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POLYESTER THINNER

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

1.1. Product identification

POLYESTER THINNER

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

For professional use in car refinish.

1.3. Data of the safety data sheet supplier

RANAL Sp. z o.o.

UI. Łódzka 3 42-240 Rudniki k/Częstochowy Tel: +48 34 329 45 03

Fax:+48 34 320-12-16

Person responsible for the safety data sheet

ranal@ranal.pl

1.4. Emergency telephone

+48 34 329 45 03 (from 8.00 am till 03.00 pm)

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:

Serious eye damage/eye irritation, hazard category 2 (Eye Irrit. 2) Causes eye irritation. Harmful effect on reproduction, hazard category 2 (Repr. 2) Suspected of damaging the unborn child.

Toxic effect on target organs – single exposure, hazard category 3, narcotic effect (STOT SE 3). May cause drowsiness or dizziness. Flammable liquids, hazard category 2. (Flam. Liq. 2). Highly flammable liquid and vapour.

2.2. Label elements:

Contains: Toluene

Pictograms:



Warning word: Danger

Risk index

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H336 May cause drowsiness or dizziness.

Safety index

P210 Keep away from heat/sparks/open flames/hot surfaces - No smoking.

P260 Do not breathe 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

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3.1. Substances

Not applicable.

3.2. Mixtures

Product identification

POLYESTER THINNER

Ethyl acetate

85-95%

Index No: 607-022-00-5

Registration No: 01-2119457290-43-XXXX

Classification 1272/2008/EC:

Flam. Liq. 2; H225; Eye Irrit.2; H319; STOT SE 3, H336

Toluene

5-9%

EC: 203-625-9 CAS: 108-88-3

Index No: 601-021-00-3

Registration No: 01-2119471310-51-XXXX

Classification 1272/2008/EC:

Flam. Liq. 2 H225 Repr. 2; H361d Asp. Tox. 1 STOT RE 2; H304; H373 Skin Irrit. 2; H315 STOT SE 3; H336

Full text of the phrases identifying the types of hazard 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.

Respiratory tract:

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

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 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 and 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

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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 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

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)

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)
108-88-3	Toluene	100	200	
141-78-6	Ethyl acetate	200	600	

National permissible biological values:

CAS NUMBER 108-88-3 **SUBSTANCE ABSORBED** Toluene SUBSTANCE MARKED o-cresol/Toluene BIOLOGICAL MATERIAL urine*/ capillary blood PCB VALUES 0,3 mg/l/0,3 mg/l

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Notes: * single sample at the end of daily exposure any day.

PN-EN 482:2009 Workplace Atmospheres – General Requirements Concerning Characteristic of Procedures for Measurement 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 and Measurement Strategy.

PN Z-04008-7:2002 Air Cleanness Protection - Sampling - Principles of Sampling Air in the Working Environment and Interpreting the Results.

PN-86/Z-04152.02 Air Cleanness Protection – Assessment of Styrene Content – Marking Styrene in Workplaces by Gas Chromatography with Sample Enriching.

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, butyl rubber, 0,5 mm thick, penetration time >=480 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

Odour

strong, powerful

Odour threshold

0.18-670 mg/m³ (ethyl acetate)

pН

not applicable

Melting / freezing point

-83°C

Boiling point

77-110°C

Flash point

about 2°C

Autoignition point

460°C

Breakdown point

Not specified

Evaporation rate

Not specified

Flammability (solid, gas)

Not applicable

Explosion limits

% bottom: 1.2 vol% top: 7 vol% (toluene)

Vapour pressure

98 hPa (20°C) (ethyl acetate)

Vapour density(with regard to air)

3.04 (ethyl acetate)



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Density

about 0.89 g/cm³ (20°C) **Solubility (in water)**

very poor

n-octanol/water division ratio

0.66 (ethyl acetate)

Viscosity (rotational rheometer)

about 1mPas

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 are generated in case of fire.

10.4. Conditions to be avoided

Highly flammable. Avoid contact with large amounts of organic peroxides, strong acids and bases, as well as other strong oxidants. Take precaution measures against electrostatic discharge. Protect from the sunrays, heat sources and low temperatures.

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

Ethyl acetate

 LD_{50} (rat, ingestion) – 5620 mg/kg

LC₅₀ (rat, inhalation) - 200 gm/m³

Toluene

LD₅₀ (rat, ingestion) - 5000 mg/kg

 LC_{50} (rat, inhalation) – 15320 mg/m³ /4h

b) Caustic / irritating effect on skin

Causes skin irritation.

c) Serious eye damage/ eye irritation

No available data confirming the hazard class.

d) Allergic effect on respiratory tract or skin

The mixture is not classified as having allergic effects. 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.

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f) Carcinogenicity

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

g) Harmful effect on reproduction

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

h) Toxic effect on target organs - single exposure

No available data confirming the hazard class.

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: Harmful in case of inhalation.

Skin: Irritating to skin. Eyes: Irritating to eyes.

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

Harmful; if swallowed the substance may cause lung damage.

Poisoning symptoms:

Headaches and dizziness, fatigue, decreased muscle power, drowsiness and in exceptional instances loss of consciousness. Vapours may cause drowsiness and 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

Ethyl acetate

Daphnia magna /NOEC (48 hours) 12 mg/l/21d

Number in catalogue of water hazardous substances: 95

Water hazard class:

Toluene

Daphnia magna /EC50 (48 hours) 11 mg/l Acute toxicity for fish LC50 13mg/l/96 hours

Number in catalogue of water hazardous substances: 194

Water hazard class:

12.2. Persistence and degradability

Ethyl acetate

Biodegradability: 100% (THOD)

12.3. Bioaccumulative potential

No data available.

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

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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 07 01 04* Do not dispose the product into the sewage system. Do not store with communal waste. Remove carefully the remains of the product and leave to dry completely. (only in well ventilated rooms). **CAUTION:** The remains should be left to dry only in well ventilated rooms and away from flammable products.

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 of wastes.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

1263

14.2. UN proper shipping name

PAINT-RELATED MATERIAL

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 December 18 2006 concerning Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing 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 the EU L 136 of May 29 2007r. with later amendments Official Journal of the EU L 304 of November 22 2007, Official Journal of the EU L268 of October 09 2008, Official Journal of the EU L 46 of February 17 2009, Official Journal of the EU L164 of June 26 2009, Official Journal of the EU L133/1 of May 31 2010 with later amendments.
- Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation of the European Parliament and of the Council (EC) No 1272/2008 of December 16 2008 on Classification, Labeling 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 the EU L 353 of December 31 2008); Official Journal of the EU L 235 of September 5 2009, Official Journal of the EU L 83 of March 30 2011, Official Journal of the EU L 179 of July 11 2012, Official Journal of the EU L 149 of June 1 2013, Official Journal of the EU L 261 of October 3 2013, Official Journal of the EU L 167 of June 6 2014, Official Journal of the EU L 197 of July 25 2015.

15.2. Chemical safety assessment

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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.2 Flammable liquids cat. 2

Flam.Liq.3 Flammable liquids cat.3

H225 Highly flammable liquid and vapours.

H226 Flammable liquid and vapours.

Asp. Tox. 1 Aspiration hazard.

STOT RE 2 Toxic effect on target organs - repeated exposure STOT rep. exp. (cat.2)

H304 May be fatal if swallowed and enters airways.

H373 May cause damage to organs.

Repr. 2 Harmful effect on reproduction (cat.2)

H361d Suspected of damaging the unborn child.

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

H336 May cause drowsiness or dizziness.

Acute Tox. 4 Acute toxicity cat. 4

H332 Harmful if inhaled.

H312 Harmful in contact with skin.

Eye Irrit. 2; Eye irritation cat .2

H319 Causes serious eye irritation.

Skin Irrit. 2 Caustic/irritating effect on skin, cat. 2

H315 Causes skin irritation (category 2)

EUH066 Repeated exposure may cause ski dryness or cracking.

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

Nr CAS – numerical symbol ascribed to a chemical substance by the American organization Chemical Abstracts Service (CAS).

Nr EC – 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