																										
European Union	CMD - Carcinogens and Mutagens Directive	0.001										11 July 2027																																					
European Union	CMD - Carcinogens and Mutagens Directive	0.004											11 July 2027																																				
Additional requirement	For workers adequate procedure shall be available and training must be provided																																																

GE Avio s.r.l. disclaims liability for any personal injury, property or other damages of any nature whatsoever whether special, indirect, consequential or compensatory, directly or indirectly resulting from the publication, use or reliance on this safe use instruction.
 GE Avio s.r.l. also makes no guarantee or warranty as to the accuracy or completeness of any information published herein.

Revision - 1
 Edited by - Enrica Santucci
 Date - September 2020