

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

**1.1. Product identification**

**REPAIR BOX UFI: F030-P03R-S00P-Y54S**

**POLIESTER RESIN UFI: YK80-JOYJ-P00U-YC0Y**

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

For professional use in car refinishing.

**1.3. Data of the safety data sheet supplier**

**Przedsiębiorstwo RANAL Sp. z o.o.**

Ul. Łódzka 3

42-240 Rudniki k. Częstochowy, PL

Tel.: +48 34 329 45 03

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**Person responsible for the safety data sheet**

ranal@ranal.pl

**1.4. Emergency telephone**

+48 34 329 45 03 (from 8:00 am. to 3.00 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 of the Sheet.

**Classification 1272/2008/EC:**

Suspected of damaging the unborn child (Repr. 2)

Causes skin irritation. (Skin Irrit.2)

Causes eye irritation. (Eye Irrit.2)

Causes damage to organs through prolonged or repeated exposure. (STOT RE 1)

Flammable liquid and vapour. (Flam.liq.3)

**2.2. Label elements**

Contains:

Styrene

Pictograms:



Warning word: **Danger.**

Risk index:

H226 Flammable liquid and vapour.

H361d Suspected of damaging the unborn child.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

Safety index:

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

P261 Avoid breathing dust/fume/gas/mist/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 POISON CENTER or doctor/physician if you feel unwell.

**2.3. Other hazards**

Vapours of styrene form explosive mixtures with air. Vapours are heavier than air and accumulate close to the ground level and in lower parts of rooms.

Styrene polymerization may occur under the influence of high temperature or as a result of contact with strong oxidants, peroxides, strong acids, bases, metal salts, copper and its alloys. Styrene polymerization is a highly exothermic process.

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### **3.1. Substances**

Not applicable.

#### **3.2. Mixtures**

##### **Product identification**

REPAIR BOX, POLIESTER RESIN

##### **Styrene**

30-40%

EC: 202-851-5

CAS: 100-42-5

Index no: 601-026-00-0

Registration no: 01-2119457861-32-XXXX

Classification 1272/2008/EC:

Flam. Liq. 3; H226;

Repr. 2, H361d

Acute Tox. 4; H332

Eye Irrit. 2; H319

Skin Irrit. 2; H315

STOT Rep. 1, H372

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.

Inhalation:

Take the victim outside to the fresh air, ensure quiet surrounding, in case of no breath perform 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 cornea 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**

Styrene vapours in low concentrations may cause eye lacrimation, metallic taste in mouth; painful and reddened conjunctiva, and in higher concentrations – cough, dizziness, disequilibrium.

#### **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**

Styrene polymerization may occur under the influence of high temperature or as a result of contact with strong oxidants, peroxides, strong acids, bases, metal salts, copper and its alloys. Styrene polymerization is a highly exothermic process. 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)

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

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

### 8.1. Control parameters

CAS NUMBER: SUBSTANCE	MPC (mg/m <sup>3</sup> )	MPIC (mg/m <sup>3</sup> )	MPCC (mg/m <sup>3</sup> )
100-42-5 Styrene	50	200	---
121-69-7 N,N-dimethylaniline	12	40	---

National acceptable biological values:

**CAS NUMBER** 100-42-5

**SUBSTANCE ABSORBED** Styrene

**SUBSTANCE MARKED** mandelic acid + phenyl glyoxylic acid

**MATERIAŁ BIOLOGICZNY** urine\*

**WARTOŚCI DSB** 350 mg/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.

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.

People suffering from respiratory tract hypersensitivity (asthma, chronic respiratory tract inflammation) should avoid contact with the product.

**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**

<b>Physical state</b>	Highly viscous liquid
<b>Colour</b>	According to specification
<b>Odour</b>	Slightly sweet to strong
<b>Odour threshold</b>	0.43 mg/m <sup>3</sup> (styrene)
<b>pH</b>	Not applicable
<b>Melting /freezing point</b>	-30°C
<b>Boiling point</b>	146°C
<b>Flash point</b>	30°C
<b>Autoignition point</b>	400°C
<b>Breakdown point</b>	Not specified
<b>Evaporation rate</b>	Not specified
<b>Flammability (solid, gas)</b>	Not applicable
<b>Explosion limits</b>	% bottom: 1.1 vol% top: 8.0 vol% (styrene)
<b>Vapour pressure</b>	about 7.3 hPa (20°C) (styrene)
<b>Vapour density (with regards to air)</b>	3.6 (styrene)
<b>Density</b>	According to specification
<b>Solubility (in water)</b>	Very poor
<b>n-octanol/water partition coefficient</b>	3,2 (styrene)
<b>Viscosity (rotative rheometer)</b>	According to specification
<b>Explosive properties</b>	Not applicable
<b>Oxidizing properties</b>	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**

Styrene polymerization may occur under the influence of high temperature or as a result of contact with strong oxidants, peroxides, strong acids, bases, metal salts, copper and its alloys. Uncontrolled polymerization in a closed container might result in an explosion. Carbon monoxide and other toxic gases are generated as a result of thermal decomposition.

**10.4. Conditions to be avoided**

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**

Styrene

LD50 (rat, ingestion)	5000 mg/kg
LC50 (rat, inhalation)	24000 mg/m <sup>3</sup> (4 h)
TCL0 (human, inhalation)	2600 mg/m <sup>3</sup>
LCL0 (human, inhalation)	43000 mg/m <sup>3</sup>

N,N-dimethylaniline

LD <sub>50</sub> (rat, ingestion)	1300 mg/kg
LD <sub>50</sub> (human, ingestion)	50 mg/kg
LC <sub>L0</sub> (rat inhalation)	250 mg/m <sup>3</sup>

#### **b) Caustic /irritating effect on skin**

Causes skin irritation.

#### **c) Serious eye damage / eye irritation**

Causes eye irritation.

#### **d) Allergic effects 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.

#### **f) Carcinogenicity**

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

#### **g) Harmful effect on reproduction**

Suspected of damaging the unborn child.

#### **h) Toxic effect on target organs – single exposure**

Styrene vapours in low concentrations may cause eye lacrimation, metallic taste in mouth; in concentrations of about 800 mg/m<sup>3</sup> – painful and reddened conjunctivas, and in higher concentrations – cough, dizziness, disequilibrium. Prolonged exposure causes drowsiness, disturbances of consciousness; possible paralysis of respiratory centre.

#### **i) Toxic effect on target organs – repeated exposure**

Drowsiness, disturbances of consciousness; possible paralysis of respiratory centre. Causes damage to organs (hearing organ) through prolonged or repeated exposure inhalation).

#### **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.

Poisoning symptoms:

Headaches and dizziness, fatigue, decreased muscle power, drowsiness and in exceptional instances loss of consciousness. If swallowed, the substance may cause irritation of alimentary tract, nausea, vomiting and diarrhea. Depressing effect on the central nervous system.

## **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**

styrene

Acute toxicity for fish / LC50 (96 h)	4-10 mg/l/96h
Acute toxicity for crustacea <i>Daphnia magna</i> / EC50/24h	182 mg/l/24h
Number in catalogue of water hazardous substances:	187
Water hazard class:	2

N,N-dimethylaniline	
Acute toxicity for Daphnia Magna / : LC50 (48h)	5mg/l
Acute toxicity for algae: / LC50 (96h)	340 mg/l
Number in catalogue of water hazardous substances:	1152
Water hazard class:	2

#### **12.2. Persistence and degradability**

styrene  
Biodegradability: 80% (closed bottle test)

#### **12.3. Bioaccumulative potential**

styrene  
Log Pow: 2,96 (OECD 107) - low bioaccumulation ability

#### **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:

Unhardened remains of the product are harmful waste, waste code: 08 04 09\*. 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.

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

Contaminated container:

A container with 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**

RESIN IN SOLUTION, flammable

#### **14.3 Transport hazard class (es)**

3

#### **14.4. Packaging group**

III

#### **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. Liq. 3 H226	Flammable Liquids 3 Flammable liquid and vapour.
Acute Tox. 4 H332	Acute Toxicity 4 Harmful if inhaled.
STOT SE 3 H335	Toxic effect on target organs – single exposure, cat. 3 May cause respiratory irritation
Eye Irrit. 2 H319	Eye Irritation 2 Causes serious eye irritation.
Skin Irrit. 2 H315	Skin Irritation 2 Causes skin irritation (category 2).
Repr.2 H361d	Harmful effect on reproduction, hazard category 2 Suspected of damaging the unborn child.
STOT RE 1 H372	Toxic effect on target organs – repeated exposure, cat. 1 Causes damage to organs through prolonged or repeated exposure.
Asp. Tox. 1 H304	Aspiration Toxicity 1 May be fatal if swallowed and enters airways.

### **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: 1.1, 16.0 and general update

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