In accordance with Regulation (EU) 2020/878 Date of

preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 1 from 10

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product ID

REACTIVE PRIMER HARDENER WASH PRIMER 1:1 UFI: JTD0-C0T0-Q003-D2K4

1.2. Identified relevant uses of the substance or mixture and non-recommended uses

Hardener (component B) to cure the reactive primer. For professional use in automotive painting.

1.3. Safety Data Sheet Supplier Details

Enterprise RANAL Ltd.

Łódzka 3 42-240 Rudniki k. Częstochowy

Phone: +48 34 329 45 03 Fax: +48 34 320 12 16

Registration number: 000029202

Person responsible for preparing the safety data sheet: ranal@ranal.pl

Distributor: Ada Color Ltd. ul. 176 Brezovsko Shose Street, 4003 Plovdiv, Bulgaria Mobile: +359896663052 Tel: +35932940456 Fax: +35932940457

web: adacolor-bg.com

1.4. Emergency phone number

+48 34 329 45 03 (from 8.00 to 15.00)

Additional information: Bulgaria:

Toxicology Clinic at the Hospital for Active Treatment of Sick

Patients "N.I. Pirogov" Emergency phone number:

+359 02 9154 409 (during standard working hours except Saturdays and Sundays)

+359 02 9154 346 (continuous service)

SECTION 2: DESCRIPTION OF HAZARDS

2.1. Classification of the substance or mixture

The mixture is classified as hazardous in accordance with current regulations – see section 15 of the Map.

Classification 1272/2008/EC:

Current fire, category 3 - H226

Acute toxicity (oral), category 4 - H302 Corrosive/irritating effect on the

skin, category 2 - H315

Serious eye damage/eye irritation, category 1 - H318

Toxic effects on target organs - single exposure, category 3, narcotic effects - H336

Toxic effect on target organs - single exposure, category 3, irritant effect on the respiratory tract - H335

Harmful effects related to physicochemical properties, effects on human health*: No further information.

2.2. Label elements

Contains*: Butyl alcohol

Pictograms:



GHS02, GHS05, GHS07 * Warning word: Danger.

Phrases indicating the type of hazard (CLP):

Flammable liquid and vapors. H226 H302 It is harmful if swallowed.

H315 Irritates the skin.

It causes serious eye damage. H318

May cause irritation of the respiratory tract. H335

In accordance with Regulation (EU) 2020/878 Date of

preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 2 from 10

H336 It can cause feelings of drowsiness or dizziness.

Precautionary Phrases (CLPs):

P210 Store away from heat sources, hot surfaces, sources of sparks, open flames and other sources of ignition. Don't

smoke.

P261 Avoid inhaling vapour/dispersed liquid. P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P305+351+338 IN CASE OF CONTACT WITH EYES: Gently rinse with water for several minutes. Remove contact lenses, if any, and as

much as possible. Keep rinsing.

P312 In case of malaise, contact a doctor.

2.3. Other dangers

Does not contain PBT/vPvB substances ≥ 0,1% assessed in accordance with Annex XIII of REACH.*

The mixture does not contain substance(s) included in the list established in accordance with Art. 59 par. 1 of the REACH Regulation due to endocrine disrupting properties, or has not been identified as endocrine disruptor according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or in Commission Regulation (EU) 2018/605 in a concentration equal to or greater than 0.1% by weight. *

SECTION 3: COMPOSITION / INGREDIENT INFORMATION

3.1. Substances

Not applicable

3.2. Mixtures

Name of substance Concentration [% wg] Identification numbers Classification and designation

Butyl alcohol

~99%

WE: 200-751-6 CASE: 71-36-3 Zip code number: 603-004-00-6

Registration number: 01-2119484630-38-XXXX

Класификация 1272/2008/WE: Flam. Liq. 3, H226, Acute Tox. 4 (Перорален*), H302, STOT SE 3, H335, Skin Irritant. 2, H315, Eye Dam. 1,

H318, STOT SE 3, H336.

Phosphoric acid (V) 75%

<2%

WE: 231-633-2 CASE: 7664-38-2 Zip code number: 015-011-00-6

Registration number:01-2119485924-24-XXXX Classification

1272/2008/EC: unclassified*.

Specific concentration limits*: phosphoric acid(V) 75% CAS number: 7664-38-2

EU No: 231-633-2

Index number: 015-011-00-6REACH-number: 01-2119485924-24 $(10 \le C < 25)$ Skin irritation 2, H315 $(10 \le C < 25)$ Eye Irrit. 2, H319 $(25 \le C \le 100)$ Skin Corr. 1B, H314

Note B: Some substances (acids, bases, etc.) are placed on the market in the form of aqueous solutions of different concentrations and therefore these solutions require different classification and labelling, as hazards change at different concentrations. In Part 3, the headings with Note B are collectively designated as follows: 'nitric acid ... %'. In this case, the supplier must indicate on the label the percentage concentration of the solution. Unless otherwise specified, the percentage concentration is assumed to be calculated on the basis of a weight ratio.

The full meaning of the phrases indicating the type of threat is placed in section 16 of the map.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General instructions: Refer to section 11 of the Safety Data Sheet.

In accordance with Regulation (EU) 2020/878 Date of

preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 3 from 10

Respiratory tract:

If breathing is difficult, take the victim to fresh air and keep him at rest in a position comfortable for breathing .*

Skin:

In case of skin contamination, immediately remove all contaminated clothing and wash the contaminated skin with a large amount of water and soap. Rinse the skin under a stream of water/shower. In case of skin irritation or rash: Seek advice/seek medical attention. If skin irritation persists, consult a doctor. *

Eyes:

Gently rinse with water for several minutes. Remove contact lenses, if any, and as much as possible. Keep rinsing. Call a doctor immediately. In case of contact with eyes, immediately rinse with plenty of water and seek advice from a doctor.

Digestive system:

In case of ingestion: rinse the mouth. DO NOT induce vomiting. Call a doctor immediately. *

4.2. The most significant acute symptoms and effects occurring after a certain period of time

Money can cause feelings of drowsiness and dizziness.

Prolonged or repeated contact can cause skin dryness. * May cause eye irritation.*

4.3. Indication of the need for any emergency medical care and special treatment

Symptomatic treatment. *

SECTION 5: FIRE MEASURES

5.1. Fire extinguishers

Dust, foam resistant to alcohols, carbon dioxide, water mist. Do not use a strong stream of water. *

5.2. Particular hazards arising from the substance or mixture

In the event of a fire, carbon monoxide and other toxic gases may be formed.*

5.3. Tips for firefighters

Protection during firefighting*: Do not intervene without proper protective equipment. Self-contained, insulating respiratory protective apparatus. Full protective clothing.

SECTION 6: EMERGENCY DISCHARGE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For persons who are not part of the staff providing assistance:

Remove ignition sources. Ensure sufficient ventilation of the room. Avoid direct contact with the release substance. Avoid contact with skin and eyes. Personal protective equipment – section 8 of the card.

For people who provide assistance:

Do not intervene without proper protective equipment. See Section 8. *

6.2. Precautions to protect the environment

Avoid release into the environment. Do not allow it to get into surface water and sewage. Do not allow the product to enter groundwater, water bodies or sewage, even in small quantities.*

6.3. Methods and materials for restraint and cleaning

Cover the spilled/spilled product with non-combustible material, such as sand, earth, vermiculite. Assemble the product mechanically.**

6.4. Reference to other sections

Personal protective equipment – see section 8 of the Card. Waste treatment – see section 13 of the Map.

SECTION 7: OPERATION AND STORAGE

7.1. Precautions for safe operation

Precautions for safe operation

Ensure good ventilation in the workplace. Store away from heat sources, hot surfaces, sources of sparks, open flames and other sources of ignition. Don't smoke. Use only outdoors or in a well-ventilated area. Wear personal protective equipment.

Hygiene recommendations*:

Wash soiled clothes before reuse. Contaminated protective clothing should not be taken out of the workplace. Do not eat, drink or smoke while using the product. Wash your hands after each contact with the product.

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 4 from 10

7.2. Safe storage conditions, including incompatibilities

Technical means*:

Ground/connect the container and receiving equipment.

Terms and conditions of storage:

Store in a well-ventilated place. Store in a cool place. Store container tightly closed. *

7.3. Specific end-use(s)

There is no additional information. *

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

8.1. Control parameters

National values of the highest permissible concentrations in the working environment and permissible biological values*:

phosphoric acid(V) 75 % (7664-38-2)		
EU - Indicative Limit Value for Occupational Exposure (IOEL)		
Local name	Orthophosphoric acid	
IOEL STEL	2 mg/m³	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Poland - Highest permissible concentration in the workplace		
Local name	Phosphoric acid (V)	
NDS (OEL TWA)	1 mg/m³	
NDSCh (OEL STEL)	2 mg/m³	
Regulatory reference	Sg. OB. 2018 items 1286	
Butyl alcohol (71-36-3)		
Poland - Highest permissible concentration in the workplace		
Local name	Butane-1-ol (n-butyl alcohol)	
NDS (OEL TWA)	50 mg/m ³	
NDSCh (OEL STEL)	150 mg/m³	
Regulatory reference	Sg. OB. 2018 items 1286	

Recommended monitoring procedures*:

Monitoring method: EN 482. Job Exposure – General requirements for the characterization of chemical factor measurement procedures.

 $Formation \ of \ air \ pollutants*: \ No \ further \ information.$

DNEL и PNEC*:

Butyl alcohol (71-36-3)		
DNEL/DMEL (Workers)		
Long-term - local effects due to inhalation	310 mg/m³	
DNEL/DMEL (General Population)		
Long-term - systemic effects after ingestion	3,125 mg/kg body weight/day	
Long-term - local effects due to inhalation	55 mg/m³	
PNEC (Water)		
PNEC aqua (fresh water)	0.082 mg/l	
PNEC aqua (sea water)	0.0082 mg/l	
PNEC aqua (periodic, fresh water)	2.25 mg/l	

In accordance with Regulation (EU) 2020/878 Date of

preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 5 from 10

Butyl alcohol (71-36-3)		
PNEC (Sediment)		
PNEC Sludge (Fresh Water)	0,178 mg/kg dry matter	
PNEC sludge (seawater)	0,0178 mg/kg dry matter	
PNEC (Zemia)		
PNEC Soil	0,015 mg/kg dry matter	
NECP (STP)		
PNEC Wastewater Treatment Plant	2476 mg/l	

Risk Lane Management*:

There is no additional information.

8.2. Exposure control

Appropriate technical means of control:

Ensure good ventilation in the workplace. *

Personal protective equipment:

Personal protective equipment symbols*:







Eye protection: Safety glasses. *

Skin protection:

Suitable protective clothing (coated, impregnated fabrics).

Hand protection:

Protective gloves PN-EN 374-3 (viton, thickness 0.7 mm, penetration time >480 min.; nitrile rubber, thickness 0.4 mm, penetration time >30 min.)

Respiratory tract protection:

In case of insufficient ventilation, wear a suitable breathing apparatus: Gas mask with filter type A1/B1 (EN 14387). *

Thermal threats*:

There is no additional information.

Environmental Exposure Control:

Avoid release into the environment. *

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties*

Physical condition

Colour

Smell

Odor threshold:

Melting temperature

Freezing temperature

Boiling temperature

Flammability of materials*: Explosive properties:

Limits of explosiveness

Flash point

Self-ignition temperature

Decomposition temperature

Kinematic viscosity*:

liquid

achromatic

Characteristic*

34-46

does not apply

unavailable*

117,5°C

does not apply

no data *

% lower: 1.14 vol%, upper: 11.3 vol%

29°C 340°C

unavailable* does not apply

unavailable

In accordance with Regulation (EU) 2020/878 Date of

preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 6 from 10

Solubility (in water)

Partition coefficient n-octanol/water (Log Kow)0.88

pressure at temp. 20°C6,6 hPa

Vapor pressure at temp. 50°C *

Density

Relative Density *

Relative density of steam at temp. 20°C *

Characteristics of molecules *

Weak Vapor

unavailable approx. 0.8 g/cm3 (20°C) unavailable unavailable

does not apply

9.2. Other information

Information on physical hazard classes*: No data. Other safety features*:

No additional information.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is not reactive under normal conditions.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of dangerous reactions

There are no known hazardous reactions under normal conditions of use.* *

10.4. Conditions to avoid

Flammable product. Avoid the occurrence and accumulation of static electricity. Keep away from sunlight and heat sources.

10.5. Incompatible materials

Avoid contact with: strong acids, strong bases and strong oxidizing agents. *

10.6. Hazardous products in case of decay

Under normal conditions of storage and use, no hazardous decay products should be formed. Thermal decomposition can lead to the formation of: Carbon monoxide. Other toxic gases. *

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008*

Acute toxicity

Acute toxicity (oral): Harm by ingestion.

Acute toxicity (cutaneous): Unclassified (Based on available data, classification criteria not met) Acute toxicity (inhalation): Unclassified (Based on available data, classification criteria not met)

ATE Index*:

ATE CLP (oral): 505.051 mg/kg body weight

Butyl alcohol

LD50 (rat, oral) ≥ 2000 mg/kg Source: ECHA LD50: (rabbit, skins)3430 mg/kg Source: ECHA

Skin corrosion / irritation: Irritates the skin.

Serious Eye Damage/Eye Irritation: Causes eye damage.*

Respiratory or skin sensitization: May cause an allergic skin reaction. Germ cell mutagenicity: The mixture is not classified

as mutagenic. There are no data confirming the hazard class.

Carcinogenicity: The mixture is not classified as carcinogenic. There are no data confirming the hazard class.

Reproduction toxicity: The mixture is not classified as toxic for reproduction. There are no data confirming the hazard class. **Organ-Specific Toxicity (Specific Organ Toxicity) – Single exposure:** May cause drowsiness or dizziness. May cause irritation of

the respiratory tract.

Butyl alcohol (71-36-3)

Specific Organ Toxicity (Specific Organs) - Single Exposure

It can cause feelings of drowsiness or dizziness. May cause irritation of the respiratory tract.

Specific Organ Toxicity - Repeated Exposure: No data confirming the hazard class.

In accordance with Regulation (EU) 2020/878 Date of preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 7 from 10

phosphoric acid(V) 75 % (7664-38-2)		
NOAEL (oral, rat, 90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD guideline 422 (Combined multi-dose toxicity study with reproductive/developmental screening test)	
Butyl alcohol (71-36-3)		
LOAEL (oral, rat, 90 days)	500 mg/kg body weight Animal: rat	
NOAEL (oral, rat, 90 days)	125 mg/kg body weight Animal: rat	

Inhalation hazard: There are no data confirming the hazard class.

Butyl alcohol (71-36-3)	
Kinematic viscosity	3.641 mm ² /s

11.2. Information on other hazards

There is no additional information.

SECTION 12: ENVIRONMENTAL INFORMATION

There are no experimental data on this preparation. The assessment is made on the basis of data on the hazardous ingredients included in the composition of the preparation.

12.1. Toxicity

Hazard to the aquatic environment, short-term (acute)*: Not classified (Based on available data, classification criteria are not met). Aquatic hazard, long-term (chronic)*: Unclassified (Based on available data, classification criteria are not met). It does not undergo rapid degradation. *

phosphoric acid(V) 75% (7664-38-2)*		
EC50 - Crustaceans [1] > 100 mg/l Test organisms (species): Daphnia magna		
EC50 72h - Algae [1] 100 mg/l Test organisms (species): Desmodesmus subspicatus (former name: Scenedesmus subspicatus)		
Butyl alcohol (71-36-3)		
LC50 - Pisces [1]	1376 mg/l Source: ECHA	
EC50 - Crustaceans [1]	1983 mg/l Source: ECHA	
EC50 96h - Algae [1]	225 mg/l Source: ECHA	
NOEC (chronic) 4.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		

12.2. Durability and degradability

There is no data.

12.3. Bioaccumulative capacity

Partition coefficient n-octanol/water (Log Pow) Mixture: 0.88 Butyl alcohol (71-36-3): 0.9 (Source: HSDB)

12.4. Soil Portability

There is no additional information. *

12.5. Results of the assessment of PBT and vPvB values.

There is no data.

12.6. Endocrine disrupting properties *

There is no additional information.

12.7. Other adverse effects

There is no data.

SECTION 13: WASTE DISPOSAL

In accordance with Regulation (EU) 2020/878 Date of

preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 8 from 10

13.1. Waste treatment methods

Remove taking into account relevant local and official waste regulations - see point 15 of the Map.

Product residues:

Waste code: 08 01 11* Waste paints and varnishes containing organic solvents or other hazardous substances.

Do not dispose of in the sewer. Do not collect with household waste. Residues of the product in the package must be carefully removed and hardened using the appropriate component A (waste) from the kit. The hardened product is not hazardous waste.

WARNING: Solidify residues in small portions away from flammable items. During the chemical reaction, a large amount of heat is released!

Contaminated packaging:

Packaging containing product residues is hazardous waste. Waste code: 15 01 10*.

Packaging containing residues of hazardous substances or contaminated with them (e.g. plant protection products of I and II toxicity classes - very toxic and toxic). Do not collect with household waste.

Contaminated packaging must be handed over to persons authorised by the competent authority. collection, recovery or disposal of waste

SECTION 14: INFORMATION ON TRANSPORTATION

14.1. UN List Number or Identification Number 1120

14.2. Exact name of the consignment on the UN list

ADR: БУТАНОЛИ IMDG*: BUTANOLS IATA*: Butanols

Description of the transport document*: ADR: ООН 1120 БУТАНОЛИ, 3, III, (D/E) IMDG: UN 1120 BUTANOLS, 3, III (29°C c.c.)

IATA: UN 1120 Butanols, 3, III

14.3. Transport hazard class(s)



14.4. Packaging Group

14.5. Environmental hazards:

Pollution of the sea: No.

14.6. Special precautions for consumers Road

transport:

F1 Classification Code (ADR):

Limited quantities (ADR):5I

Provi

sions on joint packaging (ADR): MP19 Transport category (ADR):

3 Special Provisions on Carriage - Shipments: V12

30 1120

Orange signs:

Tunnel Transport Restrictions (ADR) Code: S/A

Sea transport.	
Special Regulations (IMDG):	223
Limited Quantities (IMDG):	5 L
No EmS (Fire):	F-E
EMS number (Spill):	S-D
Load Distribution Category (IMDG):	But

In accordance with Regulation (EU) 2020/878 Date of preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 9 from 10

Air transport*:

There is no data.

14.7. Maritime transport of bulk cargo according to International Maritime Organization instruments Not applicable

SECTION 15: INFORMATION ON THE REGULATORY FRAMEWORK

15.1. Substance- or mixture-specific safety, health and environmental legislation/legislation

EU regulations*:

- Annex XVII to the REACH Regulation (conditions for restrictions): Does not contain substances listed in Annex XVII to the REACH Regulation (conditions for restrictions).
- Annex XIV REACH (List of Authorisations): Does not contain a substance listed in Annex XIV of the REACH Regulation (List of Authorisations).
- REACH Candidate List (SVHC): Does not contain substances listed in the REACH Candidate List.
- PIC Regulation (EU 649/2012, prior informed consent): Does not contain substances listed in the PIC list (Regulation EU 649/2012 on the export and import of hazardous chemicals).
- POP Regulation (EU 2019/1021, Persistent organic pollutants): Does not contain substances listed in the POP list (EU Regulation 2019/1021 on persistent organic pollutants).
- Regulation on the depletion of the ozone layer (EU 1005/2009): Does not contain substances listed on the ozone depletion list (Regulation EC 1005/2009 on substances that deplete the ozone layer).
- Regulation on explosives precursors (EU 2019/1148): Does not contain substances listed in the list of explosives precursors (Regulation EU 2019/1148 on the placing on the market and use of explosives precursors).
- Regulation on drug precursors (EC 273/2004): Does not contain any substances listed in the list of drug precursors (Regulation EC 273/2004 on the manufacture and placing on the market of certain substances used for the illicit manufacture of narcotic drugs and psychotropic substances).

The other provisions:

- Safety data sheet EU format in accordance with Commission Regulation (EU) 2020/878.
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Enforcement of Restrictions in the Field of Chemicals (REACH), the establishment of a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and No 1488/94, as well as Council Directive 76/769/EEC and Commission Directive 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006.
- ADR agreement

15.2. Safety assessment of the chemical substance or mixture

Not committed.

SECTION 16: FRIEND INFORMATION

Full meaning of phrases indicating the type of hazard listed in sections 2-15 of the map:

Ascute tox. 4 (Oral)	Acute toxicity (oral), category 4	
Eye Dam. 1	Serious eye damage/eye irritation, category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, category 2	
Flam. Liq. 3	Flammable liquid substances, category 3	
H226	Flammable liquid and vapors.	
H302	It is harmful if swallowed.	
H314	It causes serious skin burns and eye damage.	
H315	Irritates the skin.	
H318	It causes serious eye damage.	
H319	It irritates the eyes.	
Н335	May cause irritation of the respiratory tract.	
H336	It can cause feelings of drowsiness or dizziness.	

In accordance with Regulation (EU) 2020/878 Date of preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6
HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 10 from 10

Skin Corr. 15	Corrosive/irritating effect on the skin, category 1, subcategory 1B	
Skin Irrit. 2	Corrosive/irritating effect on the skin, category 2	
STOT SE 3	Toxic effects on target organs – single exposure, category 3, narcotic effects	

Explanation of abbrevia	tions and acronyms used in the safety data sheet:		
DNA	European Agreement concerning the International Transport of Hazardous Materials by Inland Waterways		
ADR	European Agreement concerning the International Transport of Dangerous Goods by Road		
ATE	Acute toxicity assessed		
BCF	Bioconcentration coefficient BCF		
BLV	Value of the quantitative restriction		
BOD	Biochemical oxygen consumption (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived level causing minimal changes		
DNEL	A derivative level that does not cause changes.		
Number by HU	European Community number		
EC50	Average effective concentration		
IN	European Standard		
IARC	International Agency for Research on Cancer		
IATA	International Air Carriers Association		
IMDG	International maritime transport of dangerous goods		
LC50	Concentration of the substance causing the death of 50% of the population of test organisms.		
LD50	Dose causing the death of 50% of the test organism population		
LOAEL	The lowest level at which harmful changes are observed.		
NOAEC	A concentration at which no harmful changes are observed.		
NOAEL	Dosage level at which no harmful changes are observed.		
NOEC	The highest concentration at which no harmful changes are observed		
OECD	Organisation for Economic Co-operation and Development		
OIL	Occupational exposure limit		
PBT	Persistent substance, showing the ability to bioaccumulate and toxic.		
PNEC	A predicted concentration that does not cause changes in the environment.		
RID	Regulations for the International Transport of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Wastewater Treatment Plant		
ThOD	Theoretical oxygen demand (TNC)		
TLM	Central tolerance limit		
LZO	Volatile organic compounds		
CAS number	CAS number		
N.O.S.	Otherwise Unspecified		
vPvB	Very resistant and showing a very high capacity for bioaccumulation.		
	Endocrine disrupting properties		

The classification was carried out by a calculation method in accordance with the classification rules contained in Regulation No 1272/2008/EC.

	Flam. Liq. 3	H226	Based on research results
	Ascute tox. 4 (Oral)	H302	Calculation method

In accordance with Regulation (EU) 2020/878 Date of

preparation: 5.11.2012

Update Date: 16.01.2023 Version: 6

HARDENER FOR REACTIVE PRIMER WASH PRIMER 1:1



Page: 11 from 10

Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
STOT SE 3	H336	Calculation method
STOT SE 3	H335	Calculation method

Other data sources:

European Chemicals Agency (ECHA)

Changes to the map compared to the previous version:

Tab Undate

- 9: change of title of subsection 9.1: Information on basic physical and chemical properties
- 11: change of title of point 11.1: Information on hazard classes defined in Regulation (EC) No 1272/2008, added point 11.2. Information on other hazards
- 12: new point 12.6: Endocrine disrupting properties.
- 14: change the text of point 14.1: UN number or ID identification number; rewording of point 14.7: Maritime carriage of bulk cargo in accordance with IMO instruments.

Changes in the content of the points:

2.1, 2.2, 2.3, 3.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 7.1, 7.2, 7.3, 8.1, 8.2, 9.1, 9.2, 10.3, 10.5, 10.6, 11.1, 11.2, 12.1, 12.3, 12.4, 12.6, 14.1, 14.2, 14.3, 14.6, 14.7, 15.1, 16. General update.

Card number: 09-0P1L-0123-V6