

Material Safety Data Sheet

According to 91/155 EEC



Printing date 08.03.2005

Reviewed on 08.03.2005

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** NFM RAL 8027 MATT
- **Article number:** NFM005
- **Application of the substance / the preparation** Paint
- **Manufacturer/Supplier:**
MOTIP DUPLI B.V.
Wolfraamweg 2
NL- 8471 XE Wolvega
The Netherlands
Tel: +31 (0)561 694400
Fax: +31 (0)561 694411
e-mail info@nl.motipdupli.com
- **Further information obtainable from:** QHSE Department
- **Information in case of emergency:** Tel: +31 (0)561 694400

2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 67-64-1 EINECS: 200-662-2	acetone	☒ Xi, ☒ F; R 11-36-66-67	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	2.5-10%
CAS: 106-97-8 EINECS: 203-448-7	butane	☒ F+; R 12	2.5-10%
CAS: 123-86-4 EINECS: 204-658-1	n-butyl acetate	R 10-66-67	2.5-10%
CAS: 1330-20-7 EINECS: 215-535-7	xylene	☒ Xn; R 10-20/21-38	2.5-10%
CAS: 75-28-5 EINECS: 200-857-2	isobutane	☒ F+; R 12	2.5-10%
CAS: 78-93-3 EINECS: 201-159-0	butanone	☒ Xi, ☒ F; R 11-36/37-66-67	2.5-10%
CAS: 108-88-3 EINECS: 203-625-9	toluene	☒ Xn, ☒ F; R 11-20	2.5-10%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate	☒ Xi; R 10-36	2.5-10%
CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol	☒ Xi, ☒ F; R 11-36-67	2.5-10%
CAS: 71-36-3 EINECS: 200-751-6	butan-1-ol	☒ Xn; R 10-22-37/38-41-67	2.5-10%
CAS: 78-83-1 EINECS: 201-148-0	butanol	☒ Xi; R 10-37/38-41-67	1-2.5%
CAS: 50-00-0 EINECS: 200-001-8	formaldehyde	☒ T; R 23/24/25-34-40-43	0.1-1%

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· **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· **Hazard description:**



Xi Irritant
F+ Extremely flammable

· **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.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

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:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

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7 Handling and storage

- **Handling:**

- **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

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

Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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

- **Storage:**

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

Store in a cool location.

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	
OES ()	Short-term value: 3620 mg/m ³ , 1500 ppm Long-term value: 1210 mg/m ³ , 500 ppm New, IOELV
115-10-6 dimethyl ether	
OES ()	Short-term value: 958 mg/m ³ , 500 ppm Long-term value: 766 mg/m ³ , 400 ppm IOELV
74-98-6 propane	
OES ()	Asphyxiant
106-97-8 butane	
OES ()	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm
123-86-4 n-butyl acetate	
OES ()	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
1330-20-7 xylene	
OES ()	Short-term value: 662 mg/m ³ , 150 ppm Long-term value: 441 mg/m ³ , 100 ppm Sk
78-93-3 butanone	
OES ()	Short-term value: 899 mg/m ³ , 300 ppm Long-term value: 600 mg/m ³ , 200 ppm IOELV, Sk, Bmgv

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108-88-3 toluene

OES () Short-term value: 574 mg/m³, 150 ppm
 Long-term value: 191 mg/m³, 50 ppm
 Sk

108-65-6 2-methoxy-1-methylethyl acetate

OES () Short-term value: 548 mg/m³, 100 ppm
 Long-term value: 274 mg/m³, 50 ppm
 New, IOELV, Sk

67-63-0 propan-2-ol

OES () Short-term value: 1250 mg/m³, 500 ppm
 Long-term value: 999 mg/m³, 400 ppm

71-36-3 butan-1-ol

OES () Short-term value: 154 mg/m³, 50 ppm
 Sk

78-83-1 butanol

OES () Short-term value: 231 mg/m³, 75 ppm
 Long-term value: 154 mg/m³, 50 ppm

50-00-0 formaldehyde

MEL () Short-term value: 2.5 mg/m³, 2 ppm
 Long-term value: 2.5 mg/m³, 2 ppm

· **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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:** Not required.

· **Material of gloves:** Not required.

· **Penetration time of glove material:** Not required.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form: Aerosol
Colour: According to product specification
Odour: Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Not applicable, as aerosol.

· **Flash point:**

< 0°C (< 32°F)
 Not applicable, as aerosol.

· **Ignition temperature:**

235.0°C (455°F)

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· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	2.6 Vol %
Upper:	18.6 Vol %
· Vapour pressure at 20°C (68°F):	4000.0 hPa (3000 mm Hg)
· Density at 20°C (68°F):	0.770 g/cm ³
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Solvent content:	
Organic solvents:	85.8 %
· EU-VOC:	662.5 g/l
· EU-VOC in %:	85.82 %
· Solids content:	8.7 %

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)
Dermal	LD50	20000 mg/kg (rabbit)
Inhalative	LC50/4 h	39 mg/l (rat)

115-10-6 dimethyl ether

Inhalative	LC50/4 h	308 mg/l (rat)
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106-97-8 butane

Inhalative	LC50/4 h	658 mg/l (rat)
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123-86-4 n-butyl acetate

Oral	LD50	10770 mg/kg (rat)
Dermal	LD50	>17600 mg/kg (rabbit)
Inhalative	LC50/4 h	>21.0 mg/l (rat)

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
Inhalative	LC50/4 h	22.1 mg/l (rat)

78-93-3 butanone

Oral	LD50	2737 mg/kg (rat)
Dermal	LD50	6480 mg/kg (rabbit)
Inhalative	LC50/4 h	34 mg/l (rat)

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108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	8532 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4 h	35.7 mg/l (rat)

67-63-0 propan-2-ol

Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

71-36-3 butan-1-ol

Oral	LD50	4400 mg/kg (rat)
Dermal	LD50	4200 mg/kg (rabbit)
Inhalative	LC50/4 h	25 mg/l (rat)

78-83-1 butanol

Oral	LD50	2460 mg/kg (rat)
Dermal	LD50	3400 mg/kg (rabbit)

50-00-0 formaldehyde

Oral	LD50	>200 mg/kg (rat)
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· **Primary irritant effect:**· **on the skin:** No irritant effect.· **on the eye:** Irritating effect.· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**

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:

Irritant

12 Ecological information· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

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

Danger to drinking water if even small quantities leak into the ground.

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 01 11 waste paint and varnish containing organic solvents or other dangerous substances

15 01 04 metallic packaging

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

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14 Transport information

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



- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** 23
- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label:** 2.1
- **Description of goods:** 1950 AEROSOLS

· **Maritime transport IMDG:**



- **IMDG Class:** 2
- **UN Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Proper shipping name:** AEROSOLS

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 2
- **UN/ID Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **Proper shipping name:** AEROSOLS

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.
- 23 Do not breathe aerosol.

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- 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.*
- 46 *If swallowed, seek medical advice immediately and show this container or label.*
- 51 *Use only in well-ventilated areas.*

· **Special labelling of certain preparations:**

- Contains formaldehyde. May produce an allergic reaction.*
- Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.*
- Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.*
- Buildup of explosive mixtures possible without sufficient ventilation.*
- Keep out of the reach of children*

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.*
- 20 *Harmful by inhalation.*
- 20/21 *Harmful by inhalation and in contact with skin.*
- 22 *Harmful if swallowed.*
- 23/24/25 *Toxic by inhalation, in contact with skin and if swallowed.*
- 34 *Causes burns.*
- 36 *Irritating to eyes.*
- 36/37 *Irritating to eyes and respiratory system.*
- 37/38 *Irritating to respiratory system and skin.*
- 38 *Irritating to skin.*
- 40 *Limited evidence of a carcinogenic effect.*
- 41 *Risk of serious damage to eyes.*
- 43 *May cause sensitisation by skin contact.*
- 66 *Repeated exposure may cause skin dryness or cracking.*
- 67 *Vapours may cause drowsiness and dizziness.*

· **Department issuing MSDS: QHSE Department**

· **Contact:**

- Mrs. D. Kleistra*
- Mr. H.J. Hoogenberg*

· *** Data compared to the previous version altered.**