RCM

LABORATORY OF INDUSTRIAL CHEMISTRY

ColorRip

SIMPLY REMOVES THE PAINT

«In order to regain technological leadership we need to thoroughly to choose the priorities. The candidates are comprised of such industries as... high-tech chemistry, nano-technologies.»

President of the Russian Federation, V.V. Putin,
January 20, 2012

www.erciem.ru

Surface preparation for application of a new coating

Today the most popular method for cleaning off the old paints and lacquers (PNL) before applying a new coating is sand (grit) blasting which has a number of sufficient drawbacks:

- because of the intensive due to the intensive generation of dust, the process is not environmentally friendly and measures must be taken to protect personnel and the environment;
- complex work procedure (the necessity of special fixtures and benches, etc.);
- impossibility of treating surfaces with complex shapes, caverns, inner surfaces etc.;
- rapid corrosion of the cleaned metal (especially taking into account the necessity of washing it with water after treatment).

Surface preparation for application of a new coating

The second most widespread among the methods of surface preparation for new coating application is the use of so-called "paint removers" - chemical substances designed for the removal of old PNL.

The drawbacks inherent in the currently existing types or groups of "paint removers are":

- long operational time;
- lack of universality with regard as to both to PNL and surface types;
- reactivity to metal;
- toxicity to personnel.

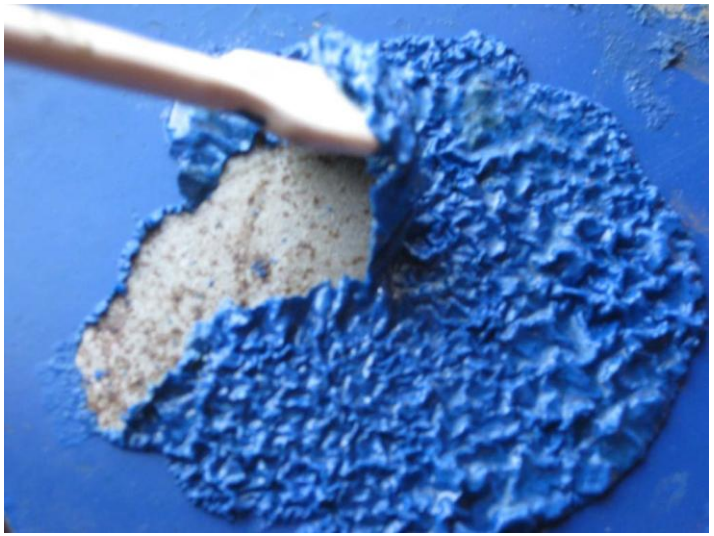
**The solution we present – the chemical ColorRip –
is free from all the drawbacks mentioned above,
it is environmentally friendly, it saves power resources,
time and labor costs.**

ColorRip

The proposed solution: ColorRip™

Colorrip is a moderate viscous composition designed for the effective removal of all kinds of paint and lacquer coatings from surfaces of various types (metal, wood, brick, stone, concrete, various plastics, glass, porcelain, ceramics etc.):

- it can be applied by any application method (using a brush, roller, tamponing, submerging, spray, deposition);
- operating time is on average 1-15 minutes, for especially hard and multi layer coatings - up to 30 minutes;
- the old PNL is easily removed by palette-knife or stream of water;
- ensures the protection of metal from corrosion;
- the composition is efficient even at sub zero temperatures;
- it maintains useful properties even after freezing down to –30°C.



The use of ColorRip allows you to get rid of the sand/grit blasting operation which is environment unfriendly, labor and cost intensive.

ColorRip™: the advantages

ColorRip is an innovative substance designed to eliminate all kinds of paint and lacquered materials (PNL) from any surface.
In comparison with market analogues (MA) ColorRip possesses the following advantages:

1. Operation time is much shorter in comparison with any other MA.
2. Some MA are just not suitable for certain PNL. ColorRip works with all well-known ones.
3. Some MA while removing PNL also affects the metal - "eating it up" at the same time. ColorRip is not only interact with metals, it also temporarily inhibits bare metal from corrosion.
4. The majority of MA removes PNL only from metal. ColorRip also removes PNL from concrete, bricks, wood, ceramics, porcelain, stone, the majority of plastic as well as from other surfaces.
5. The majority MA are based on the principle of liquefying PNL for the washing to follow. ColorRip operates on the principle of "ripping" PNL from the surface, ensuring the possibility of dry elimination off (using a palette-knife, for instance).
6. The majority of MA belong to hazard Class 3. ColorRip is a substance of the 4th (the lowest) hazard Class and accordingly it is more environmentally friendly and safe.

Technical characteristics of ColorRip™

Metal attack	None. Inert to metals
Metal protection	Protects metals by means of phosphate conversion, contains corrosion inhibitors
Temperature range of application	Recommended temperature range of application is from -15°C up to +40°C
Methods for removing an old coating	By spray of air or water (Karcher, for instance), pallet-knife, tampon, sponge, napkin, rags
Surface types	Any, including vertical surfaces and surfaces at negative angles
Surface material types which ColorRip eliminates PNL from	Metal, stone, concrete, bricks, wood, glass, porcelain, ceramics, a wide range of plastics
Containers	50 ml, 120 ml, 300 ml, 600 ml, 1 l, 5 l, 10 l, 20 l

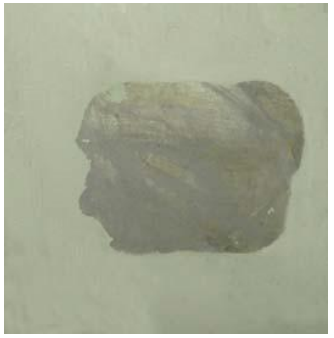
Technical characteristics of ColorRip™

It is available in two variants	- Moderate viscous liquid - Jellylike
Consumption	300-500 ml/m2
Exposure time	Standard time from 1 to 15 minutes
Method of application	Using a brush, roller, tamponing, submerging, spray, deposition
Effectively removes	Epoxy, epoxy-ester, poly-ester, poly urethane, polyacrylic ester, powder, oily, acrylic, alkyd, melamine, urea formaldehyde, perchlorvinyl, oil-polymer, latex and other paints, lacquers and primers
Hazard Class	Class 4 – low-hazard as per GOST 12.1.007-76
Appearance	Colorless opalescent liquid with high thixotropic properties; jellylike composition possesses moderate viscosity

ColorRip™: application results

Results of applying ColorRip to various types of paint and lacquer coatings (PNL), exposure time is 7-12 min

Hood from VAZ 2105 car
(year of manufacture 1982)



PC processor block
(powder paint)

Alkyd automotive
enamel

Acrylic construction
paint

Penta phthalic enamel
PF-115

Metal shelf rack
(powder paint)

In order to demonstrate the efficiency of ColorRip, all samples submitted were treated with the same ColorRip composition, without modifications for each type of PNL

FEDERAL ACCREDITATION SERVICE
ROSACCREDITATION

TESTING LABORATORY POLYMERTEST, LLC

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website: www.polimortest.ru
Physical address: 63, Lesnoi Av., St. Petersburg, 194100
Phone/Fax: +7 (812) 295-34-48,702-48-34, e-mail pl2006@yandex.ru
Certificate No. ROSS RU.0001.21HI04
(date of incorporation into the Rosaccreditation register 09.09.2014)

"APPROVED"
Head of testing laboratory
E.V. Bolshakova

TEST CERTIFICATE No. 2-SG-358-16

April 15, 2016

1. Customer:	"RCM" LLC, 123007, Russia, Moscow, 2nd Silikatny pass, 14, block 5
2. Object being tested:	Substance to remove paint and lacquer coatings, "ColourRip"
3. Manufacturer:	RCM LLC, 123007, Russia, Moscow, 2nd Silikatny pass, 14, block 5
4. ID used:	Unified sanitary-epidemiological requirements (SanEiG) approved by resolution No. 229, chapter II, section 19
5. Quantity of tested samples:	1 l
6. Sample code:	358T
7 Test date:	21.03.2016 - 15.04.2016
8. Test conditions:	Temperature (21 ±2)°C, humidity (60 ±5)%

1. The certificate covers only the samples which have been tested.
2. The certificate in full or in part cannot be copied or reproduced without the approval of the Testing Laboratory Polymertest LLC.

The Test Certificate No. 2-SG-358-16 dated April 15, 2016 is printed in 3 copies. *Page 1 of 2*

TABLE OF TESTS TO CERTIFICATE No. 2-SG-358-16

Date of sample collection: 17.03.2016 Amount collected: 358T.
Sample denomination: Substance to remove paint and lacquer coatings, "ColourRip"
Scope of application: as per the manufacturer's recommendation
Conditions of the tests modelling:
- the tests were conducted on warm blooded, reproductive laboratory animals of both sexes: white mice of 20-22 g weight, white rats of 180-200 g weight and guinea pigs of 250-300 g weight. **Tests results:**

No.	Determined indicators	Units of measurement	Value and tolerance of indicators	Reg. Doc. for testing method	M samples	Test results
1	2	3	4	5	6	7
1	Acute toxicity when introduced into the stomach. $DL_{50\ m/m}$ (wh. mice, wh. rats)	mg/kg	Hazard Class 2-4, $15 \le DL_{50} < 5000$	MU 2163-80	358T	Hazard Class 4, $DL_{50} < 5000$
2	Acute toxicity when inhaled in saturated concentrations by volatile grade (wh. mice)		Not regulated	MU 2196-80	358T	Irritates the mucous membranes of the upper airways
3	Resorptive effect through the skin (wh. mice)		Not regulated	MU 2102-79	358T	Resorptive effect is not manifested
4	Irritant effect on skin - one time - repeatedly (g. pigs)	rate	0-8	MU 2196-80	358T	1.5 3.5
5	Irritant effect on the conjunctiva of the eyes (g. pigs)	rate	0- 10	MU 2196-80	358T	4.0
6	Sensitizing effect (g. pigs)	rate	Not regulated	TU 1.1.578-96	358T	Sensitizing effect is not manifested

Conclusions:
- as per the acute toxicity indicator, the substance related to Hazard Class 4, low hazard substance as per GOST 12.1.007-76;
- the substance has an irritant effect on the skin and the mucous membranes of the eyes;
- the volatile components, released from the substance, irritate the mucous membranes of the upper airway of the laboratory animals;
- Resorptive effect and sensitizing effect were not manifested.

The tested sample corresponds to the Unified SanEiG requirements dated 28.05.2010, No.299, chapter II. section 19. with regard to tested indicators. The test certificate covers only the samples which have been tested.

Head of the toxicology department
and sanitary-chemical testing, Cand. of chemical sciences _____ L. I. Petrova

The Test Certificate No. 2-SG-358-16 dated April 15, 2016 is printed in 3 copies. *Page 2 of 2*

The environmentally friendly substance ColorRip has been confirmed by all the necessary research and testing as per GOST 12.1.007-76

Certificate of state registration

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ

ДЕПАРТАМЕНТ ПРОФИЛАКТИКИ ЗАБОЛЕВАНИЙ И ГОСУДАРСТВЕННОГО САНИТАРНО-ЭПИДЕМИОЛОГИЧЕСКОГО НАДЗОРА
МИНИСТЕРСТВА ЗДРАВООХРАНЕНИЯ КЫРГЫЗСКОЙ РЕСПУБЛИКИ
КЫРГЫЗСКАЯ РЕСПУБЛИКА, БИШКЕК

(уполномоченный орган государства-члена Евразийского экономического союза, руководитель уполномоченного органа, наименование административно-территориального образования)

СВИДЕТЕЛЬСТВО
о государственной регистрации
№ KG.11.01.09.008.E.004749.11.18 от 29.11.2018 г.

Продукция:
Препарат для удаления лакокрасочных покрытий "КолорРип". Изготовлена в соответствии с документами: ТУ 2319-004-13618842-2018. Изготовитель (производитель): ООО "ЭРСИЭМ", 140100, Московская область, Раменский район, город Раменское, улица Карла Маркса, дом 5, здание Ткацкое производство №1, этаж 2, комната 4, Российская Федерация. Адрес производства: 140100, Московская область, Раменский район, город Раменское, улица Карла Маркса, дом 5, здание Ткацкое производство №1, Российская Федерация. Получатель: ООО "ЭРСИЭМ", 140100, Московская область, Раменский район, город Раменское, улица Карла Маркса, дом 5, здание Ткацкое производство №1, этаж 2, комната 4, Российская Федерация.

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соответствует
Единым санитарно-эпидемиологическим и гигиеническим требованиям к товарам, подлежащим санитарно-эпидемиологическому надзору (контролю) Глава II Раздел 19

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для удаления лакокрасочных материалов с поверхностей металлов, бетона, древесины, устойчивых к воздействию компонентов препарата.

Настоящее свидетельство выдано на основании (перечислить рассмотренные протоколы исследований, наименование организации (испытательной лаборатории, центра), проводившей исследования, иные рассмотренные документы):
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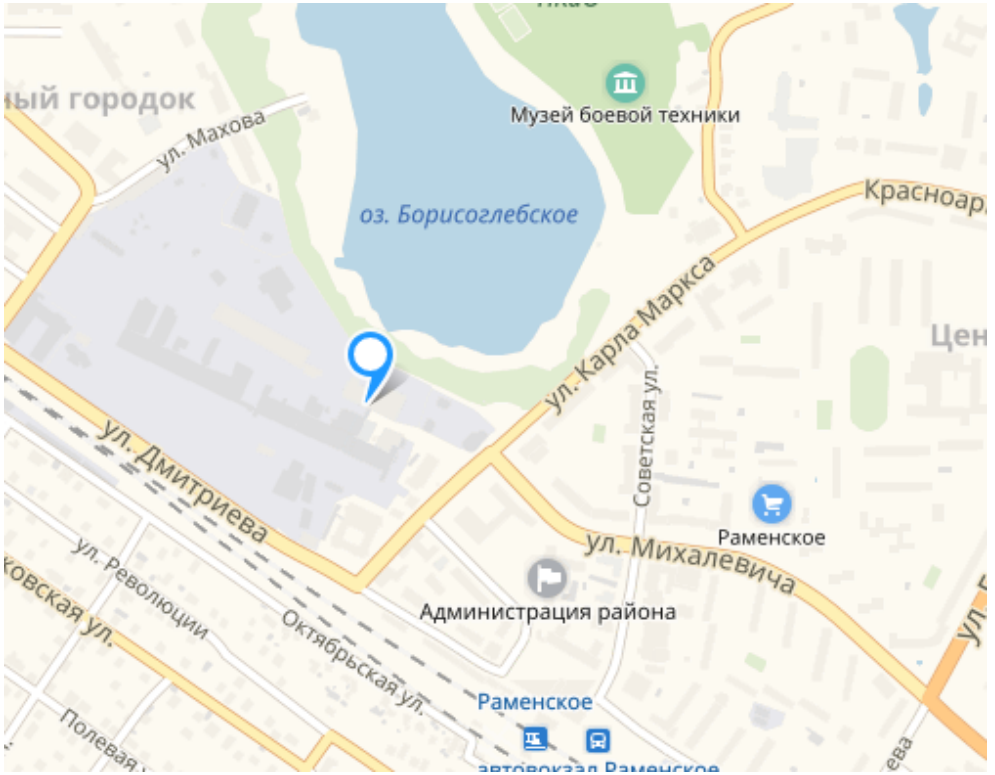

ColorRip