

Metaflux Multi-Spray

70-47

1. Identification of the substance/preparation

Name of product	Metaflux Multi-Spray Art-Nr. 70-47
Manufacturer/distributor	Techno-Service GmbH Detmolder Str.515, D-33605 Bielefeld Phone 0521/924440, Fax 0521-207432
Advice	Verkauf Phone 0521/9244420 Fax 0521/207432
Emergency advice	Zentrale Phone 0521/924440

2. Composition/information on ingredients**Chemical characterization**

Hydrocarbon solvents, mineraloil, additives, propane

Hazardous ingredients

CAS-No.	Name	[% weight]	Classification
000074-98-6	propane	22 - 27	F+ R12
008008-20-6	Kerosine (petroleum)	1 - 2	Xn R65-66
064741-65-7	Naphtha (petroleum), heavy alkylate	30 - 40	Xn R65-66-53
064742-49-0	Naphtha (petroleum), hydrotreated light	10 - 19	Xn; R11-38-51/53-65-67 F; N

Additional adviceClassification and labelling Xn/R65 is not required for preparations in aerosols containing $\geq 10\%$ of hydrocarbon solvents (s. Directive 96/54/EC, Annex V, No.8.4)

to CAS-No. 64742-49-0 : This material contains < 0.1 Benzene and must not be classified as carcinogenic (nota P)

to CAS-No. 64741-65-7 : This material contains < 0.1 w/w Benzene and must not be classified as carcinogenic (NOTA P)

Use: Rust solver, slip agent. corrosion protection. dewatering

R-Phrases see chapter 16

3. Special hazards information for man and environment**R-phrases**

12	Extremely flammable.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

Special hazards information for humans and environment

When used formation of explosive gas/air mixtures may be possible

! 4. First aid measures**General information**

Take affected person into fresh air.

In case of inhalation

In case of inhalation remove the casualty into fresh air and seek medical advice.

In case of skin contact

wash with soap and water

In case of eye contact

Eye rinsing with water carefully while protecting unhurt eye.

In case of ingestion

If swallowed seek medical advice immediately and show the doctor packing or label.

Physician's information / possible symptoms

unknown

! Physician's information / possible dangers

Risk of aspiration by vomiting if swallowed.

Treatment (Advice to doctor)

Treat symptoms.

5. Fire-fighting measures

Suitable extinguishing material

Foam

Dry powder

Carbon dioxide

Extinguishing material that may not be used for safety reasons

Full water jet

Special exposure hazards arising from the substance, combustible products or resulting gases

Risk of bursting by fire heat

Special protective equipment for firefighters

Use breathing apparatus with independent air supply.

Additional information

Cool containers at risk with water spray jet.

6. Accidental release measures

Personal precautions

Ensure adequate ventilation.

Keep away sources of ignition.

Environmental precautions

Product shall not reach the drain or soil.

Methods for cleaning up/taking up

Stem and take up with absorbent material (e.g. sand, peat, earth).

Additional Information

Keep off any handling equipment with engines (source of ignition)

7. Handling and storage

Advice on safe handling

Use only in well-ventilated areas.

Advice on protection against fire and explosion

Risk of injuries and fire spreading by bursting caused by fire heat

Requirements for storage rooms and vessels

Observe National and Local regulation

Advice on storage compatibility

no

Metaflux Multi-Spray

70-47

Further information on storage conditions

Protect from heat and direct solar radiation.

Storage group 2B**Fire class** C**Information on storage stability**

Storage time above 24 months.

8. Exposure controls / personal protection**Additional advice on system design**

use only in well-ventilated area

Ingredients with occupational exposure limits to be monitored

CAS-No.	Name	Code	[mg/m ³]	[ml/m ³]	Remark
000074-98-6	propane	MAK	1800	1000	
008008-20-6	hydrocarbon vapours		500	100	
064741-65-7	hydrocarbon vapours		1000	200	
64742-49-0	hydrocarbon vapours	MAK	1000	200	

Respiratory protection

Generally not required

Hand protection

Use glove made of nitrile (according to EN 374) in case of prolonged and intensive contact with the skin

Eye protection

Generally not required

Skin protection

Generally not required

General protective measures

Do not inhale aerosols

Hygiene measures

Cloths contaminated with product should not be kept in trouser pockets.

9. Physical and chemical properties**Form**
aerosol**Colour**
yellowish**Odour**
characteristic**Data relevant for safety**

	Value	Temperature	at	Method	Remark
pH value in delivery state					not applicable
Acid number					not applicable
Changes in physical state solid/fluid					not applicable
Changes in physical state gas					not applicable
Flash point	< 0 °C				not applicable

Safety data-sheet (91/155 EEC)

Printed 26.05.2003

Revision 26.05.2003

Metaflux Multi-Spray

70-47

	Value	Temperature	at	Method	Remark
Flammable solid					not applicable
Flammable gas					not applicable
Combustion temperature					not applicable
Autoignition					not applicable
Lower explosion limit	ca. 1,5 Vol-%				informations concern to propellant only
Upper explosion limit	ca. 11 Vol-%				informations concern to propellant only
Vapour pressure	ca. 3,9 bar	20 °C			7,3 bar at 50°C
Density	ca. 0,67 g/cm ³	20 °C			
Bulk density					not applicable
Rel. vapour density					not applicable
Solubility in water					immiscible
Solubility/other					organic solvent
Partition coefficient (log p_{OW})					not determined
Viscosity 1					not applicable
Viscosit 2					not applicable
Solvent separation test					not applicable
Solvent concentration	ca. 58 %				
Explosive properties	When used formation of explosive mixtures may be possible				
Additional information	no				

10. Stability and reactivity

Conditions to avoid

Avoid near heating sources, naked flames and other ignition sources

Materials to avoid

no

Hazardous decomposition products

not by destinated use

Additional information

no

11. Toxicological information**Acute toxicity/Irritability/Sensitization**

	Value/Validation	Species	Method	Remark
LD 50 acute oral				no data available
LD 50 acute dermal				no data available
LC 50 acute inhalation				no data available
Irritability skin				low
Irritability eye				low
Sensitization skin				no
Sensitization respiratory system				no

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Subacute Toxicity				no data available
Subchronic Toxicity				no data available
Chronic Toxicity				no data available
Mutagenicity				no
Reproduction-Toxicity				no
Carcinogenicity				no

Toxicity test (Additional information)

not determined

Experiences made from practice

no negative experience

Additional information

no

12. Ecological information**Data on elimination (persistence and degradability)**

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	The product doesn't reach sewage by using as destined			
Biological degradability	The product doesn't reach sewage by using as destined			

Safety data-sheet (91/155 EEC)

Printed 26.05.2003

Revision 26.05.2003

Metaflux Multi-Spray

70-47

	Elimination rate	Method of analysis	Method	Validation
Degradability	The product doesn't reach sewage by using as destined			
Biological eliminability	The product doesn't reach sewage by using as destined			
Degradability according to WRMG	The product doesn't reach sewage by using as destined			
Mobility and bioaccumulative potential	not determined			

Ecotoxicological effects				
	Value	Species	Method	Validation
Fish				no data available
Daphnia				no data available
Algae				no data available
Bacteria				no data available

Behaviour in sewage plant
The product doesn't reach sewage by using as destined

Breathing inhibition of activated sludge			
	Value	Method	Remark
EC 50			The product doesn't reach sewage by using as destined

Additional ecological information			
	Value	Method	Remark
OC			not determined
COD			not determined
BOD			not determined
AOX	no		

Contains following heavy metals and compounds of the 76/464/EWG
no

General regulation
VOC = 0.224 kg/ can

13. Disposal considerations

Waste code No. 16 05 04	Name of waste gases in pressure containers (including halons) containing dangerous substances
-----------------------------------	---

Recommendations for the product
material recycling according to National or Local regulations

Recommendations for packaging

material recycling EWC 150104

Recommended cleansing agent

no

General information

Give only emptied containers to recycling

14. Transport information**Land and inland navigation transport (ADR/RID/GGVS/GGVE/ADNR)****Identification** UN 1950 AEROSOLS, 2.1**UN-No.** 1950**Class** 2 / Classification code 5F**PG** -**Remarks**

Transportation as Limited Quantities (LQ 2); Marking: UN 1950 (rhombe)

Entry in the transportation document: Transportation according chapter3.4 ADR

Marine transport IMDG/GGV See**Proper shipping name** AEROSOLS**UN-No.** 1950**Class** 2**PG** -**Marine pollutant** No**EmS-No.** 2-13**Remarks**

Entry in transportation document: limited quantities

Marks: AEROSOLS UN 1950

Air transport ICAO/IATA**Proper shipping name** Aerosols, flammable**UN/ID-No.** UN1950**Class** 2.1**PG** II**Remarks**

UN-4G/Y fibre board boxes required

Label: Flammable Gas

Marking: Aerosols, flammable UN 1950

Transport/further informations

ADR Transport Emergency Card: not required

15. Regulatory information**Classification****F+** Extremely flammable**R-phrases**

12 Extremely flammable.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

S-phrases

- 23.4 Do not breathe spray.
24/25 Avoid contact with skin and eyes.
35 This material and its container must be disposed of in a safe way.
51 Use only in well-ventilated areas.

Special labelling for certain preparations

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. Keep out of the reach of children.

Without sufficient ventilation formation of explosive mixtures may be possible.

National regulations

Restriction of occupation

no

**Decree for case of interference/
remarks** not applicable

**Classification according to VbF/
remarks** not applicable

German TA LUFT remarks

not applicable

Water hazard class 1 german water pollution classification

Other regulations, restrictions and prohibition regulations

no

16. Other information

Training advice

Use the entries of this Material Safety Data Sheet

Recommendend uses and restrictions

Observe care instructions

Further information

R-Phrases from chapter 2:

R 11: Highly flammable

R 12: Extremely flammable

R 67: Vapours may cause drowsiness and dizziness.

R 66: Repeated exposure may cause skin dryness or cracking.

R 65: Harmful: may cause lung damage if swallowed.

R 38 :Irritating to skin.

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

R 53: May cause long-term adverse effects in the aquatic environment.

Sources of key data used

Material Safety Data Sheets of raw materials
