

1 REFERENCES

PART A (POL) [RESIN]	CDRE4215R	CDRE740	PART B (ISO) [HARDNER]
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2 DESCRIPTION

GENERAL	FREE MERCURY Clear Coating 2Component PU system 100% reactive
INTERNAL/EXTERNAL	Suitable for outdoor applications
USE	Casting resin to coat and decorate emblems, stickers and labels
FIELDS OF APPLICATION	Promotional and gifts, toys, household appliances, motorbike, automotive

3 REAGENT PROPERTIES

	PART A (POL) [RESIN]	PART B (ISO) [HARDNER]
Viscosity at 25°C , cPs , Brookfield (IM 1406)	600:700 26/01/2018	1000:1300 07/03/2018
Density , g/cm³ , Internal method	1,035 26/01/2018	1,075 15/11/2017
Relative Umidity , % , Karl Fischer titration	<0,04 26/01/2018	N/D

4 REAGENT MIXING RATIO

	PART A (POL) [RESIN]	PART B (ISO) [HARDNER]
Volumetric Ratio	100	100
Weight Ratio	96,28	100
%	50	50
%	49,05	50,95

5 FINAL POLYMER PROPERTIES

Gel time of the mixture (100 gr.@25°C) , mm,ss , Internal method	12,3/14,3	26/01/2018
Gel time of the mixture (20 gr.@23°C) , mm,ss , Internal method	40/42	26/01/2018
Hardness @ 1 sec. , Shore D , Internal method	60 +/- 2,5	26/01/2018
Hardeness @ 15 sec. , Shore D , Internal method	49 +/- 2,5	26/01/2018
Reaction viscosity after 150 seconds , cPs , Internal method	550/750	26/01/2018
Reaction viscosity after 300 seconds , cPs , Internal method	1000/1300	26/01/2018
Reaction viscosity after 600 seconds , cPs , Internal method	2200/2500	26/01/2018

6 SHELF LIFE

CDRE4215R	8 months in original package, stored at room temperature from 5 to 25°C
CDRE740	6 months in original package, stored at room temperature from 5 to 25°C

7 REFERENCE STANDARDS

REACH	Compliant	We declare that every component used in the formulation of these products complies with European Standard 1907/2006 (REACH) because all the components have been duly registered.
SVHC	Compliant	We declare that the formulation of these products does not include substances listed in the SHVC list updated on 12/01/2017
ROHS/WEEE	Compliant	We declare that the mercury content in the obtained polymer is lower than the limit imposed by Directive 2002/95/EC i.e. 1000ppm. Further more We declare that there are no components subject to constraints on the present normative, as listed in the latest issue of the annex II dated 24/06/2015
ELV	Compliant	
IMDS	Registered	We declare that the reagents here listed have been registered/not registered on the IMDS databank
EPA TSCA	Compliant	All ingredients listed in the formulation and production of the present resin are listed within the EPA's Toxic Substances Control Act list 8(b).
EN 71	Compliant	We declare that the final polymer in itself meets all the requirements stated by the EN 71 standard.
PAH	Compliant	According to EU Regulation 1272/2013 amending the Annex XVII to REACH regulation EC 1907/2006 on the restriction of polycyclic aromatic hydrocarbons (PAH), PAH are not intentionally added therefore to the best of our present knowledge we consider they are not present
Dodd-Frank Conflict Minerals Provision	Compliant	Conflict Minerals, which the U.S. Securities and Exchange Commission (SEC) has defined as Gold, Coltan (Columbite-Tantalite), Cassiterite, wolframite or their derivatives (tin, tantalum, or tungsten) are not contained in and are not necessary to the production of Color Dec Resins
Phthalates	Compliant	We declare that the final polymer meets all the requirements stated by European Directive 2005/84/EC relating to restriction on the marketing and use of certain dangerous substances and preparations (phthalates in toys and childcare articles)
Persistent Organic Pollutants	Compliant	We declare that the formulation of this products does not include substances listed in the European Directive 2012/519/EU (amending Regulation EC 850/2004 of the European Parliament and of the Council) on persistent organic pollutants
Swedish Act 2016:1067	Compliant	We declare that the formulation of this products does not include substances listed in the Swedish Act 2016:1067
Biocidal products	Compliant	We declare that the formulation of this products does not include substances listed in the European Regulation 528/2012 concerning the making available on the market and use of biocidal products
EU Regulation 2017/852	Compliant	The present document is valid as declaration of conformity with the European regulation 2017/852 of 17/05/2017 about mercury content in the formulation of the present products
California Proposition 65	Compliant	We declare that the formulation of these products does not include/include substances listed in the California Proposition list updated on 29/12/2017

8 NOTES

Any information or suggestions related to the products of the present Data Sheet represents the best information available to us and we believe them to be reliable. They should not, however, be considered as a control and are presented without any guarantee either express or implied.

This data sheet is only valid in conjunction with the latest edition of the corresponding Safety Data Sheet.

9 TECHNICAL SPECIFICATIONS

It is imperative that you test our products and information to determine to your own satisfaction whether our products and information are suitable for your intended uses and applications. Application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily done by us.

QUV exposure	Compliant	Still good after QUV exposure of 1500 hours following the SAE J2020 (Accelerated Exposure of Automotive Exterior Materials Using a Fluorescent UV and Condensation Apparatus): 8 hours of light using UVB lamps (usually at 0.48 W/m ² irradiance) at 70°C + 4 hours of condensation at 50°C
Artificial ageing Weatherometer	Compliant	The test, realised in conformity of the method RENAULT D27 1911 (02/95), produced positive results with the Delta E values lower than 2. The device used is a Weather O Meter ATLAS (black panel @80°C; humidity 50%; int. and ext. filters borosilicate S; Insolation continuously; Irrigation with 18
Climatic ageing	Compliant	The test realised in conformity with the method Renault 1309 (09/81) produced positive results resulting any degradation of mechanic al, physical or visible characteristics. Used for this test a Regulated climatic area and a Graduation of grey colours for the measures. The samples were exposed
Resistance to the chemical agents	Compliant	Resistance to the chemical agents, after 120 hours of total immersion, resulted very good for Water, Sea water, Sulphuric acid, Sodium hydroxide, Ethylene Glycol and Oil Elf 15W40. Good resistance to Chloridric acid and Ammonium hydroxide
Sensibility to scratching	Compliant	The test, realised in conformity with the method PSA D15 1211 (03/81), produced results included between 5 gr. and 20 gr. (Using scratching device type ERICHSEN 239 MI with summit angle of 90°, conic point in carbon steel, bend radius of the conic point 0,08 mm and magnifying glass measure 3)
Grit test	Compliant	The test, realised in conformity with the method Renault 1428 (10/83), produced results included between 24 min. and 34 min. using Grit machine with grit pistol (Cannon diameter 10 mm +/- 0,1 mm; Air injector diameter 4 mm; Cannon-piece distance 100 mm +/- 1 mm; Angle Cannon/piece
Shrinkage	Compliant	No shrinkage after 17 days at 80°C. The test was performed with 2 mm thickness samples rested 15 days at room temperature.
Temperature resistance	Compliant	There is no modification after constant exposure at temperatures included between -30 °C and +60 °C. One of our acceptance test passed after an exposure at 130 °C for 2h 30 minutes with no changes (the sample was placed on the front panel of a gas cooker)
Flame resistance method FMVSS 302	Compliant	This test has been realised in conformity with the test method FMVSS 302. (Federal Motor Vehicle Safety Standard).The test is conducted inside a test chamber where the test specimen is mounted horizontally. The exposed side of the test specimen is subjected to a gas flam from underneath. The

PRODUCT TECHNICAL DATA SHEETS

form vers. 3.0

COLORDEC

REVISION 08/01/2018

RESIN

CDRHGFP40702&CDR71022

PRINT DATE : 15/01/2018

1 REFERENCES

PART A (POL) [RESIN]	CDRHGFP40702	CDR71022	PART B (ISO) [HARDNER]
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2 DESCRIPTION

GENERAL	Clear Coating 2Component PU system 100% reactive free mercury
INTERNAL/EXTERNAL	Suitable for outdoor applications
USE	Casting resin to coat and decorate emblems, stickers and labels
FIELDS OF APPLICATION	Promotional and gifts, toys, household appliances, motorbike, automotive

3 REAGENT PROPERTIES

	PART A (POL) [RESIN]	PART B (ISO) [HARDNER]
Viscosity at 25°C , cPs , Brookfield (IM 1406)	550:700 30/09/2015	600:800 18/10/2013
Density , g/cm3 , Internal method	1,03 30/09/2015	1,06 21/10/2013
Relative Umidity , % , Karl Fischer titration	<0,04 30/09/2015	N/D

4 REAGENT MIXING RATIO

Volumetric Ratio	100	100
%	50	50
Weight Ratio	97,17	100
%	49,28	50,72

5 FINAL POLYMER PROPERTIES

Gel time of the mixture (100 gr.@25°C) , mm,ss , Internal method	9/11	30/09/2015
Gel time of the mixture (20 gr.@23°C) , hh,mm ,	24/27	15/12/2016
Hardness @ 1 sec. , Shore D , Internal method	72,5 +/- 2,5	16/03/2015
Hardeness @ 15 sec. , Shore D , Internal method	67,5 +/- 2,5	16/03/2015
Reaction viscosity after 150 seconds , cPs , Internal method	450/650	15/12/2016
Reaction viscosity after 300 seconds , cPs , Internal method	1400/1600	15/12/2016
Reaction viscosity after 600 seconds , cPs , Internal method	4200/4400	15/12/2016

6 SHELF LIFE

CDRHGFP40702	8 months in original package, stored at room temperature from 5 to 25°C
CDR71022	6 months in original package, stored at room temperature from 5 to 25°C

7 REFERENCE STANDARDS

REACH	Compliant	We declare that every component used in the formulation of these products complies with European Standard 1907/2006 (REACH) because all the components have been duly registered.
SVHC	Compliant	We declare that the formulation of these products does not include substances listed in the SVHC list updated on 12/01/2017
ROHS/WEEE	Compliant	We declare that the mercury content in the obtained polymer is lower than the limit imposed by Directive 2002/95/EC i.e. 1000ppm. Further more We declare that there are no components subject to constraints on the present normative, as listed in the latest issue of the annex II dated 24/06/2015
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