

SPECTRAL SOFT Multifunctional Putty; SPECTRAL FINAL Finishing Putty; SPECTRAL FM- Glass FiberPutty**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING****1.1. Product identifier****SPECTRAL SOFT Multifunctional Putty; SPECTRAL FINAL Finishing Putty; SPECTRAL FM- Glass FiberPutty****1.2. Relevant identified uses of the substance or mixture and uses advised against**

Putties (component A) based on non-saturated polyester resins used for levelling scratches and pits before spraying. For professional use in car refinish.

1.3. Data of the supplier Safety Data Sheet

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SECTION 2: HAZARD IDENTIFICATION**2.1. Classification of the substance or mixture**

The mixture was classified as dangerous pursuant to current regulations - see section 15.

Classification 1272/2008/WE:

Reproductive toxicity, Hazard Category 2 (Repr.2) Suspected of damaging the unborn child.

Irritating effect on skin, category 2 (Skin Irrit.2). Causes skin irritation.

Serious eye damage/eye irritation, Hazard Category 2 (Eye Irrit.2). Causes serious eye irritation.

Specific target organ toxicity — Repeated exposure, Hazard Category 1 (STOT RE 1) Cause damage to organs (hearing organs) through prolonged or repeated exposure.

Liquid, flammable substances, category 3 (Flam. Liq. 3). Flammable liquid and vapour.

2.2. Label elements:

Contains:

styrene

Pictograms:



Signal word:

Danger

H226

Flammable liquid and vapour.

H361d

Suspected of damaging the unborn child.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H372

Cause damage to organs (hearing organs) through prolonged or repeated exposure.

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260

Do not breathe dust/vapours.

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 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.

SPECTRAL SOFT Multifunctional Putty; SPECTRAL FINAL Finishing Putty; SPECTRAL FM- Glass FiberPutty**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances**

Not applicable.

3.2. Mixtures**Product identification**

Substance name	Identification numbers	SPECTRAL SOFT Multifunctional Putty; SPECTRAL FINAL Finishing Putty; SPECTRAL FM- Glass FiberPutty Classification and marking	Concentration [wt%]
Styrene	EC: 202-851-5 CAS: 100-42-5 Index no.: 601-026-00-0 Registration no.: 01-2119457861-32-XXXX	Flam. Liq. 3; H226 Repr. 2; H361d Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Irrit. 2; H315 STORE RE 1; H372 (hearing organs)	12.5-14

The full text of the hazard statements (H) is provided in Section 16.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

General information:

See section 11 of the Safety Data Sheet.

Inhalation:

Take the victim outside into fresh air, ensure quiet surrounding, in case of no breath, apply artificial respiration. **Call a doctor.**

Skin:

Take off contaminated clothing. Rinse contaminated skin with plenty of lukewarm water for about 15 minutes. If irritation persists, consult a doctor.

Eyes:

Rinse immediately with plenty of lukewarm water for about 15 minutes, avoid strong water jet-risk of cornea damage, consult a doctor.

Alimentary tract:

Do not provoke 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 and effects, both acute and delayed

Styrene foams in low concentrations may cause eye lachrimation, metallic taste in mouth, painful and reddened conjunctivas, 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 strongly oxidizing agents, peroxides, strong acids, bases, metal salts, copper and its alloys. Styrene polymerization is a highly exothermic process. Fire may cause generation of carbon dioxide and other toxic gases.

SPECTRAL SOFT Multifunctional Putty; SPECTRAL FINAL Finishing Putty; SPECTRAL FM- Glass FiberPutty**SECTION 5: FIREFIGHTING MEASURES****5.3. Advice for firefighters**

Fire-fighting teams should wear self-contained breathing apparatus and light protective clothing. Cool adjacent tanks by spraying water at a safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

For persons not being the members of aid giving staff:

Eliminate sources of ignition. Ensure sufficient ventilation of the room. Avoid direct contact with the released substance. Avoid contact with skin and eyes. Personal protection measures - section 8 of the Safety Data Sheet.

For persons giving aid:

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 containers 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 Safety Data Sheet.

Disposal considerations - see section 13 of the Safety Data Sheet.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Keep away from heat and fire sources. Prevent leakage to the sewage system, surface waters, underground waters and soil. Use in well ventilated rooms. Do not smoke. Do not inhale fumes. Avoid contact with skin and eyes. Take precaution measures against electrostatic discharge. Use personal protection measures - section 8 of the Safety Data Sheet.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly sealed, original containers. Do not store near large amounts of organic peroxides and other strong oxidants. Take precaution measures against electrostatic discharge. Store in cool, well ventilated rooms. Protect from low temperatures, influence of sunrays and heat sources.

7.3. Specific end use(s)

Putties (component A) based on non-saturated polyester resins used for levelling scratches and pits before spraying. For professional use in car refinish, taking into consideration the information included in sections 7.1 and 7.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Styrene CAS 100-42-5 according to:

- TRGS 900: MAK: 20ppm, MAK: 86 mg/m³, 2(II),DFG, Y
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA 100 mg/m³; 430 mg/m³, STEL 250ppm, 1080 mg/m³

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).

SPECTRAL SOFT Multifunctional Putty; SPECTRAL FINAL Finishing Putty; SPECTRAL FM- Glass FiberPutty**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.2. Exposure control**

Workplace:

Fixed fume extraction and general ventilation.

Persons suffering from respiratory tract hypersensitivity (e.g. 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**

Physical state	highly viscous liquid
Colour	According to the specification
Odour	slightly sweet to strong
Odour threshold	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 1.1 vol% top: 8.0 vol% (styrene)
Vapour pressure	about 7.3 hPa (20°C) (styrene)
Vapour density (with regard to air)	3.6 (styrene)
Density	1.2 g/cm ³ (20°C)
Solubility (in water)	Very poor
N-octanol/water division ratio	3.2 (styrene)
Viscosity (rotation rheometer)	20000 – 50000 mPas
Explosive properties	not applicable
Oxidizing properties	not applicable

9.2 Other informations

No available data.

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

The product is not reactive under normal conditions.

10.2. Chemical stability

The product remains stable 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 might result in an explosion. Carbon monoxide and other toxic gases are generated as a result of thermal decomposition.

10.4. Conditions to avoid

Flammable product. Avoid contact with strongly oxidizing agents, 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.

SPECTRAL SOFT Multifunctional Putty; SPECTRAL FINAL Finishing Putty; SPECTRAL FM- Glass FiberPutty**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects**

No experimental data available on the preparation. Evaluation was performed based on the data on dangerous ingredients included in the preparation.

a) Acute toxicity

Styren

LD50 (rat, oral) – 5000 mg/kg

LC50 (rat, inhalation) – 24000 mg/m³ (4 h)

TCL0 (human, inhalation) – 2600 mg/m³

LCL0 (human, inhalation) – 43000 mg/m³

b) Skin corrosion/irritation

Causes skin irritation.

c) serious eye damage/irritation

Causes serious eye irritation.

d) respiratory or skin sensitisation

The mixture has not been classified as allergenic. No available data confirming the hazard class.

e) germ cell mutagenicity

The mixture has not been classified as mutagenic. No available data confirming the hazard class.

f) carcinogenicity

The mixture has not been classified as cancerogenic. No available data confirming the hazard class.

g) reproductive toxicity

Suspected of damaging the unborn child.

h) STOT-single exposure

Styrene foams in low concentrations may cause eye lacrimation, metallic taste in mouth; in concentrations of ca. 800 mg/m³ - painful and reddened conjunctivas, in higher concentrations - cough, dizziness, disequilibrium.

i) STOT- repeated exposure

Prolonged exposure causes drowsiness, disturbances of consciousness, possible paralysis of the respiratory centre. Cause damage to organs (hearing organs) through prolonged or repeated exposure (inhalation).

j) aspiration hazard

No available data confirming the hazard class.

Exposure methods:

Inhalation: Harmful in case of inhalation.

Skin: Irritating effect.

Eyes: irritating effect.

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

Poisoning symptoms:

Headache and vertigo, fatigue, decreased muscle power, drowsiness and, in exceptional instances, loss of consciousness. If swallowed, the substance may cause irritation of the alimentary tract, nausea, vomiting and diarrhoea. It has depressing effect on the central nervous system.

SECTION 12: ECOLOGICAL INFORMATION

No experimental data available on the preparation. Evaluation was performed 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 the 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

Product very poorly soluble in water.

SPECTRAL SOFT Multifunctional Putty; SPECTRAL FINAL Finishing Putty; SPECTRAL FM- Glass FiberPutty**SECTION 12: ECOLOGICAL INFORMATION****12.5. Results of PBT and vPvB assessment**

No available data.

12.6. Other adverse effects

No available data.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

The product must be disposed of in compliance with proper local and statutory regulations with regard to waste - see point 15. The product should be disposed with entities which are authorised to conduct activity in the area of collecting, recycling or utilization of waste.

Product remains:

Unhardened remains of the product are harmful waste. 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. The hardened product is not harmful waste.

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

Contaminated container:

A container containing unhardened remains of the product is harmful waste. Do not store with communal waste. The contaminated container should be disposed with entities which are authorized to collection, recover or disposal.

SECTION 14: TRANSPORT INFORMATION

	ADR/RID	IMO/IMGD	IATA-DGR
14.1. UN number	1866	1866	1866
14.2. UN proper shipping name		RESIN SOLUTION, flammable	
14.3. Transport hazard class(es)	3	3	3
14.4. Packaging group	III	III	III
14.5. Environmental hazards	none	none	none
14.6. Special precautions for user	Do not transport with materials of class 1 (excluding materials of class 1.4S) and some materials of classes 4.1 and 5.2. During transport, avoid direct contact with materials of classes 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 Convention and the IBC Code	Not applicable.		

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH - Regulation 2006/1907/WE

CLP - Regulation 1272/2008/WE

15.2. Chemical safety assessment

Not performed

SECTION 16: OTHER INFORMATION**Relevant hazard statements listed in Sections 2 to 15:**

Flam. Liq.3 Flammable liquid. Category 3
H226 Flammable liquid and vapour
Repr.2 Reproductive toxicity, hazard category 2
H361d Suspected of damaging the unborn child
Skin Irrit. 2 Corrosive/irritating effect on skin. Category 2
H315 Causes skin irritation Category 2
Eye Irrit. 2 Eye irritation. Category 2
H319 Causes serious eye irritation
Acute Tox. 4 Acute toxicity. Category 4
H332 Harmful if inhaled
STOT SE 3 Specific target organ toxicity– single exposure, category 3
STOT RE 1 Specific target organ toxicity – repeated exposure, Category 1
H372 Causes damage to organs through prolonged or repeated exposure

Abbreviations and acronyms:

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 List of Notified Chemical Substances (ELINCS) or a number in the European Inventory of Existing Chemical Substances mention 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

ADR – European agreement on international road transport of hazardous materials

IMO – International Marine Organization

RID – Regulations for international rail transport of hazardous materials

IMDG-Code – International marine code for hazardous materials

ICAO /IATA – Technical Instructions for Safe Air Transport of Hazardous Materials

The information is based on our current knowledge. This document shall not constitute warranty for product characteristics. Classification was made by calculation method according to the classification rules contained in Regulation 1272/2008/WE.

Other sources of information

ECHA European Chemicals Agency

TOXNET Toxicology Data Network

IUCLID International Uniform Chemical Information Database

Changes: General update

Trainings:

With regard to handling, health and safety while working with hazardous substances and mixtures.

With regard to transport of hazardous goods pursuant to the requirements of ADR regulations.

Issued by: NOVOL Sp. z o.o.

Information available from: Research and Development Laboratory, tel. +48 61 810 99 09.