Date of issue: 4.05.2012 Updating date: 1.08.2018

Version: 3



Page: 1 of 9

ACRYLIC CLEAR COAT ECO 2:1

SECTION 1: SUBSTANCE/MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification

ACRYLIC CLEAR COAT ECO 2:1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Acrylic clearcoat (component A) to be applied with the use of a spray gun. For professional use in car refinish.

1.3. Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.

Ul. Łódzka 3

42-240 Rudniki k/Częstochowy

Tel: +48 34 329 45 03 Fax:+48 34 320-12-16 Registry number: 000029202

Person responsible for the safety data sheet

ranal@ranal.pl

1.4. Emergency telephone

+48 34 329 45 03 (from 8.00am to 3.00pm)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The mixture was classified as dangerous according to current regulations – see section 15.

Classification 1272/2008/EC:

Causes skin irritation. (Skin Irrit.2) May cause drowsiness or dizziness. (STOT SE 3) Flammable liquid and vapours. (Flam. Liq. 3)

2.2. Label elements:

Contains xylene Pictograms:





Warning word: Warning

Risk index:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

Safety index:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

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

P312 Call a doctor if you feel unwell.

2.3. Other hazards

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

MATERIAL SAFETY DATA SHEET Date of issue: 4.05.2012

Updating date: 1.08.2018

Version: 3



Page: 2 of 9

ACRYLIC CLEAR COAT ECO 2:1

3.2. Mixtures

Product identification ACRYLIC CLEAR COAT ECO 2:1

Butyl acetate

20-30% EC: 204-658-1 CAS: 123-86-4

Index no: 607-025-00-1

Registration no: 01-2119485493-29-XXXX

Classification 1272/2008/EC:

Flam. Liq. 3; H226; STOT SE 3; H336

EUH066

Xylene

15-25% WE: 215-535-7 CAS: 1330-20-7

Index no: 601-022-00-9

Registration no: 01-2119488216-32-XXXX

Classification 1272/2008/EC:

Flam. Liq. 3; H226; Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit.2; H315

1-metoxy -2-propanol acetate

5-10% EC: 203-603-9 CAS: 108-65-6

Index no: 607-195-00-7

Registration no: 01-2119475791-29-XXXX

Classification 1272/2008/EC:

Flam. Liq. 3; H226;

Butyl glycol acetate

1-5%

EC: 203-933-3 CAS: 112-07-2

Index no: 607-038-00-2

Registration no: : 01-2119475112-47-XXXX

Classification 1272/2008/EC:

Acute Tox. 4; H332 Acute Tox. 4; H312

Full text of the phrases identifying the types of hazard and R phrases provided in section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

General information:

See section 11 of the Material Safety Data Sheet.

Inhalation:

Take the victim outside to the fresh air, ensure quiet surrounding, in case of no breath ensure artificial respiration. **Call a doctor.**

Skin

Take off contaminated clothing. Rinse contaminated skin with plenty of lukewarm water for about 15 min. If irritation persists consult a doctor.

Eves

Rinse immediately with plenty of water for about 15 min, avoid strong water jet- risk of comea damage, consult

MATERIAL SAFETY DATA SHEET Date of issue: 4.05.2012

Updating date: 1.08.2018

Version: 3



3

Page: 3 of 9

ACRYLIC CLEAR COAT ECO 2:1

a doctor.

Alimentary tract:

Do not cause vomiting (choking risk). Rinse mouth with water. If conscious, administer 1-2 glasses of warm water. Call a doctor. Person giving first aid should wear medical gloves.

4.2. Most important symptoms both acute and delayed

Vapours may cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

4.3. Indications of any immediate medical attention and special treatment needed

Special measures allowing for specialist and immediate aid should be available in the place of work.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Powder, foam resistant to alcohols, carbon dioxide, water mist.

5.2. Special hazards arising from the substance or mixture

Carbon monoxide and other toxic gases may be generated in case of fire.

5.3. Advice for firefighters

Fire-fighting teams should wear self-contained breathing apparatus and light protective clothing. Cool adjacent tanks by spraying water from a safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures

For persons not being members of aid giving staff:

Remove ignition sources. Ensure sufficient ventilation of the room. Avoid direct contact with the released substance. Avoid contact with skin and eyes. Personal safety measures – see section 8 of Material Safety Data Sheet.

For persons being the members of aid giving staff:

Persons giving aid should wear protective clothing made of coated impregnated fabric, protective gloves (viton), tight protective glasses and breathing apparatus: gas mask with A type absorber.

6.2. Environmental precautions

Prevent leakage to the sewage system, surface waters, underground waters and soil.

6.3. Methods and materials for containment and cleaning up.

Stop the leakage (close the liquid inflow, seal), place damaged container in an emergency container, remove the liquid mechanically and place it in an emergency container. In case of large leakage embank the area. In case of small amounts, collect with the use of a binding agent (e.g. mica, diatomaceous earth, sand).

6.4. Reference to other sections

Personal protection measures—see section 8 of the Material Safety Data Sheet. Disposal considerations—see section 13 of the Material Safety Data Sheet.

SECTION 7: HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling

Keep away from heat and sources of ignition. Prevent leakage to the sewage system, surface waters, underground waters and soil. Use only in well ventilated rooms. Do not smoke. Do not inhale vapours. Avoid contact with skin and eyes. Take precaution measures against electrostatic discharge. Use personal protection measures – see section 8 of the Material Safety Data Sheet.

7.2. Conditions for safe storage, including any incompatibilities

Store in well sealed original containers. Do not store near large amounts of organic peroxides or other strong oxidants. Take precaution measures against electrostatic discharge. Store in cool, well ventilated rooms. Protect from low temperatures, the sunrays and heat sources.

7.3. Special end use(s)

MATERIAL SAFETY DATA SHEET Date of issue: 4.05.2012

Updating date: 1.08.2018

Version: 3



Page: 4 of 9

ACRYLIC CLEAR COAT ECO 2:1

For professional use in car refinish taking into consideration the information included in subsections 7.1 and 7.2.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters

CAS NUMBER	: SUBSTANCE	MPC (mg/m³)	MPIC (mg/m³)	MPCC (mg/m ³)
1330-20-7	Xylene	100		
123-86-4	Butyl acetate	200	950	
108-65-6	1-metoxy -2-propanol acetate	260	520	
112-07-2	Butyl glycol acetate	100	300	

National acceptable biological values:

CAS NUMBER 1330-20-7
SUBSTANCE ABSORBED Xylene
SUBSTANCE MARKED methyl hippuric acid
BIOLOGICAL MATERIAL urine*
PCB VALUE 0,75 g/g creatinine

Notice: * single sample, taken at the end of a daily exposure any day.

PN-EN 482: 2012 Occupational exposure – General requirements for the characteristics of procedures of measurements of chemical factors.

PN-EN-689: 2002. Workplace atmospheres. Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values.

 $\overline{\text{PN}}$ Z-04008-7:2002 Protection of air cleanliness. Sampling. Principles of air sampling in the work environment and interpretation of results.

8.2. Exposure control

Respiratory tract protection:

Gas mask with A type absorber (EN 141).

Hand protection:

Protective gloves PN-EN 374-3 (viton, 0,7 mm thick, penetration time > 480 min, nitrile rubber, 0,4 mm thick, penetration time > 30 min).

Eye protection:

Tight protective glasses.

Skin protection:

Proper protective clothing (coated, impregnated fabrics).

Workplace:

Fixed fume extraction and general ventilation.

Environmental exposure control:

Prevent leakage to the sewage system, surface waters, underground waters and soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Physical state

liquid

Colour

clear

Date of issue: 4.05.2012 Updating date: 1.08.2018

Version: 3



Page: 5 of 9

ACRYLIC CLEAR COAT ECO 2:1

Odour

strong, powerful

Odour threshold

0.9-9 mg/m³ (xylene)

pН

not applicable

Melting/freezing point

not applicable

Boiling point

120-130°C

Flash point

26°C

Autoignition point

about 435°C

Breakdown point

not specified

Evaporation rate

not specified

Flammability (solid, gas)

not applicable

Explosion limits

% bottom: 1.1 vol% top: 8.0 vol% (xylene)

Vapour pressure

9 hPa (20°C)

Vapour density (with regard to air)

4.0 (butyl acetate)

Density

about 1.0 g/cm³ (20°C)

Solubility (in water)

poor

n-octanol/water partition coefficient

1,85 (butyl acetate)

Viscosity ISO 2431 (4mm)

200s

Explosive properties

not applicable

Oxidizing properties

not applicable

9.2. Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Product not reactive under normal conditions.

10.2. Chemical stability

Product stabile under normal conditions.

10.3. Possibility of hazardous reactions

Carbon monoxide and other toxic gases may be generated as a result of thermal decomposition.

10.4. Incompatible materials

Flammable product. Avoid contact with strong oxidants, strong acids and bases.

Avoid generation and accumulation of static electricity. Protect from the influence of sunrays and heat sources.

10.5. Incompatible materials

Avoid contact with large amounts of organic peroxides, strong acids and bases, as well as other strong oxidants.

10.6. Hazardous decomposition products

Carbon monoxide and other toxic gases are generated as a result of thermal decomposition.

Date of issue: 4.05.2012 Updating date: 1.08.2018

Version: 3



ACRYLIC CLEAR COAT ECO 2:1

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No experimental data available on the preparation. Evaluation based on the data on dangerous ingredients included in the preparation.

a) Acute toxicity

Xylene

 $L\bar{D}_{50}$ (rat, ingestion) 5000 mg/kg LC_{50} (rat, inhalation) 4550 ppm/4h

Butyl acetate

 LD_{50} (rat, ingestion) 14000 mg/kg LC_{50} (rat, inhalation) 9660 mg/m 3 /8h

1-metoxy -2-propanol acetate

LD₅₀ (rat, ingestion) 8532mg/kg

Butyl glycol acetate

LD₅₀ (rat, ingestion) 2400mg/kg

b) Caustic/irritating effect on skin

Causes skin irritation.

c) Serious eye damage/eye irritation

No available data confirming the hazard class.

d) Allergic effects on respiratory tract or skin

The mixture is not classified as having allergic effect. No available data confirming the hazard class.

e) Mutagenic effect on germ cells

The mixture is not classified as mutagenic. No available data confirming the hazard class.

f) Carcinogenicity

Mixture is not classified as carcinogenic. No available data confirming the hazard class.

g) Harmful effect on reproduction

The mixture is not classified as harmful to reproduction. No available data confirming the hazard class.

h) Toxic effect on target organs - single exposure

May cause drowsiness or dizziness.

i) Toxic effect on target organs - repeated exposure

No available data confirming the hazard class.

j) Aspiration hazard

No available data confirming the hazard class.

Exposure methods:

Respiratory tract: Possible irritating effect.

Skin: Causes skin irritation. Eyes: Possible irritating effect.

If swallowed the substance may cause irritation of the alimentary tract, nausea, vomiting and diarrhea.

Poisoning symptoms:

Headaches and dizziness, fatigue, decreased muscle power, drowsiness and in exceptional instances loss of consciousness. Vapours may cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

SECTION 12: ECOLOGICAL INFORMATION

No experimental data available on the preparation. Evaluation based on the data on dangerous ingredients included in the preparation.

Page: 6 of 9

Date of issue: 4.05.2012 Updating date: 1.08.2018

Version: 3



Page: 7 of 9

ACRYLIC CLEAR COAT ECO 2:1

12.1. Toxicity

1-metoxy -2-propanol acetate

Daphnia magna EC50 (48 hours) > 500 mg/l

Oncorhynchus mykiss LC50 (96 hours) 100-180 mg/l

Number in catalogue of water hazardous substances: 5033

Water hazard class:

Xylene

Daphnia magna EC50 (48 hours) 7,4 mg/l

Acute toxicity for mammals: 3; for fish: 4,1

Number in catalogue of water hazardous substances: 206

Water hazard class: 2

Buty acetate

Number in catalogue of water hazardous substances: 42

Water hazard class: 1

Butyl glycol acetate

Toxicity for fish EC50/17h 960 mg/l

Number in catalogue of water hazardous substances: 592

Water hazard class:

12.2. Persistence and degradability

Butyl acetate

Biodegradability: 98% (close bottle test)

12.3. Bioaccumulative potential

Butyl acetate

Biodegradation coefficient: BCF=3,1

12.4. Mobility in soil

Very poorly soluble in water.

12.5. Results of PBT and vPvB assesment

No data available.

12.6. Other hazardous effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product must be disposed of in compliance with the proper local and statutory regulations with regard to waste – see point 15.

Product remains:

Waste code: 08 01 11* Do not dispose the product into the sewage system. Do not store with communal waste. Remove the remains of the mixture carefully and harden with the use of the proper B component (waste hardener) included in the set. Hardened product is not harmful waste.

Warning: harden the remains in small portions and away from flammable products. Large amounts of heat are released during chemical reaction!

Contaminated container:

A contaminated container containing unhardened remains of the product is harmful waste. Waste code: 15 01 10*. Do not store with communal waste. The contaminated container should be disposed with entities which are authorized to collection, recover o disposal.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

1866

14.2. UN proper shipping name

MATERIAL SAFETY DATA SHEET Date of issue: 4.05.2012

Updating date: 1.08.2018

Version: 3



Page: 8 of 9

ACRYLIC CLEAR COAT ECO 2:1

RESIN IN SOLUTION, flammable

14.3. Transport hazard class (es)

14.4. Packaging group

14.5. Environmental hazards

14.6. Special precautions for user

Do not transport together with products of class 1 (except products of class 1.4S), and some products of class 4.1 and 5.2. During the transport avoid direct contact with products of class 5.1 and 5.2. Do not use an open flame and do not smoke.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 Convention and the IBC Code Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations / legislations specific for the substance or mixture

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. Official Journal of EU L 136 of May 29 2007. Official Journal of EU L 304 of November 22 2007, Official Journal of EU L268 of October 09 2008, Official Journal of EU L 46 of February 17 2009, Official Journal of EU L164 of June 26 2009, Official Journal of EU L133/1 of May 31 2010 with later amendments.
- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Official Journal of EU L 132 of May 29 2015.
- 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 (Official Journal of EU L 353 of December 31 2008); Official Journal of EU L 235 of September 5 2009, Official Journal of EU L 83 of March 30 2011, Official Journal of EU L 179 of July 11 2012, Official Journal of EU L 149 of June 1 2013, Official Journal of EU L 261 of October 3 2013, Official Journal of EU L 167 of June 2014, Official Journal of EU L 197 of July 25 2015.

15.2. Chemical safety assessment

Not performed.

SECTION 16: OTHER INFORMATION

Full text of the phrases identifying the types of hazards and R phrases mentioned in sections 2-15:

Flam. Liq. 3 Flammable Liquid 3

H226 Flammable liquid and vapour.

STOT SE 3 Toxic effect on target organs – single exposure, cat. 3

H336 May cause drowsiness or dizziness.

Acute Tox. 4 Acute Toxicity 4

H332 Harmful if inhaled.

H312 Harmful in contact with skin.

Skin Irrit. 2Skin Irritation 2

H315 Causes skin irritation (category 2)

EUH066 Repeated exposure may cause skin dryness or cracking.

Explanations of the abbreviations and acronyms used in the Material Safety Data Sheet:

CAS number - numerical symbol ascribed to a chemical substance by the American organization Chemical

MATERIAL SAFETY DATA SHEET Date of issue: 4.05.2012 Updating date: 1.08.2018

Version: 3



Page: 9 of 9

ACRYLIC CLEAR COAT ECO 2:1

Abstracts Service (CAS).

EC number – a number ascribed to a chemical substance in the European List of Notified Chemical Substances (ELINCS), or a number in the European Inventory of Existing Chemical Substances mentioned in "No-longer polymers" publication (EINECS)

MPC - maximum permissible concentration of health hazardous substances in the work place.

MPIC – maximum permissible instantaneous concentration.

MPCC – maximum permissible ceiling concentration.

PCB – permissible concentration in biological material

UN number – four-digit identification number of a substance, preparation or product pursuant to UN model regulations

Classification based on calculation method according to classification rules included in Regulation 1272/2008/EC Other data sources:

ECHA European Chemicals Agency **TOXNET** Toxicology Data Network

Changes: general update

Number MSDS: 0P1L0318V3