LIGHT FILLING PUTTY - LIGHT

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

1.1. Product identification

LIGHT FILLING PUTTY - LIGHT

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.
Ul. Warszawska 36a
PL 42-240 Rudniki
Tel: +48 34 329-45-03
Fax: +48 34 320-12-16

Person responsible for the safety data sheet
e-mail: ranal@ranal.pl

1.4. Emergency telephone

+48 34 329-45-03 (from 7:30 am. to 3:30 pm.)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification 1999/45/WE:
The mixture was classified as dangerous according to current regulations – see section 15.
Harmful product. Harmful by inhalation. Irritating to eyes and skin. Flammable product.

2.2. Label elements:

Contains: styrene
Signs:

Risk symbol:
Xn Harmful

Risk index:

R10	Flammable.
R20	Harmful by inhalation.
R36/38	Irritating to eyes and skin.

Safety index:

S(2-)	Keep out of the reach of children.
S22	Do not breathe dust.
S23	Do not breathe vapour.
S36	Wear suitable protective clothing.
S46	If swallowed, seek medical advice immediately and show this container or label.
S51	Use only in well-ventilated areas.

2.3. Other hazards

Styrene fumes form explosive mixtures with air. Fumes 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.

LIGHT FILLING PUTTY - LIGHT

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable.

3.2. Mixtures

Product identification
LIGHT FILLING PUTTY - LIGHT

Substance name	Identification numbers	Classification and marking	Concentration [%]
Styrene	WE: 202-851-5 CAS: 100-42-5 Index no: 601-026-00-0 Registration no: --	Classification 67/548/EEC: R10 Xn; R20 Xi; R36/38 Classification 1272/2008/WE: Flam. Liq. 3; H226 Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Irrit. 2; H315	12.5-14%

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 contamined clothing. Rinse contamined 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
Styrene foams 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 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 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: 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
Protect from the sunrays and low temperatures. 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.

7.3. Special end use(s)
Car body protector in spray, for professional use in car body 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/m^3)	MPIC (mg/m^3)	MPCC (mg/m^3)
100-42-5	Styrene	50	200	---

National acceptable biological values:

CAS NUMBER:	SUBSTANCE ABSORBED	SUBSTANCE MARKED	BIOLOGICAL MATERIAL	PCB VALUES
100-42-5	Styrene	mandelic acid + phenylglyoxal acid	urine*	350 mg/g creatinine

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

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, nitryl 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.

Persons suffering from respiratory tract hipersensitivity (e.g. asthma, chronic respiratory tract infiammation) 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

Parameters	Values
Physical state	highly viscous liquid
Colour	according to specification
Odour	slightly sweet to strong
Odour treshold	0.43 mg/m^3 (styrene)
pH	not applicable
Melting / freezing point	-30°C
Boiling point	146°C
Flash point	30°C
Autoignition point	490°C
Breakdown point	not specified
Evaporation rate	not specified
Flammability (solid, gas)	not applicable
Explosion limits	% bottom: 1.1vol% top: 8.0 vol% (styrene)
Vapour pressure	około 7.3 hPa (20°C) styrene
Vapour density(with regard to air)	3.6 (styrene)
Density	according to specification
Solubility (in water)	very poor
n-oktanol/water division ratio	3,2 (styrene)
Viscosity	according to specification
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

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 may be 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/m³ (4 h)
TCL0 (human, inhalation) – 2600 mg/m³
LCL0 (human, inhalation) – 43000 mg/m³

b) Irritating effect
Skin: irritating to skin and mucous membrane
Eyes: irritating effect

c) Caustic effect
Mixture is not classified as caustic. No available data confirming the hazard class.

d) Allergic effects
Mixture is not classified as allergenic. No available data confirming the hazard class.

e) Toxicity for repeated exposure
Styrene foams in low concentration may cause eye lacrimation, metallic taste in mouth; in concentration of about 800 mg/m³ – painful and reddened conjuctivas, and in higher concentrations – caugh, dizziness, disequilibriumi. Prolonged exposure causes drowsiness, disturbances of consciousness; possible paralysis of the respiratory centre.

f) Cancerogenity
Mixture is not classified as cancerogenic. No available data confirming the hazard class.

g) Mutagenity
Mixture is not classified as mutagenic. No available data confirming the hazard class.

h) Harmful effect on reproduction
Mixture is not classified as harmful to reproduction. 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, and in exceptional instances loss of consciousness. If swallowed the substance may cause irritation of alimentary tract, nausea, vomiting and diarrhea. 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 ingredients included in the preparation.

12.1. Toxicity
styrene
Acute toxicity for fish: LC50 4-10 mg/l/96h
Acute toxicity for crustacea Daphnia magna EC50/24 182 mg/l/24h
Number in catalogue of water hazardous substances: 187
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, 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.

Contamined container:
A contamined container containing unhardened remains of the product is harmful waste. Waste code: 15 01 10*. Do not store with communal waste. The contamined 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 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 use an open flame and do not smoke. 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.

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
- Directive 67/548 /EWG (2006/121/WE)
- Directive 91/155/EWG (2001/58/WE)
- Directive 1999/45/EC (2006/8/WE)
- REACH – Regulation 2006/1907/WE
- CLP – Regulation 1272/2008/WE

15.2. Chemical safety assessment
Not performed

SECTION 16: OTHER INFORMATION

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

R10 Flammable.
R20 Harmful by inhalation.
R36/38 Irritating to eyes and skin.
Flam.Liq.3
H226 Flammable liquid and vapour.
Acute Tox. 4
H332 Harmful if inhaled
Eye Irrit. 2
H319 Causes serious eye irritation.
Skin Irrit. 2
H315 Causes skin irritation (category 2)

16.2. 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

Changes: General update