HYBRYD 200 MULTIFUNCTIONAL MICROFIBER PUTTY

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

1.1. Product identifier

HYBRYD 200 MULTIFUNCTIONAL MICROFIBER PUTTY

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

Putty (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.
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novol@novol.pl

Person responsible for the Safety Data Sheet
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 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.
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable.

3.2. Mixtures

<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, CAS: 100-42-5, Index no.: 601-026-00-0, Registration no.: 2119457861-32-XXXX</td>
<td>Flam. Liq. 3; H226, Acute Tox. 4; H332, Eye Irrit. 2; H319, Skin Irrit. 2; H315, STORE RE 1; H372 (hearing organs)</td>
<td>10-20</td>
</tr>
<tr>
<td>1-ethylpyrrolidin-2-one</td>
<td>WE: 220-250-6, CAS: 2687-91-4, Index no.: 616-208-00-5, Registration no.: 01-2119472138-36-XXXX</td>
<td>Repr. 1B; H360 Df, Eye Dam. 1; H318</td>
<td>&lt;0.2</td>
</tr>
</tbody>
</table>

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 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.

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 monoxide and other toxic gases.
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. Special end use(s)
Putty (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 CONTROL/PERSONAL PROTECTION

8.1. Control parameters
Styrene CAS 100-42-5 according to:
- TRGS 900: MAK: 20ppm, MAK: 86 mg/m³, 2(III),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.
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SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.2. Exposure control

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>according to specification</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>110-140°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>23-25°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 (with regard to air)</td>
<td>3.6 (styrene)</td>
</tr>
<tr>
<td>Density</td>
<td>1.4 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. Possible occurrence 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 sunrains 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.
HYBRYD 200 MULTIFUNCTIONAL MICROFIBER PUTTY

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
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 (rat, oral)</td>
<td>5000 mg/kg</td>
</tr>
<tr>
<td>LC50 (rat, inhalation)</td>
<td>24000 mg/m³ (4 h)</td>
</tr>
<tr>
<td>TCL0 (human, inhalation)</td>
<td>2600 mg/m³</td>
</tr>
<tr>
<td>LCL0 (human, inhalation)</td>
<td>43000 mg/m³</td>
</tr>
</tbody>
</table>

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 conjuctivas, 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. Harmful: danger of serious damage to health by prolonged exposure through 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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Acute toxicity for fish: LC50</th>
<th>Acute toxicity for crustacea: Daphnia magna EC50</th>
<th>Water hazard class</th>
</tr>
</thead>
<tbody>
<tr>
<td>styrene</td>
<td>4-10 mg/l/96h</td>
<td>182 mg/l/24h</td>
<td>187</td>
</tr>
</tbody>
</table>

Number in the catalogue of water hazardous substances: 187
Water hazard class: 2

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substance</th>
<th>Biodegradability: 80% (closed bottle test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>styrene</td>
<td></td>
</tr>
</tbody>
</table>

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SECTION 12: ECOLOGICAL INFORMATION

12.3. Bioaccumulation potential
Log Pow: 2.96 (OECD 107) - low bioaccumulation ability
styrene

12.4. Mobility in soil
Product very poorly soluble in water.

12.5. Results of PBT and vPvB properties evaluation
No available data.

12.6. Other harmful 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 collect, recover or dispose.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number
ADR/RID 1866
IMO/IMGD 1866
IATA-DGR 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
HYBRYD 200 MULTIFUNCTIONAL MICROFIBER PUTTY

SECTION 16: OTHER INFORMATION

Relevant hazard statements listed in Sections 2 to 15:
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapours
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H360D May damage the unborn child. Suspected of damaging fertility.
H361d Suspected of damaging fertility or the unborn child
H372 Cause damage to organs through prolonged or repeated exposure

Explanation of the abbreviations and acronyms used in the Safety Data Sheet
Acute Tox. 4. Acute toxicity, category 4
Eye Dam. 1 Serious eye damage, category 1
Eye Irrit. 2. Irritating effect on eyes, category 2
Flam.Liq.3 Liquid, flammable substances, category 3
Repr. 1B Reproductive Toxicity category 1B
Repr. 2 Reproductive Toxicity category 2
Skin Irrit. 2 Skin irritating effect, category 2.
STOT RE 1 Specific target organ toxicity — Repeated exposure, Hazard Category 1
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. 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.