



## Material Safety Data Sheet

According to 91/155 EEC

Printing date 21.11.2005

Reviewed on 21.11.2005

* 1 Identification of the substance/preparation and of the company/undertaking	
· <b>Product details</b>	
· <b>Trade name:</b> <u>Aerosol Art RAL</u>	
· <b>Article number:</b> 722509	
· <b>Application of the substance / the preparation</b> Lacquer	
· <b>Manufacturer/Supplier:</b> MOTIP DUPLI GmbH Industriestrasse 19 D-74855 Haßmersheim	<i>Tel.:</i> +49/6266/75-0
· <b>Further information obtainable from:</b> Abteilung Produktsicherheit	
· <b>Information in case of emergency:</b> Tel.: +49 6266-75-310 Fax +49 6266-75-362	

* 2 Composition/information on ingredients	
· <b>Chemical characterization</b>	
· <b>Description:</b> Mixture of substances listed below with nonhazardous additions.	
· <b>Dangerous components:</b>	
CAS: 67-64-1 EINECS: 200-662-2	acetone ☒   F; R 11-36-66-67 25-50%
CAS: 106-97-8 EINECS: 203-448-7	butane (containing < 0,1 % butadiene (203-450-8)) ☒  F+; R 12 10-25%
CAS: 115-10-6 EINECS: 204-065-8	dimethyl ether ☒  F+; R 12 10-25%
CAS: 74-98-6 EINECS: 200-827-9	propane ☒  F+; R 12 10-25%
CAS: 123-86-4 EINECS: 204-658-1	n-butyl acetate R 10-66-67 2.5-10%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate ☒  R 10-36 2.5-10%
CAS: 9004-70-0	cellulose nitrate ☒  F; R 11 ≤ 2.5%
CAS: 71-36-3 EINECS: 200-751-6	butan-1-ol ☒  Xn; R 10-22-37/38-41-67 ≤ 2.5%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. Carc. Cat. 2; ☒  Xn; ☒  N; R 10-51/53-65-66-67 <1.0%
· <b>Additional information:</b>	For the wording of the listed risk phrases refer to section 16.

* 3 Hazards identification	
· <b>Hazard description:</b>	
	<i>Xi Irritant</i> <i>F+ Extremely flammable</i>

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### Trade name: Aerosol Art RAL

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#### · **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Warning! Pressurized container.

Has a narcotizing effect.

R 12 Extremely flammable.

R 36 Irritating to eyes.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

94.5 % by mass of the contents are flammable

Keep out of the reach of children

#### · **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 4 First-aid measures

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

#### · **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

### 5 Fire-fighting measures

· **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:**

Water

Water with full jet

· **Protective equipment:** No special measures required.

### 6 Accidental release measures

· **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

· **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Measures for cleaning/collecting:**

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

### 7 Handling and storage

· **Handling:**

· **Information for safe handling:** Open and handle receptacle with care.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool location.

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Observe official regulations on storing packagings with pressurized containers.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Keep container tightly sealed.

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

## 8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

### 67-64-1 acetone

WEL (0)	Short-term value: 3620 mg/m <sup>3</sup> , 1500 ppm Long-term value: 1210 mg/m <sup>3</sup> , 500 ppm
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### 106-97-8 butane (containing < 0,1 % butadiene (203-450-8))

WEL (0)	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm
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### 115-10-6 dimethyl ether

WEL (0)	Short-term value: 958 mg/m <sup>3</sup> , 500 ppm Long-term value: 766 mg/m <sup>3</sup> , 400 ppm
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### 123-86-4 n-butyl acetate

WEL (0)	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm
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### 108-65-6 2-methoxy-1-methylethyl acetate

WEL (0)	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm Long-term value: 274 mg/m <sup>3</sup> , 50 ppm
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### 71-36-3 butan-1-ol

WEL (0)	Short-term value: 154 mg/m <sup>3</sup> , 50 ppm
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· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Trade name: Aerosol Art RAL

- **Eye protection:**



Tightly sealed goggles

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## 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Aerosol
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

- **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Not applicable, as aerosol.

- **Flash point:** Not applicable, as aerosol.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.

- **Explosion limits:**

<b>Lower:</b>	1.5 Vol %
<b>Upper:</b>	18.6 Vol %

- **Vapour pressure at 20°C:** 8300.0 hPa

- **Density at 20°C:** 0.873 g/cm<sup>3</sup>

- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

- **Solvent content:**

<b>Organic solvents:</b>	88.0 %
<b>VOC-USA</b>	768.6 g/l / 6.41 lb/gl

- **Solids content:** 7.1 %

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Dangerous reactions** No dangerous reactions known.

- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

### 67-64-1 acetone

Oral	LD50	5800 mg/kg (rat)
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Dermal	LD50	20000 mg/kg (rabbit)
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- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritating effect.

- **Sensitization:** No sensitizing effects known.

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### Trade name: Aerosol Art RAL

#### · Additional toxicological information:

*Irritant*

*The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:*

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### \* 12 Ecological information

#### · General notes:

*Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water*

*Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*

### \* 13 Disposal considerations

#### · Product:

#### · Recommendation

*Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

#### · European waste catalogue

08 00 00	<i>WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS</i>
08 01 00	<i>wastes from MFSU and removal of paint and varnish</i>
08 01 11	<i>waste paint and varnish containing organic solvents or other dangerous substances</i>
15 00 00	<i>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</i>
15 01 00	<i>packaging (including separately collected municipal packaging waste)</i>
15 01 04	<i>metallic packaging</i>

#### · Uncleaned packaging:

*· Recommendation: Disposal must be made according to official regulations.*

### \* 14 Transport information

#### · Land transport ADR/RID (cross-border)



· **ADR/RID class:** 2 5F Gases.

· **UN-Number:** 1950

· **Hazard label** 2.1

· **Description of goods:** 1950 AEROSOLS

#### · Maritime transport IMDG:



· **IMDG Class:** 2

· **UN Number:** 1950

· **Label** 2.1

· **EMS Number:** F-D,S-U

· **Marine pollutant:** No

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· Proper shipping name: AEROSOLS

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 2.1

· UN/ID Number: 1950

· Label 2.1

· Proper shipping name: AEROSOLS, flammable

## 15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:



*Xi Irritant  
F+ Extremely flammable*

· Risk phrases:

12 Extremely flammable.

36 Irritating to eyes.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

· Safety phrases:

2 Keep out of the reach of children.

9 Keep container in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

23 Do not breathe aerosol.

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

33 Take precautionary measures against static discharges.

43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

60 This material and its container must be disposed of as hazardous waste.

64 If swallowed, rinse mouth with water (only if the person is conscious).

· Special labelling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

94.5 % by mass of the contents are flammable

Keep out of the reach of children

· National regulations:

· Technical instructions (air):

Class	Share in %
NK	88.0

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**Trade name: Aerosol Art RAL**

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- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

**\* 16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**

- 10 Flammable.
- 11 Highly flammable.
- 12 Extremely flammable.
- 22 Harmful if swallowed.
- 36 Irritating to eyes.
- 37/38 Irritating to respiratory system and skin.
- 41 Risk of serious damage to eyes.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 65 Harmfull: may cause lung damage if swallowed
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

- **Department issuing MSDS:** Abteilung Labor/QS

- **Contact:** Anwendungstechnik

- \* Data compared to the previous version altered.

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