

Preparation description: **Cast Iron**

**General Information:**

Cast Iron is iron or a ferrous alloy, which has been heated until it liquefies, and is then poured into a mould to solidify. The alloy constituents affect its colour when fractured. White cast iron has carbide impurities that allow cracks to pass straight through. Grey cast iron contains graphite flakes that deflect a passing crack and initiate countless new cracks as the material breaks. Carbon (C) and silicon (Si) are the main alloying elements, with the amount ranging from 2.5 – 5% and 1 – 3%, respectively. During the production process, high-carbon content and (mould) release agents could leave contaminants on the cast iron surface.



There are two cleaning processes depending on the condition of the surface. Grinding or blasting systems need to be used for a sustainable coating system. The surface to be painted must be dry, clean and free from any contamination, e.g. corrosion, oil, grease or release agents.

It is very important to use the correct PPE (personal protective equipment) such as gloves, glasses, mask, and protective overalls. Only use appropriate tools and equipment, and certified grinding media.

Use slower evaporating cleaners to avoid condensation on the surface, do not apply any paint products to objects which are subject to the influence of moisture. Recoating must be executed without any undue delay (within 60-90 minutes), with direct lacquers or primer and topcoat.



**Cleaning**

Products: RS605/607/609 Universal Reducer or AD690 Degreaser

	to refine  1x	Use the recommended products with a brush or soaked cloth/rag to remove the residues on the surface.  If the contamination level is too high, repeat the cleaning step.
	wipe dry	With a clean dry cloth, wipe the dissolved contaminant from the surface, repeat until the surface is dry.




**Sanding**

Products: P80 – P180 – P240 grinding (eccentric) machine

	Beam technology (optional)	Recommended methods are: dry ice blasting or possible blasting medium for the cast iron surface. Choose the right pressure depending on the thickness, hardness and construction of the cast iron object.
	sanding	<p><b>Cast iron</b> has to be sanded after the cleaning process with an eccentric grinding machine (&lt;5mm rotary lift unit), P80 – P180 sanding disk and aspirator.</p> <p>For direct lacquers use a P180 – P240 sanding disk (to avoid sanding marks).</p>


**Cleaning**

Products: RS605/607/609 Universal Reducer or AD690 Degreaser

	<p>cleaning with pressured air</p>	<p>The sanded/scuffed surface must be cleaned with compressed air so that loose abrasive particles which were not vacuumed by the suction device are removed.</p>
	<p>to refine 1x</p>	<p>Use the recommended products with a soaked cloth/rag to remove the residues on the surface.</p>
	<p>wipe dry</p>	<p>With a clean dry cloth, wipe the dissolved contaminant from the surface, repeat until the surface is dry.</p>

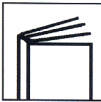
**Coating**

Depending on the recommendation, such as a HVLP/LVLP/RP spray gun or low-high pressure pump.

	<p>to coat</p>	<p>Application of direct to metal topcoats, primer, primer surfaces with basecoat and clearcoat or topcoat.</p>
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**Please select a suitable paint system from the “System Technique” datasheets.**

**Further Information**

		<p>For more information see:</p> <ul style="list-style-type: none"> <li>• Information at CRS (ICRIS, COINS, Valspar refinish)</li> <li>• “Purple Box” starter pack information sheets</li> <li>• Information on our web page (<a href="http://www.valsparindustrialmix.com">www.valsparindustrialmix.com</a>)             <ul style="list-style-type: none"> <li>○ Technical Information</li> <li>○ Technical Data Sheets</li> </ul> </li> </ul>
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This preparation description has been developed in order to enable professional users to maintain high quality standards for Valspar (Light) Industrial Mix and Commercial vehicle systems.

**Precautions:** During application all health and safety measures referring to the use and handling of coating materials are to be observed, e.g. existing regulations issued by the trade associations in the chemical industry. For health and safety information, please refer to the Material Safety Datasheet (MSDS). Information is also available on our web page: [www.valsparindustrialmix.com](http://www.valsparindustrialmix.com)

**Note:** The products listed are intended only for the professional user and for professional use. All recommendations given in writing on the use of our products to customers or users are non-binding and do not give reasons for secondary obligations resulting from the bill of sale. Every care is taken to ensure that the technical information provided is accurate and up to date according to the present state of knowledge in science and our experience. These recommendations do not, however, exempt the customer from independently checking whether our products are suitable for the intended purpose. The durability of the coating system largely depends on thorough preparation of the surface. Furthermore, our uniform terms of delivery and payment are applicable.

With the publication of this Technical Data Sheet, all previous versions regarding this product are no longer valid.