SPECTRAL BASE BASECOAT

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

1.1. Product identifier

SPECTRAL BASE BASECOAT

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

Basecoats in various colours (see appendix no. 1) for mixing with binders SPECTRAL BASE, for application with the use of a spray gun. 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

Person responsible for the Safety Data Sheet dokumentacja@novol.pl

1.4. Emergency telephone number +48 61 810-99-09 (from 7.00 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. Harmful mixture.

Classification 1272/2008/WE:
Irritating effect on skin, category 2 (Skin Irrit.2). Causes skin irritation.
Serious eye damage/eye irritation, Hazard Category 1 (Eye Dam. 1). Causes serious eye damage.
Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation (STOT SE 3). May cause respiratory irritation. Specific target organ toxicity — Single exposure, Hazard Category 3, Narcosis (STOT SE 3). May cause drowsiness or dizziness.
Hazardous to the aquatic environment — Chronic Hazard, Category 3 (Aquatic Chronic 3). Harmful to aquatic life with long lasting effects.
Liquid, flammable substances, category 3 (Flam. Liq. 3). Flammable liquid and vapour.

Classification 1999/45/EC:
Irritant mixture. Irritating to respiratory system. Risk of serious damage to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. Flammable.

2.2. Label elements:

Contains: butan-1-ol

Pictograms:

Signal word: Danger.

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
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.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a doctor if you feel unwell.

2.3. Other hazards
No available data.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Not applicable.

3.2. Mixtures

Product identification SPECTRAL BASE

Substance name	Identification numbers	Classification and marking	Concentration [wt%]
Butyl acetate	EC: 204-658-1 CAS: 123-86-4 Index no.: 607-025-00-1 Registration no.: 01-2119485493-29-XXXX	Classification 67/548/EEC: R10, R66-67 Classification 1272/2008/EC: Flam. Liq. 3; H226; STOT SE 3; H336 EUH066	<50
1-methoxy-2-propanol acetate	EC: 203-603-9 CAS: 108-65-6 Index no.: 607-195-00-7 Registration no.: 01-2119475791-29-XXXX	Classification 67/548/EEC: R10 Classification 1272/2008/EC: Flam. Liq. 3; H226;	<25
Solvent naphtha (petroleum), light arom. (contains less than 0,1 % w/w benzene (Einecs No 200-753-7)	WE: 265-199-0 CAS: 64742-95-6 Index no.: 649-356-00-4 Registration no.: 01-2119486773-24-XXXX	Classification 67/548/EWG: Note H and Note P R10 Xn; R65 Xi; R37 R 53 R66-67 Classification 1272/2008/WE: Note H and Note P Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066	<20
butan-1-ol	WE: 200-751-6 CAS: 71-36-3 Index no.: 603-004-00-6 Registration no.: 01-2119484630-38-XXXX	Classification 67/548/EWG: R10 Xn; R22 Xi; R37/38-41 R67 Classification 1272/2008/WE: Flam. Liq. 3; H226 Acute Tox. 4; H302 STOT SE 3; H335 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H336	<15
xylene	EC: 215-535-7 CAS: 1330-20-7 Index no.: 601-022-00-9 Registration no.: 01-2119539452-40-XXXX	Classification 67/548/EEC: R10, Xn; R20/21 Xi; R38 Classification 1272/2008/EC: Flam. Liq. 3; H226; Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit.2; H315	<12
ethanol	WE: 200-578-6 CAS: 64-17-5 Index no.: 603-002-00-5 Registration no.: 01-2119457610-43-XXX	Classification 67/548/EWG: F; R11 Classification 1272/2008/WE: Flam. Liq. 2; H225	0-5

SPECTRAL BASE BASECOAT

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance name	Identification numbers	Classification and marking	Concentration [wt%]
Naphtha (petroleum), hydrotreated heavy (contains less than 0,1 % w/w benzene (Einecs No 200-753-7)	WE: 265-150-3 CAS: 64742-48-9 Index no.: 649-327-00-6 Registration no.: 01-2119486659-16-XXXX	Classification 67/548/EWG: Note H and Note P R10 Xn; R65 Xi; R37 R53 Classification 1272/2008/WE: Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 Aquatic Chronic 4; H413	0-3

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
Vapours might cause drowsiness and vertigo. Repeated exposure might cause skin dryness or rupture.

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
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.

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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 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 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, the influence of sunrays and heat sources.

7.3. Special end use(s)
SPECTRAL BASE basecoats 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

8.1. Control parameters
Xylene CAS 1330-20-7 according to:
- *TRGS 900:* MAK: 100ppm, MAK: 440 mg/m^3, 2(II),DFG, H
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA 50 mg/m^3, 220mg/m^3, STEL 100ppm, 441 mg/m^3, Sk, BMGV

2-methoxy-1-methylethyl acetate CAS 108-65-6 according to:
- *TRGS 900:* MAK: 50ppm, MAK: 270 mg/m^3, 1(I),DFG, EU, Y
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA 50 ppm, 274 mg/m^3, STEL 100ppm, 548 mg/m^3, Sk

Butyl acetate CAS 123-86-4 according to:
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA 150 ppm, 724 mg/m^3, STEL 200ppm, 966 mg/m^3

Butan-1-ol CAS 71-36-3 according to:
- *TRGS 900:* MAK: 100ppm, MAK: 310 mg/m^3, 1(I),DFG, Y
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: STEL 50ppm, 154 mg/m^3,Sk

8.2. Exposure control
Respiratory tract protection:
Gas mask with A type absorber (EN 141).

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SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.2. Exposure control
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.

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	liquid
Colour	according to palette's colour
Odour	strong, powerful
Odour threshold	2.9-10 mg/m^3 (Butyl acetate)
pH	not applicable
Melting/freezing point	not applicable
Boiling point	126-140℃
Flash point	23℃
Autoignition point	about 370℃
Breakdown point	not specified
Evaporation rate	not specified
Flammability (solid, gas)	not applicable
Explosion limits	% bottom: 1.4 vol% top: 9.6 vol% (Butyl acetate)
Vapour pressure	13 hPa (20℃) (Butyl acetate)
Vapour density (with regard to air)	4.0 (butyl acetate)
Density	about 1.0 g/cm^3 (20℃)
Solubility (in water)	poor
N-octanol/water division ratio	1.85 (butyl acetate)
Viscosity	100 ÷ 130s
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
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 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.

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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

Xylene	LD_{50} (rat, ingestion)	4300 mg/kg
	LC_{50} (rat, inhalation)	5000 ppm/4h
	LD_{50} (rabbit, skin)	1700 mg/kg
Butyl acetate	LD_{50} (rat, ingestion)	10768 mg/kg
	LC_{50} (rat, inhalation)	390 ppm/4h
	LD_{50} (rabbit, skin)	17600 mg/kg
ethanol	LD_{50} (rat, ingestion)	7060mg/kg
	LC_{50} (rat, inhalation)	20000ppm /10h
1-methoxy-2-propanol acetate	LD_{50} (rat, ingestion)	8532 mg/kg
Butan-1-ol	LD_{50} (rat, ingestion)	790 mg/kg
	LC_{50} (rat, inhalation)	800 ppm/4h

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

e) Toxicity for repeated exposure
Repeated exposure might cause skin dryness or rupture.

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
The mixture has not been classified as having any harmful effect on reproduction. No available data confirming the hazard class.

Exposure methods:
Inhalation: Irritating to respiratory system.
Skin: Repeated exposure may cause skin dryness or cracking.
Eyes: Risk of serious damage to eyes.
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. Fumes might cause drowsiness and vertigo. Repeated exposure might cause skin dryness or rupture.

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

Xylene	Daphnia magna EC50 (48hours.) > 7.4 mg/l	
	Evaluation indicator of acute toxicity for mammals: 3; for fish: 4.1	
	Number in the catalogue of water hazardous substances:	206
	Water hazard class: 2	
Butyl acetate	Number in the catalogue of water hazardous substances:	42
	Water hazard class: 1	

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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

1-methoxy-2-propanol acetate	Daphnia magna EC50 (48hours.) > 500 mg/l Oncorhynchus mykiss (rainbow trout)/LC50 (96 hours 100-180 mg/l Number in the catalogue of water hazardous substances: 5033 Water hazard class: 1
Butan-1-ol	Evaluation indicator of acute toxicity for mammals 1; for fish: 2.9 Number in the catalogue of water hazardous substances: 39 Water hazard class: 1

12.2. Persistence and degradability

Butyl acetate	Biodegradability: 98% (closed bottle test)

12.3. Bioaccumulative potential

Butyl acetate	Biodegradation coefficient: BCF=3.1

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:
Do not dispose the product into the sewage system. Do not store with communal waste. Remove the remains of the mixture carefully and leave to dry only in good ventilated rooms. The dried product is not harmful waste.
CAUTION: The remains should be dried in small portions. 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**	1263	1263	1263
14.2.	**UN proper shipping name**		PAINT RELATED MATERIAL	
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 together 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.

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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)
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

Full text of the phrases identifying the types of hazards and R phrases mentioned in sections 2-15
R10 Flammable
R20/21 Harmful by inhalation and in contact with the skin
R22 Harmful if swallowed.
R37/38 Irritating to respiratory system and skin.
R37 Irritating to respiratory system.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R53 May cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
Flam.Liq.2/3 Liquid, flammable substances, category 2/3
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
STOT SE 3 Specific target organ toxicity– single exposure, category 3
H335 May cause respiratory irritation.
H336 Might cause drowsiness or or dizziness.
Acute Tox. 4. Acute toxicity, category 4
H332 Harmful if inhaled.
H312 Harmful in contact with skin.
H302 Harmful if swallowed.
Eye Dam. 1 Poważne uszkodzenie oczu
H318 Causes serious eye damage.
Asp. Tox. 1 Aspiration hazard, Hazard Category 1
H304 May be fatal if swallowed and enters airways.
Skin Irrit. 2 Caustic/irritating effect on skin, category 2
H315 Causes skin irritation.
EUH066 Repeated exposure might cause skin dryness or rupture.
Aquatic Chronic 2 Hazardous to the aquatic environment — Chronic Hazard, Category 2
H411 Toxic to aquatic life with long lasting effects.
Aquatic Chronic 3 Hazardous to the aquatic environment — Chronic Hazard, Category 3
H412 Harmful to aquatic life with long lasting effects.
Aquatic Chronic 4 Hazardous to the aquatic environment — Chronic Hazard, Category 4
H413 May cause long lasting harmful effects to aquatic life.

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
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.

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SECTION 16: OTHER INFORMATION

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.

APPENDIX 1: LIST OF COLOURS SPECTRAL BASE BASECOAT

SPECTRAL BASE SOLID BASECOATS:

SB-110 MATTING, SB-160 BLACK, SB-457 BORDEAUX, SB-672 GREEN BLUE, SB-342 GOLD YELLOW BC, SB-671 BLUE, SB-721 GREEN GOLD, SB-341 TRANSP. RED BROWN, SB-322 TRANSP. GOLD YELLOW, SB-323 TRANSP YELLOW OXIDE, SB-561 VIOLET, SB-762 GREEN, SB-652 RED BLUE SB-761 YELLOW GREEN, SB-100 WHITE, SB-120 MEDIUM JET BLACK, SB-130 JET BLACK, SB-432 DARK ORANGE, SB-452 BRILLANT RED, SB-271 LIGHT YELLOW, SB-433 TRANSPARED RED OXIDE, SB-453 MAGENTA, SB-455 LIVE RED, SB-435 TRANSP. ORANGE BROWN, SB-140 BLACK NO2, SB-434 TRANSP. BROWN, SB-456 LIGHT RED,SB-541 BORDEAUX NO2, SB-454 RED VIOLET, SB-673 TORQUOISE BLUE, SB-451 LIGHT RED, SB-651 NEW RED BLUE, SB-431 RED OXIDE, SB-272 OCHRE YELLOW, SB-653 PARIS BLUE, SB-150 BLACK DARK – SPECIAL, SB-459 CARMINE RED