

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.11.2011

Version number 13

Revision: 24.11.2011

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

Product identifier

Trade name: Release Agent Mikon® F-57

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

Application of the substance / the preparation Release Agent

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Muench Chemie International GmbH

Viernheimer Strasse 70 - 76

D-69469 Weinheim

GERMANY

Phone: +49 (6201) 99 83 - 0

Fax: +49 (6201) 1 71 95

Mail: info@muench-chemie.com

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Further information obtainable from: Laboratory

Emergency telephone number: Muench Chemie International GmbH: +49 (6201) 99 83 - 0 or +49 (171) 37 37 502


2 Hazards identification

Classification of the substance or mixture


Classification according to Directive 67/548/EEC or Directive 1999/45/EC

 Xn; Harmful


R65: Harmful: may cause lung damage if swallowed.

 Xi; Irritant

R38: Irritating to skin.

 F; Highly flammable

R11: Highly flammable.

 N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R66-67: Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

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.

Has a narcotizing effect.

Classification system:

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

Label elements

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:

Xn Harmful

F Highly flammable

N Dangerous for the environment

Hazard-determining components of labelling:

Naphtha (petroleum), hydrotreated light, < 0,1 % Benzene

Solvent naphtha (petroleum), light arom., < 0,1 % Benzene

xylene

Risk phrases:

11 Highly flammable.

38 Irritating to skin.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

(Contd. on page 2)

Safety data sheet
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Revision: 24.11.2011

Trade name: Release Agent Mikon® F-57

67 Vapours may cause drowsiness and dizziness.

(Contd. of page 1)

Safety phrases:

- 9 Keep container in a well-ventilated place.
 16 Keep away from sources of ignition - No smoking.
 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
 33 Take precautionary measures against static discharges.
 36/37 Wear suitable protective clothing and gloves.
 51 Use only in well-ventilated areas.

Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures**Description:** Mixture: consisting of the following components.**Dangerous components:**

CAS: 64742-49-0	Naphtha (petroleum), hydrotreated light, < 0,1 % Benzene	20 - 50%
EINECS: 265-151-9	Xn R65; Xi R38; F R11; N R51/53	
	R67	
	Carc. Cat. 3, Muta. Cat. 3	
CAS: 1330-20-7	xylene	10 - 25%
EINECS: 215-535-7	Xn R20/21; Xi R38	
	R10	
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom., < 0,1 % Benzene	10 - 20%
EINECS: 265-199-0	Xn R65; N R51/53	
	R10-66-67	
	Carc. Cat. 3, Muta. Cat. 3	
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	10 - 20%
EINECS: 265-150-3	Xn R65	
	R10-66-67	
	Carc. Cat. 3, Muta. Cat. 3	
CAS: 78-93-3	butanone	5 - 10%
EINECS: 201-159-0	Xi R36; F R11	
	R66-67	
CAS: 67-64-1	acetone	5 - 10%
EINECS: 200-662-2	Xi R36; F R11	
	R66-67	

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

4 First aid measures

Description of first aid measures**General information:** Immediately remove any clothing soiled by the product.**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.**After skin contact:**

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water.**After swallowing:** Inform doctor. Do not give milk or fatty oils.**Information for doctor:****Most important symptoms and effects, both acute and delayed**

Headache

Dizziness

Nausea

Dizziness

Unconsciousness

Indication of any immediate medical attention and special treatment needed

If swallowed or in case of vomiting, danger of entering the lungs.

EU

(Contd. on page 3)

Safety data sheet
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Version number 13

Revision: 24.11.2011

Trade name: Release Agent Mikon® F-57

(Contd. of page 2)

5 Firefighting measures

Extinguishing media

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

Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Environmental precautions:

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

Do not allow to penetrate the ground/soil.

In case of seepage into the ground inform responsible authorities.

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

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Provide solvent resistant, sealed floor.

Store in a cool location.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions:

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 13

Revision: 24.11.2011

Trade name: Release Agent Mikon® F-57
Specific end use(s) No further relevant information available.

(Contd. of page 3)

8 Exposure controls/personal protection

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

Control parameters
Ingredients with limit values that require monitoring at the workplace:
1330-20-7 xylene
IOELV Short-term value: 442 mg/m³, 100 ppmLong-term value: 221 mg/m³, 50 ppm

Skin

78-93-3 butanone
IOELV Short-term value: 900 mg/m³, 300 ppmLong-term value: 600 mg/m³, 200 ppm
67-64-1 acetone
IOELV 1210 mg/m³, 500 ppm
Additional information: The lists valid during the making were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.

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 skin.

Avoid contact with the eyes and skin.

Respiratory protection:

Short term filter device:

Filter A/P2

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:


Protective gloves

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.

Eye protection:


Tightly sealed goggles

Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:
Form:

Fluid

Colour:

Whitish

Odour:

Characteristic

Odour threshold:

Not determined.

pH-value:

Not determined.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.11.2011

Version number 13

Revision: 24.11.2011

Trade name: **Release Agent Mikon® F-57**

(Contd. of page 4)

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	80 °C
Flash point:	0 °C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	240 °C
Decomposition temperature:	Not determined.
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:	0,6 Vol %
Upper:	7,5 Vol %
Vapour pressure at 20 °C:	6,7 hPa
Density at 20 °C:	0,78 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Segregation coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	79,9 %
Other information	No further relevant information available.

10 Stability and reactivity**Reactivity****Chemical stability****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**Possibility of hazardous reactions** No dangerous reactions known.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:** No dangerous decomposition products known.**11 Toxicological information****Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****64742-49-0 Naphtha (petroleum), hydrotreated light, < 0,1 % Benzene**

Oral LD50 > 2000 mg/kg (Ratte)

Dermal LD50 > 2000 mg/kg (rbt)

Inhalative LC50/4 h > 5 mg/l (Ratte)

1330-20-7 xylene

Oral LD50 4300 mg/kg (Ratte)

Dermal LD50 2000 mg/kg (rbt)

64742-95-6 Solvent naphtha (petroleum), light arom., < 0,1 % Benzene

Oral LD50 >6800 mg/kg (Ratte)

Dermal LD50 >3400 mg/kg (rab)

Inhalative LC50/4 h >10,2 mg/l (Ratte)

64742-48-9 Naphtha (petroleum), hydrotreated heavy

Oral LD50 >5000 mg/kg (Ratte)

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 13

Revision: 24.11.2011

Trade name: Release Agent Mikon® F-57

(Contd. of page 5)

Dermal LD50 >3000 mg/kg (rab)

Primary irritant effect:**on the skin:**

Irritant to skin and mucous membranes.

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

on the eye: Irritations possible.**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

Toxicity**Acquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behaviour in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Ecotoxicological effects:****Remark:** Toxic for fish**Additional 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, even in small quantities.

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

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.

13 Disposal considerations

Waste treatment methods**Recommendation**

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

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

Uncleaned packaging:**Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

14 Transport information

UN-Number**ADR, IMDG, IATA**

UN1993

UN proper shipping name**ADR**

1993 FLAMMABLE LIQUID, N.O.S. (vapor pressure at 50 °C at most 110 kPa) (Naphtha (petroleum), hydrotreated light, < 0,1 % Benzene, ETHYL METHYL KETONE (METHYL ETHYL KETONE))

IMDG

FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, < 0,1 % Benzene, ETHYL METHYL KETONE (METHYL ETHYL KETONE)), MARINE POLLUTANT

IATA

FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, < 0,1 % Benzene, ETHYL METHYL KETONE (METHYL ETHYL KETONE))

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

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Trade name: **Release Agent Mikon® F-57**

(Contd. of page 6)

Transport hazard class(es)**ADR**

Class 3 Flammable liquids.
Label 3

IMDG

Class 3 Flammable liquids.
Label 3

IATA

Class 3 Flammable liquids.
Label 3
Packing group
ADR, IMDG, IATA II
Environmental hazards:
Marine pollutant: Yes
 Symbol (fish and tree)
Special marking (ADR): Symbol (fish and tree)
Special precautions for user Warning: Flammable liquids.
Danger code (Kemler): 33
EMS Number: F-E,S-E
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

ADR
Tunnel restriction code D/E

15 Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations:****Technical instructions (air):****Class Share in %**

NK > 50

Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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 phrases

R10 Flammable.
 R11 Highly flammable.
 R20/21 Harmful by inhalation and in contact with skin.
 R36 Irritating to eyes.
 R38 Irritating to skin.
 R51/53 Toxic to aquatic organisms, 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.

(Contd. on page 8)

Safety data sheet
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Trade name: Release Agent Mikon® F-57

(Contd. of page 7)

Department issuing MSDS: Laboratory

Contact: Mr. Marek

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

EU