SAFETY DATA SHEET of: MPP/16.4

Revision date: Wednesday, November 16, 2016

1 SECTION 1: Identification of the substance/mixture and of the company/undertaking:

1.1 Product identifier:

EC - ELAPOR COLOR

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

/

Concentration in use: /

1.3 Details of the supplier of the safety data sheet:

MULTIPLEX Modellsport GmbH & Co.KG

Westliche Gewerbestr. 1

75015 Bretten-Gölshausen

Tel.: +49 7252 58093-0 — Fax: +49 7252 58093-99

Website: www.multiplex-rc.de

1.4 Emergency telephone number:

+32 70 245 245

2 SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008:

H222 Flam. Aerosol 1 H229 H315 Skin Irrit. 2 H336 STOT SE 3 H411 Aquatic Chronic 2

2.2 Label elements:

Pictograms:



Signal word:

Danger

Hazard statements:

H222 Flam. Aerosol 1: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

H315 Skin Irrit. 2: Causes skin irritation.

H336 STOT SE 3: May cause drowsiness or dizziness.

H411 Aquatic Chronic 2: Toxic to aquatic life with long lasting effects.

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P251: Do not pierce or burn, even after use.
P273: Avoid release to the environment.

P362+P364: Take off contaminated clothing and wash it before reuse.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

Contains:

Hydrocarbons, C6 iso-alkanes <5% n-hexane

2.3 Other hazards:

none

3 SECTION 3: Composition/information on ingredients:

Hydrocarbons, C6 iso-alkanes <5% n-hexane	15% - 30%	CAS number: EINECS: REACH Registration number: CLP Classification:	931-254-9 01-2119484651-34 H225 Flam. Liq. 2 H304 Asp. Tox. 1 H315 Skin Irrit. 2 H336 STOT SE 3 H411 Aquatic Chronic 2
n-Butane (<0,01% Butadiene -1,3)	15% - 30%	CAS number: EINECS: REACH Registration number: CLP Classification:	106-97-8 203-448-7 Annex V H220 Flam. Gas 1
Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cyclic	15% - 30%	CAS number: EINECS: REACH Registration number: CLP Classification:	920-750-0 01-2119473851-33 EUH066 H225 Flam. Liq. 2 H304 Asp. Tox. 1 H336 STOT SE 3 H411 Aquatic Chronic 2
Propane	5% - 15%	CAS number: EINECS: REACH Registration number: CLP Classification:	74-98-6 200-827-9 Annex V H220 Flam. Gas 1

Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	5% - 15%	CAS number: EINECS: REACH Registration number: CLP Classification:	919-446-0 01-2119458049-33 EUH066 H226 Flam. Liq. 3 H304 Asp. Tox. 1 H336 STOT SE 3 H411 Aquatic Chronic 2
Isopropanol	< 5%	CAS number: EINECS: REACH Registration number: CLP Classification:	67-63-0 200-661-7 01-2119457558-25 H225 Flam. Liq. 2 H319 Eye Irrit. 2 H336 STOT SE 3
Methyl ethyl ketone	< 5%	CAS number: EINECS: REACH Registration number: CLP Classification:	78-93-3 201-159-0 01-2119457290-43 EUH066 H225 Flam. Liq. 2 H319 Eye Irrit. 2 H336 STOT SE 3

For the full text of the H & R phrases mentioned in this section, see section 16.

4 SECTION 4: First aid measures:

4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

Skin contact: remove contaminated clothing, rinse with plenty of water, if necessary seek medical

attention.

Eye contact: first prolonged rinsing with water (contact lenses to be removed if this is easily done)

then take to physician.

Ingestion: rinse mouth, do not induce vomiting, take to hospital immediately.

Inhalation: let sit upright, fresh air, rest and take to hospital.

4.2 Most important symptoms and effects, both acute and delayed:

Skin contact: redness, pain

Eye contact: redness, pain, bad looking

Ingestion: diarrhoea, headache, abdominal cramps, sleepiness, vomiting

Inhalation: sore throat, cough, shortness of breath, headache

4.3 Indication of any immediate medical attention and special treatment needed:

none

5 SECTION 5: Fire-fighting measures:

5.1 Extinguishing media:

CO2, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

none

5.3 Advice for firefighters:

Extinguishing agents to be avoided:

none

6 SECTION 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up windRemove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

6.2 Environmental precautions:

do not allow to flow into sewers or open water.

6.3 Methods and material for containment and cleaning up:

Contain released substance, store into suitable containers. If possible remove by using absorbent material.

6.4 Reference to other sections:

for further information check sections 8 & 13.

7 SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

handle with care to avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities:

keep in a sealed container in a closed, frost-free, ventilated room.

7.3 Specific end use(s):

/

8 SECTION 8: Exposure controls/personal protection:

8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the TLV value is known

n-Butane (<0,01% Butadiene -1,3) 1,928 mg/m³, Propane 1,800 mg/m³, Isopropanol 997 mg/m³, Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cyclic 903 mg/m³, Hydrocarbons, C6 iso-alkanes <5% n-hexane 903 mg/m³, Methyl ethyl ketone 600 mg/m³, Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) 533 mg/m³

8.2 Exposure controls:

Inhalation protection:

if necessary, use an air-purifying face mask in case of respiratory hazards.



Skin protection:	handling with butyl-gloves (EN 374). Breakthrough time: >480' Material thickness: 0,7 mm. Thoroughly check gloves before use. Take of the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
Eye protection:	keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	
Other protection:	impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	

9 SECTION 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

Melting point/melting range:

Boiling point/Boiling range: $-42 \, ^{\circ}\text{C} - 192 \, ^{\circ}\text{C}$

pH: /
pH 1% diluted in water: /

Vapour pressure/20°C,:853 000 PaVapour density:not applicableRelative density, 20°C:0.800 kg/lAppearance/20°C:liquidFlash point:0 °C

Flammability (solid, gas): not applicable

Auto-ignition temperature: $250 \, ^{\circ}\text{C}$ Upper flammability or explosive $6.800 \, \%$

limit, (Vol %):

Lower flammability or explosive

limit, (Vol %):

0.900 %

Explosive properties: not applicable

Oxidising properties: not applicable

Decomposition temperature: /

Solubility in water: not soluble

Partition coefficient: n- not applicable

octanol/water:

Odour: characteristic
Odour threshold: not applicable
Dynamic viscosity, 20°C: 1 mPa.s
Kinematic viscosity, 20°C: 1 mm²/s
Evaporation rate (n-BuAc = 1): 9.600

9.2 Other information:

Volatile organic component (VOC): 90.34 %
Volatile organic component (VOC): 644.330 g/l

10 SECTION 10: Stability and reactivity:

10.1 Reactivity:

stable under normal conditions.

10.2 Chemical stability:

extremely high or low temperatures.

10.3 Possibility of hazardous reactions:

none

10.4 Conditions to avoid:

protect from sunlight and do not expose to temperatures exceeding + 50°C.

10.5 Incompatible materials:

keep away from sources of ignition

10.6 Hazardous decomposition products:

doesn't decompose with normal use

11 SECTION 11: Toxicological information:

11.1 Information on toxicological effects:

H315 Skin Irrit. 2: Causes skin irritation.

H336 STOT SE 3: May cause drowsiness or dizziness.

Calculated acute toxicity, ATE oral: /
Calculated acute toxicity, ATE /

dermal:

Hydrocarbons, C6 iso-alkanes <5% n-hexane	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	≥ 5,000 mg/kg ≥ 5,000 mg/kg ≥ 50 mg/l
n-Butane (<0,01% Butadiene -1,3)	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	≥ 5,000 mg/kg ≥ 5,000 mg/kg ≥ 50 mg/l
Hydrocarbons, C7-C9, n-alkanes, iso-alkanes, cyclic	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	≥ 5,000 mg/kg ≥ 5,000 mg/kg ≥ 50 mg/l
Propane	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	≥ 5,000 mg/kg ≥ 5,000 mg/kg ≥ 50 mg/l
Hydrocarbons, C9-12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	2,000 mg/kg ≥ 5,000 mg/kg ≥ 50 mg/l
Isopropanol	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	≥ 5,000 mg/kg ≥ 5,000 mg/kg ≥ 50 mg/l

Methyl ethyl ketone	LD50 oral, rat:	2,737 mg/kg
	LD50 dermal, rabbit:	≥ 5,000 mg/kg
	LC50, Inhalation, rat, 4h:	≥ 50 mg/l

12 SECTION 12: Ecological information:

12.1 Toxicity:

Hydrocarbons, C6 iso-alkanes <5% n-hexane	LC50 (Fish):	4.26 mg/L (96h)(Oncorhynchus mykiss)
	EC50 (Daphnia):	2.7 mg/L
	EC50 (Algae):	10.7 mg/L (Pseudokirchneriella subcapitata)
	NOEC (Algae):	7,51 mg/L (Pseudokirchneriella subcapitata)
Isopropanol	LC50 (Fish):	10000 mg/l
	LC50 (Daphnia):	> 10000 mg/L (24h)
Methyl ethyl ketone	LC50 (Fish):	2993 mg/L (96h)
	NOEC (Fish):	1170 mg/L (96h)
	EC50 (Daphnia):	308 mg/L (48h)
	NOEC (Daphnia):	68 mg/L (48h)
	EC50 (Algae):	2029 mg/L (96h)

12.2 Persistence and degradability:

No additional data available

12.3 Bioaccumulative potential:

	Additional data:
Hydrocarbons, C6 iso-alkanes <5% n-hexane	Log Pow: 3,6
n-Butane (<0,01% Butadiene -1,3)	log Pow: 2,890
Isopropanol	Log Pow: 0.05
Methyl ethyl ketone	Log Pow: 0.3

12.4 Mobility in soil:

Water hazard class, WGK: 2

Solubility in water: not soluble

12.5 Results of PBT and vPvB assessment:

No additional data available

12.6 Other adverse effects:

No additional data available

13 SECTION 13: Disposal considerations:

13.1 Waste treatment methods:

Draining into the sewers is not permitted. Removal should be carried out by licensed services. Possible restrictive regulations

14 SECTION 14: Transport information:

14.1 UN number:

1950

14.2 UN proper shipping name:

UN 1950 Aerosols, flammable, 5F, (D)

14.3 Transport hazard class(es):

Class(es): 5F

Identification number of the not applicable

hazard:

14.4 Packing group:

not applicable

14.5 Environmental hazards:

environmentally hazardous

14.6 Special precautions for user:

Hazard characteristics: Risk of fire. Risk of explosion. Containments may explode when heated.

Additional guidance: Take cover. Keep out of low areas.





15 SECTION 15: Regulatory information:

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Water hazard class, WGK: 2

Volatile organic component (VOC): 90.345 %
Volatile organic component (VOC): 644.330 g/l

Composition by regulation (EC) Aliphatic hydrocarbo

648/2004:

Aliphatic hydrocarbons > 30%, Aromatic hydrocarbons 5% - 15%

15.2 Chemical Safety Assessment:

No data available

16 SECTION 16: Other information:

Legend to abbreviations used in the safety data sheet:

ADR: The European Agreement concerning the International Carriage of Dangerous

Goods by Road

BCF: Bioconcentration factor
CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of chemicals

EINECS: European INventory of Existing Commercial chemical Substances

Nr.: number

PTB: persistent, toxic, bioaccumulative

TLV: Threshold Limit Value

vPvB: very persistent and very bioaccumulative substances

WGK: Water hazard class

WGK 1: slightly hazardous for water

WGK 2: hazardous for water

WGK 3: extremely hazardous for water

Legend to the R & H Phrases used in the safety data sheet:

EUH066: Repeated exposure may cause skin dryness or cracking. H220 Flam. Gas 1: Extremely flammable gas. H222 Flam. Aerosol 1: Extremely flammable aerosol. H225 Flam. Liq. 2: Highly flammable liquid and vapour. H226 Flam. Liq. 3: Flammable liquid and vapour. H229: Pressurised container: May burst if heated. H304 Asp. Tox. 1: May be fatal if swallowed and enters airways. H315 Skin Irrit. 2: Causes skin irritation. H319 Eye Irrit. 2: Causes serious eye irritation. H336 STOT SE 3: May cause drowsiness or dizziness. H411 Aquatic Chronic 2: Toxic to aquatic life with long lasting effects.

Reason of revision, changes of following items:

not applicable

MSDS reference number:

ECM-109332.00

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2015/830. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.