SAFETY DATA SHEET
Date of issue: 25.09.2000
Date of update: 25.11.2014
Number: SDS_1_01
Page: 1 of 7

UNI UNIVERSAL PUTTY, UNISOFT SOFT PUTTY, SOFT PLUS MULTIFUNCTIONAL PUTTY, ECONOMY FILLING PUTTY,
PROFICYNK PUTTY FOR ZINC AND ALUMINIUM, FINISH FINISHING PUTTY, TECH PLUS INDUSTRIAL PUTTY, ALU
PUTTY WITH ALUMINIUM POWDER, UNI PLUS SOFT FILLING PUTTY

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1. Product identifier
UNI UNIVERSAL PUTTY, UNISOFT SOFT PUTTY, SOFT PLUS MULTIFUNCTIONAL PUTTY, ECONOMY FILLING PUTTY,
PROFICYNK PUTTY FOR ZINC AND ALUMINIUM, FINISH FINISHING PUTTY, TECH PLUS INDUSTRIAL PUTTY, ALU
PUTTY WITH ALUMINIUM POWDER, UNI PLUS SOFT FILLING PUTTY

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
NOVOL Sp. z o.o.
Ul. Żabikowska 7/9
PL 62-052 Komorniki
Tel: +48 61 810-98-00
Fax: +48 61 810-98-09
www.novol.pl
dokumentacja@novol.pl

1.4. Emergency telephone number
+48 61 810-99-09 (from 07.00 to 15.00)

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 Rep. 1) Cause damage to organs through prolonged or repeated exposure.
Liquid, flammable substances, category 3 (Flam. Liq. 3). Flammable liquid and vapour.

Classification 1999/45/EC:
Harmful mixture. Harmful by inhalation. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to the unborn child. Irritating to eyes and skin. Flammable liquid, avoid contact with strong oxidants.

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 through prolonged or repeated exposure.

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 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.
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable.

3.2. Mixtures

Product identification
UNI UNIVERSAL PUTTY, UNISOFT SOFT PUTTY, SOFT PLUS MULTIFUNCTIONAL PUTTY, ECONOMY FILLING PUTTY, PROFICYNK PUTTY FOR ZINC AND ALUMINIUM, FINISH FINISHING PUTTY, TECH PLUS INDUSTRIAL PUTTY, ALU PUTTY WITH ALUMINIUM POWDER, UNI PLUS SOFT FILLING PUTTY

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Identification numbers</th>
<th>Classification and marking</th>
<th>Concentration [wt%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene</td>
<td>EC: 202-851-5</td>
<td>Classification 67/548/EEC: R10</td>
<td>12.5-14</td>
</tr>
<tr>
<td></td>
<td>CAS: 100-42-5</td>
<td>Repr. Cat. 3; R63</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index no.: 601-026-00-0</td>
<td>Xn; R20-48/20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Registration no.: 01- 2119457861-32-XXXX</td>
<td>Xi; R36/38 Classification 1272/2008/EC: Flam. Liq. 3; H226</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Repr. 2; H361d</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Tox. 4; H332</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Irrit. 2; H319</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Irrit. 2; H315</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STORE RE 1; H372</td>
<td></td>
</tr>
</tbody>
</table>

Full text of the phrases identifying the types of hazards and R phrases 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 lacrimation, 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.
SAFETY DATA SHEET
Date of issue: 25.09.2000
Date of update: 25.11.2014
Number: SDS_1_01
Page: 3 of 7

UNI UNIVERSAL PUTTY, UNISOFT SOFT PUTTY, SOFT PLUS MULTIFUNCTIONAL PUTTY, ECONOMY FILLING PUTTY, PROFICYNK PUTTY FOR ZINC AND ALUMINIUM, FINISH FINISHING PUTTY, TECH PLUS INDUSTRIAL PUTTY, ALU PUTTY WITH ALUMINIUM POWDER, UNI PLUS SOFT FILLING PUTTY

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.

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

NOVOL
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.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>highly viscous liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>beige, light grey, white, dark grey with visible aluminium plates</td>
</tr>
<tr>
<td>Odour</td>
<td>slightly sweet to strong</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>0.43 mg/m³ (styrene)</td>
</tr>
<tr>
<td>pH</td>
<td>not applicable</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>-30°C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>146°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>30°C</td>
</tr>
<tr>
<td>Autoignition point</td>
<td>490°C</td>
</tr>
<tr>
<td>Breakdown point</td>
<td>not specified</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not specified</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>% bottom 1.1 vol% top: 8.0 vol% (styrene)</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>about 7.3 hPa (20°C) (styrene)</td>
</tr>
<tr>
<td>Vapour density</td>
<td>3.6 (styrene)</td>
</tr>
<tr>
<td>Density</td>
<td>1.85-1.95 g/cm³ (20°C)</td>
</tr>
<tr>
<td>Solubility (in water)</td>
<td>Very poor</td>
</tr>
<tr>
<td>N-octanol/water division ratio</td>
<td>3.2 (styrene)</td>
</tr>
<tr>
<td>Viscosity (rotation rheometer)</td>
<td>20000 – 50000 mPas</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>not applicable</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

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.
SECTION 10: STABILITY AND REACTIVITY

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.

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

c) Caustic effect
The mixture has not been classified as caustic. No available data confirming the hazard class.

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

e) Toxicity for repeated 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. Prolonged exposure causes drowsiness, disturbances of consciousness, possible paralysis of the respiratory centre.

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

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

h) Harmful effect on reproduction
Possible risk of harm to the unborn child.

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.
SAFETY DATA SHEET
Date of issue: 25.09.2000
Date of update: 25.11.2014
Number: SDS_1_01
Page: 6 of 7

UNI UNIVERSAL PUTTY, UNISOFT SOFT PUTTY, SOFT PLUS MULTIFUNCTIONAL PUTTY, ECONOMY FILLING PUTTY, PROFICYNK PUTTY FOR ZINC AND ALUMINIUM, FINISH FINISHING PUTTY, TECH PLUS INDUSTRIAL PUTTY, ALU PUTTY WITH ALUMINIUM POWDER, UNI PLUS SOFT FILLING PUTTY

SECTION 12: ECOLOGICAL INFORMATION

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.

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

14.1. UN number
UNO066 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 73/78 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

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

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

- R10 Flammable
- R20 Harmful by inhalation.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R36/38 Irritating to eyes and skin.
- R63 Possible risk of harm to the unborn child.
- Flam.Liq.3 Liquid, flammable substances, category 3
- H226 Flammable liquid and vapours
- Skin Irrit. 2 Skin irritating effect (category 2).
- H315 Causes skin irritation.
- Eye Irrit. 2. Irritating effect on eyes, category 2
- H319 Causes serious eye irritation.
- Acute Tox. 4. Acute toxicity, category 4
- H322 Harmful if inhaled.
- Rep. 2 Reproductive Toxicity (category 2)
- H361d Suspected of damaging fertility or the unborn child
- STOT RE 1 Specific target organ toxicity — Repeated exposure, Hazard Category 1
- H372 Cause damage to organs through prolonged or repeated exposure

Explanation of the abbreviations and acronyms used in the 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 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

The information is based on our current knowledge. This document shall not constitute warranty for product characteristics.

Other sources of information

- ESIS European Chemical Substances Information System
- 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.