

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

1.1. Product identification POLYESTER SPRAY FILLER UNI-SPRAY

UFI: UP80-20NY-000A-NPM1

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

Przedsiębiorstwo RANAL Sp. z o.o.

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1.4. Emergency telephone

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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 serious 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:



Signal word: Danger.

Risk index:

- H226 Flammable liquid and vapour.
- H361d Suspected of damaging the unborn child.
- H315 Causes skin irritation.
- H319 Causes eye irritation.
- H372 Causes damage to organs through prolonged or repeated exposure.

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

Styrene vapours 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 strongly oxidizing agents, 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. Substance

Not applicable.

3.2. Mixtures

Product identification: POLYESTER SPRAY FILLER UNI-SPRAY

Styrene

20-30% 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 recommendations: See section 11 of Material Safety Data Sheet.

Airways:

Remove the victim into fresh air, ensure quiet surrounding, in case of no breath perform artificial respiration. Call a doctor.

Skin:

Remove contaminated clothes. Wash contaminated skin with plenty of water for about 15 min. If irritation persists consult a doctor.

Eves:

Immediately rinse contaminated eyes for about 15 minutes. Avoid strong water jet – risk of cornea damage. Consult a doctor.

Alimentary tract:

Do not cause vomiting (choking risk). Rinse mouth with water. If the victim is conscious administer 1-2 glasses of warm water. Call a doctor.

First aiders should use medical gloves.

4.2. Most important symptoms both acute and delayed

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

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

Special measures allowing 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 strongly oxidizing agents, 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: 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 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

The personal protective equipment used should meet the requirements of applicable law.

CAS NUMBER	SUBSTANCE	MPC (mg/m³)	MPIC (mg/m³)	MPCC (mg/m ³)
100-42-5	Styrene	50	100*	
CAS NUMBER ABSORBED SU MARKED SUBS BIOLOGICAL M PCB VALUES	STANCE	urine*	d + phenylglyoxylic ac	id

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

DNEL values*				
SUBSTANCE (CAS no)	WAY OF EXPOSURE	EXPOSURE TIME	DNEL value Workers	DNEL value Consumers
	Airways	Short-term (systemic)	289 mg/m ³	174.25 mg/m ³
Styrene (100-42-5)		Short-term (local)	306 mg/m ³	182.75 mg/m ³
		Long-term (systemic)	85 mg/m ³	10.2 mg/m ³
	Skin	Long-term (systemic)	406 mg/kg/day	343 mg/kg/day
	Alimentary tract	Long-term (systemic)	does not require	2.1 mg/kg/day
PNEC values*				
ELEMENT OF THE ENVIRONMENT	Styrene (CAS:100-42- PNEC VALUE	5)		
Fresh water	0.028 mg/l			
Marine water	0.014 mg/l			
Fresh water sediment	0.614 mg/kg d.m.			
Marine water sediment	0.307 mg/kg d.m.			
Intermittent release	0.04 mg/l			
Sewage treatment plant STP	5 mg/l			
Soil	0.2 mg/kg d.m.			



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.

8.2. Exposure control

Respiratory 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: Appropriate protective clothing (coated, impregnated fabrics).

Workplace: Fixed fume extraction and general ventilation.

Contact with the product is not recommended to people suffering from hypersensitivity of respiratory tract (e.g. asthma, chronic inflammation of respiratory tract).

The personal protective equipment used should meet the requirements of applicable law.

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** pН Melting/freezing point **Boiling point** Flash point Auto ignition point Breakdown point **Evaporation rate** Flammability (solid, gas) **Explosion limits** Vapour pressure Vapour density (with regard to air) Densitv Solubility (in water) n-octanol/water partition coefficient Viscosity (rotational rheometer) **Explosive properties Oxidizing properties**

highly viscous liquid light grey sweet to penetrating 0.43 mg/m³ (styrene) not applicable -30°C 146°C 30°C 490°C not specified not specified not applicable % bottom: 1.1 vol%, top: 8.0 vol% (styrene) app. 7,3 hPa (20°C) (styrene) 3.6 (styrene) 1.6 g/cm3 (20°C) verv poor 3.2 (styrene) 4000-6500 mPas not applicable not applicable

9.2. Other information No data.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is 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 strongly oxidizing agents, peroxides, strong acids, bases, metal salts, copper and its alloys.



Uncontrolled polymerization in a closed container may 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 components included in the preparation.

a) Acute toxicity

Styrene	
LD50 (rat, oral)	5000 mg/kg
LC50 (rat, inhalation)	24000 mg/m ³ (4 h)
TCL0 (human, inhalation)	2600 mg/m ³
LCL0 (human, inhalation)	43000 mg/m ³

b) Caustic / irritating effect on skin

Causes skin irritation.

c) Serious eye damage / eye irritation

Causes serious eye irritation.

d) Allergic effect on respiratory tract or skin

The mixture is not classified as allergenic. 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

The 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) Specific target organ toxicity - single exposure

Styrene vapours in low concentration may cause eye lacrimation, metallic taste in mouth; in concentration of about 800 mg/m³ – painful and reddened conjunctivas, and in higher concentrations – cough, dizziness, disequilibrium. Prolonged exposure causes drowsiness, disturbances of consciousness; possible paralysis of the respiratory centre.

i) Specific target organ toxicity - repeated exposure

Drowsiness, impaired consciousness; paralysis of the respiratory centre may occur. Causes damage to organs (hearing organ) through prolonged or repeated exposure (inhalation).

j) Aspiration hazard

No available data confirming the hazard class.

Ways of exposure: Airways: Harmful in case of inhalation. Skin: Causes skin irritation. Eyes: Irritating effect. Alimentary tract: If swallowed the substance may cause irritation of alimentary tract, nausea, vomiting and diarrhoea.

Poisoning symptoms:

Headache, dizziness, fatigue, muscle weakness, drowsiness and, in exceptional cases, loss of consciousness. If swallowed the substance may cause irritation of alimentary tract, nausea, vomiting and diarrhoea. The substance has depressing effect on central nervous system.

SECTION 12: ECOLOGICAL INFORMATION

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



12.1. Toxicity

Styrene Acute toxicity to fish / LC50 (96 h) Acute toxicity to crustacea *Daphnia magna* / EC50 (24 h) Number in catalogue of water hazardous substances Water hazard class

4-10 mg/l 182 mg/l 187 2

12.2. Persistence and degradability

Styrene Biodegradability: 80% (closed cylinder test)

12.3. Bioaccumulative potential

Styrene Log Pow: 2.96 (OECD 107) – poor bioaccumulative potential

12.4. Mobility in soil

Very poorly soluble in water

12.5. Results of PBT and vPvB assessment

No data.

12.6. Other hazardous effects

No data.

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 section 15.

Product residues:

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, a (waste) hardener from the set. Hardened product is not a harmful waste.

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

Contaminated container:

A contaminated container containing unhardened remains of the product is a 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, recovery or disposal.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number 1263

14.2. UN proper shipping name PAINT

14.3. Transport hazard class (es)

3

14.4. Packaging group

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*

The Material Safety Data Sheet is based on:

- European Agreement on the International Carriage of Dangerous Goods by Road. ADR 2019-2021, IMDG Code 2018 Edition.
- 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 2007, Official Journal EU L 304 of November 22 2007, Official Journal EU L268 of October 09 2008, Official Journal EU L 46 of February 17 2009, Official Journal EU L164 of June 26 2009, Official Journal EU L133/1 of May 31 2010 with following 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, Authorization and Restriction of Chemicals (REACH), Official Journal EU L 132 of May 29 2015.
- Regulation of the European Parliament and of the Council (EC) No 1272/2008 of December 16 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 EU L 353 of December 31 2008, Official Journal EU L 235 of of September 5 2009, Official Journal EU L 83 of March 30 2011, Official Journal EU L 179 of July 11 2012, Official Journal EU L 149 of June 1 2013, official Journal EU L 261 of October 3 2013, Official Journal EU L 167 of June 06 2014, Official Journal EU L 197 of July 25 2015, Official Journal EU L 156/1 of June 14 2016, Official Journal EU L 195/1 of June 20 2016, Official Journal EU L 78/1 of March 23 2017, Official Journal EU L 116/1 of May 05 2017, Official Journal EU L 115/1 of May 04 2018, Official Journal EU L 251/1 of October 05 2018, Official Journal EU L 86 of March 28 2019, s.1, official Journal EU L 44/1 of February 18 2020.

15.2. Chemical safety assessment

Not performed.

SECTION 16: OTHER INFORMATION

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

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

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

CAS no - numerical symbol ascribed to a chemical substance by the American organization Chemical Abstracts Service (CAS). **EC no** - a number ascribed to a chemical substance in the European Inventory of Existing Chemical Substances (EINECS), in the European List of Notified Chemical Substances (ELINCS) or a number in the list of chemical substances mentioned in the publication 'No-longer polymers'.

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

- **MPIC** maximum permissible instantaneous concentration
- **MPCC** maximum permissible ceiling concentration
- **DNEL** derived no-effect levels *

PNEC - Predicted No Effect Concentration *

d.m. - dry mass*

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 in the Sheet: sections 8.1, 15.1, 16 (marked with *) and general update.

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