

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

1.1. Product identification ACRYLIC CLEAR COAT 2:1 VHS

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

RANAL Sp. z o.o.

Ul. Łódzka 3 42-240 Rudniki k. Częstochowy, PL 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:

May cause an allergic skin reaction. (Skin Sens 1) May cause drowsiness or dizziness. (STOT SE 3) Harmful to aquatic organisms with long term effects.(Aquatic Chronic3) Highly flammable liquid and vapours. (Flam. Liq. 2) Repeated exposure may cause skin dryness or cracking.

2.2. Label elements

Contains: isobutyl-methyl ketone, butyl acetate.

Pictograms:



Warning word: Danger.

Risk index: H225 Highly flammable liquid and vapour. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long-lasting effects. EUH066 Repeated exposure May cause skin dryness or cracking.

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.

3.2. Mixtures Product identification: ACRYLIC CLEAR COAT 2:1 VHS



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The name of the substance Concentration [wt%] Identification numbers Classification and labeling

Butyl acetate

20-25% 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

Methyl-n-amyl ketone

10-15% EC: 203-767-1 CAS: 110-43-0 Index no: 606-024-00-3 Registration no: 01-2119902391-49-XXXX Classification 1272/2008/EC: Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H302

Hydrocarbons, C9, aromatics

<10% EC: 918-668-5 CAS: --Index no: --Registration no: 01-2119455851-35-XXXX Classification 1272/2008/EC: Flam. Liq. 3; H226 STOT SE 3; H335; H336 Asp. Tox. 1; H304 Aquatic Chronic 2 H411 EUH 066

Isobutyl-methyl ketone

<7% EC: 203-550-1 CAS: 108-10-1 Index no: 606-004-00-4 Registration no: 01-2119473980-30-XXXX Classification 1272/2008/EC: Flam. Liq. 2; H225; Acute Tox. 4; H332; Eye Irrit. 2; H319; STOT SE 3; H335; EUH066

Mixture: α-3-[3-(2*H*-benzotriazol-2-yl)-5-*tert* -butyl-4-hydroxyphenyl]-propionyl-ω-hydroxypoly(oxyethylene) and α-3-[3-(2*H*-benzotriazol-2-yl)-5-*tert* -butyl-4-hydroxyphenyl]propionyl-ω-3-[3-(2*H*-benzotriazol-2-yl)-5-*ter* t-butyl-4hydroxyphenyl]- propionyloxypoly(oxyethylene <1.6% EC: 400-830-7

EC: 400-830-7 CAS:104810-48-2+104810-47-1+ 25322-68-3 Index no: 607-176-00-30 Registration no: 01-2119472279-28-XXXX Classification 1272/2008/EC: Skin Sens. 1; H317 Aquatic Chronic 2; H411

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

<0.9% EC: 255-437-1 CAS: 41556-26-7 Index no: --Registration no: --Classification 1272/2008/EC: Skin Sens. 1; H317 Aquatic Chronic 1; H410

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, and 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.

Eyes:

Rinse immediately with plenty of water for about 15 min, avoid strong water jet- risk of comea damage, consult 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 the sunrays, heat sources and low temperatures.

7.3. Special end use(s)

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)
123-86-4	Butyl acetate	200	950	
110-43-0	methyl-n-amyl ketone	238	475	
108-10-1	isobutyl-methyl ketone	83	200	

National acceptable biological values: No data available

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. 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 Colour Odour Odour threshold pH Melting/freezing point Boiling point Flash point Autoignition point Breakdown point Evaporation rate Flammability (solid, gas) Explosion limits	liquid clear strong, powerful No data not applicable Not applicable 114°C 14°C about 435°C No data available No data available Not applicable % bottom: 1.2 vol% top: 8.0 vol% (isobutyl-methyl ketone)
	% bottom: 1.2 vol% top: 8.0 vol% (isobutyl-methyl ketone) 21.33 hPa (20°C) (isobutyl-methyl ketone) 4.0 (butyl acetate)
Density	about 1.0 g/cm ³ (20°C)

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Solubility (in water) n-octanol/water partition coefficient Viscosity ISO 2431 (4 mm) Explosive properties Oxidizing properties poor 1.31 (isobutyl-methyl ketone) 30s Not applicable 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 are generated as a result of thermal decomposition.

10.4. Incompatible materials

Highly flammable product. Avoid contact with strong oxidants, peroxides, 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.

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

Methyl-n-amyl ketone	
LD ₅₀ (rat, ingestion)	1.600 mg/kg
LC ₅₀ (rat, inhalation)	2000-4000 ppm/4h

Butyl acetate	
LD ₅₀ (rat, ingestion)	10768 mg/kg
LC_{50} (rat, inhalation)	390 ppm/4h
LD ₅₀ (rabbit, skin)	17600 mg/kg

b) Caustic/irritating effect on skin

No available data confirming the hazard class.

c) Serious eye damage/eye irritation

Causes eye irritation.

d) Allergic effects on respiratory tract or skin

May cause an allergic skin reaction.

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. Repeated exposure may cause skin dryness or cracking.



j) Aspiration hazard

No available data confirming the hazard class.

Exposure methods: Respiratory tract: Possible irritating effect. Skin: May cause an allergic reaction. 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.

12.1. Toxicity

Methyl-n-amyl ketone Toxicity for fish (Pimephales promeles): Number in catalogue of water hazardous substances: Water hazard class:	LC50 131 mg/l/96h 3726 1
Butyl acetate Number in catalogue of water hazardous substances: Water hazard class:	42 1
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

Harmful to aquatic organisms with long-lasting effects.

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



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14.2. UN proper shipping name RESIN IN SOLUTION, flammable

14.3. Transport hazard class (es) 3

14.4. Packaging group

11

14.5. Environmental hazards

No.

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.Lig. 2/3Flammable Liquids 2/3 H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour Asp. Tox 1 Aspiration Toxicity hazard, cat. 1 H304 May be fatal if swallowed and enters airways. STOT SE 3 Toxic effect on target organs - single exposure, cat. 3 H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. Acute Tox. 4 Acute Toxicity 4 H332 Harmful if inhaled H302 Harmful if swallowed. Skin Sens. 1 Skin sensitization H317 May cause an allergic skin reaction. Eye Irrit. 2 Eye Irritation 2 H319 Causes serious eye irritation. Aquatic Chronic 2 Hazardous for aquatic environment – chronic hazard, cat. 1 H411 Toxic to aquatic life with long-lasting effects. Aquatic Chronic 3 Hazardous for aquatic environment, cat.3 H412 Harmful to aquatic life with long-lasting effects. 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 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

Changes: 1.1, 16 and general update.

Number of MSDS: 00-0P1L-1220-V4