



Datenblatt - Fiche technique - Data sheet

19.03.3165



ROLINE TFT/LCD Schaumreiniger (400ml)

ROLINE Mousse pour TFT/LCD (400ml)

ROLINE TFT/LCD-Foam-Cleaner

Data sheet
english

1. Substance/description of preparation and company

1.1 description of preparation

TFT/LCD Foam Cleaner Aerosol

producer/supplier Kleinmann GmbH
street / P.O. Box Am Trieb 13 / -
nationality / zip / city D - 72820 Sonnenbühl-Undingen
telephone: 07128/92 92-0
telefax: 07128/92 92 92
responsible department: dept. QS
emergency number: ++49 (0)30 / 19240
Advice Center for Poisoning Symptoms, Berlin

2. Possible dangers

2.1 description of dangers: Container under pressure. F+ Extremely flammable.

2.2 special information on danger for people and environment:

Danger of bursting when heated. Increased interior pressure in closed containers. Container is under pressure. Do not expose directly at sun and at temperatures over 50 °C (p.e. with incandescent lamps). Do not open with force and do not burn after use. Do not spray on flames or flaming objects. Keep away from ignition sources - do not smoke. Store out of reach of children.

3. Composition / information on components of preparation

3.1 general characterisation

Aerosol.

3.2 hazardous components

CAS No.	description	weight - %	symbol	R-sent
74-98-6	Propan	< 35	F+	12
106-97-8	Butan	< 70	F+	12
75-28-5	Isobutan	< 4	F+	12
	Ammonia 25 % (Anm. B)	0,1- 1 %	C, N	34-50

4. First aid measures

4.1 inhaling

supply fresh air or oxygen Consult emergency doctor if complaints are permanent.
in case of unconsciousness use stable lateral-position for transport.

4.2 skin contact

wash off with water and soap immediately and rinse thoroughly.
in case of permanent skin irritation consult doctor.

4.3 eye contact

rinse open eyes under running water for various minutes. Consult doctor.

4.4 swallowing: - swallowing liquid gas is extremely difficult. Drink water (mixed with activated carbon if available) Consult a doctor immediately.
stomach irrigation and vomiting can lead to aspiration.

4.5 information for the doctor

the following symptoms can be observed: ice anesthesia in case of skin and eye contact.

5. Firefighting measures

5.1 suitable extinguishing agents:

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

5.2 extinguishing agents not suitable for safety reasons: fully jetted water

5.3 special dangers caused by the material or the preparation, its combustion product or developing gases:

development of explosive air-gas mixtures possible.

carbon monoxide can develop in a fire.

5.4 special protection equipment for firefighting

wear breathing apparatus independent from the circulating air.

wear a complete protection suit.

depending on size of the fire, coordinate with fire in the surroundings.

6. Measures for accidental evolution

see point 8 and point 13.

6.1 personal safety measures:

wear protective clothing. Keep unprotected people away.

provide for sufficient ventilation.

keep away ignition sources.

avoid contact with eyes and skin.

6.2 environmental protection measures:

do not introduce larger quantities into sewerage system or into waters.

inform responsible authorities when sewerage system or waters are affected.

inform responsible authorities when soil is affected.

6.3 cleaning methods:

provide for sufficient ventilation.

7. Storage and handling

7.1 handling

information for safe handling:

cool and dry storage in tightly closed Gebinden.

provide for good ventilation/suction filter at the workplace.

provide for good ventilation at ground level (vapor is heavier than air).

information on protection of fire and explosion:

flammable liquid. Vapor is heavier than air and can build explosive mixtures with air. Cool endangered containers with water. Keep away ignition sources and do not smoke.

take measures against electrostatic charging.

7.2 storage

requirements for storage rooms and containers:

store in a cool place. Provide for solvent-resistant and tightly closing floor.

comply to the authority regulations on the storage of pressure gas packaging

information for materials stored together: no prohibitions concerning materials stored together

special storage conditions (see point 10.2):

keep container tightly closed. Cool storage.

protect from heat and direct sun exposure.

heating leads to increased pressure and danger of bursting.

store container in a room with good ventilation.

8. Limitations of exposition and personal protection equipment

8.1 additional information for the arrangement of technical plants:

see point 7

8.2 components with limit values that are relevant to the workplace

<u>CAS-No.</u>	<u>Description of material</u>	<u>Type</u>	<u>Value</u>	<u>Unit</u>
106-97-8	Butan	MAK	2400	mg/m ³
			1000	ml/m ³
74-98-6	Propan	MAK	1800	mg/m ³
			1000	ml/m ³
75-28-5	Isobutan	MAK	2400	ml/m ³

additional information: the lists valid during time of drawing up are used as basis

8.3 personal protection equipment

breathing protection: wear protective mask in case of regular exposure and inappropriate ventilation.

hand protection: -

eye protection: wear tight protective glasses in case of regular exposure.

body protection:

general protection and hygiene measures:

take the usual measures for the use of chemicals.

avoid eye and skin contact.

do not inhale gases / vapors / aerosols.

9. Physical and chemical properties

	<u>value</u>	<u>unit</u>	<u>method</u>
9.1 appearance/smell:			
state:	Aerosol		
color:	white foamt		
odor:	mild		
9.2 data relevant for safety			
pH value:	n.a.		
change of state			
boiling point/boiling area *:	< - 20	°C	
flaming point :	< - 20	°C	
ignition temperatur: *:	235	°C	
danger of explosion:	the development of explosive air-vapour mixtures is possible.		
Density:	0,92	g/ml	
Water-solubility:	soluble		
Solvent concentration:	10,2%		
Water concentration:	89,7%		
Solid concentration:	0,1		

That with „*“ marked parameters refers on the most dangerous component in the preparation.

10 Stability and reactivity

- 10.1 conditions to be avoided**
warmth, flames
- 10.2 material to be avoided**
reaction with strong oxidizing agents.
- 10.3 hazardous decomposition products**
CO, CO₂ after burning.

11 Information concerning toxicology

- 11.1 toxicologic tests:** n.a.
acute toxicity: n.a.
primary irritative effects:
- 11.2 additional information:** According to the information available to us, the product does not cause health damages if it is used properly and as agreed

12 Information on ecology

- 12.1 information about elimination:** n.d.a.
decomposibility about: n.d.a.
- 12.2 behavior in environmental compartment:** n.d.a.
- 12.3 ecotoxic effects:** n.d.a.

13 Information on disposal

- 13.1 product recommendation:**
comply with regulations of local authorities.
Do not introduce larger undilluted quantities into ground water, sewerage system or into waters.
- 13.2 for uncleaned packaging safe handling:** comply with regulations of local authorities.

14 Transport regulations

- 14.1 Road-transport by ADR**
UN – No: 1950
class: 2
number / letter: 5 F
description of good: Aerosols

For regulations concerning reduced quantities see chapter 3.4 ADR. Cartons up to 30 kg. Markings shall be displayed within a diamond-shaped area surrounded by a line that measures at least 100 mm x 100 mm.

14.2 Sea transport IMDG-Code:

class: 2
number/letter: -
EMS-No.: F-D, S-U
UN-No : 1950
Description of good: Aerosols
Limited quantities: chapter 3.4 IMDG-Code
Cartons up to 30 kg. Marking see Road transport.

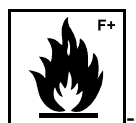
14.3 Air transport IATA / ICAO:

class: 2.1
UN-Number: 1950
Description of good: Aerosols flammable, n.o.s.

15 Regulations

15.1 labeling regulation on hazardous material including EC regulations (67/548/EEC as well as 88/379/EEC)

symbol and description of danger:



F+
Extremely flammable
propan / butan (label)

most dangerous component:

R-phrases:

12 Extremely flammable --

S-phrases:

2 Keep out of the reach of children.

23 aerosols don't inhale

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 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.

15.2 special labeling of special preparations:

name, address, telephone of producer or seller.

container is under pressure. Do not expose directly at sun and at temperatures over 50 °C (p.e. with incandescent lamps). Do not open with force and do not burn after use. Do not spray on flames or flaming objects. Keep away from ignition sources - do not smoke. Store out of reach of children.

16. additional information

the information refers to the product in its condition on delivery.

department issuing data sheet: Dep. QS

data sheet labeling:

Alterations are at the left margin with „ * " marked.

Legend:

n.a. = not applicable / n.a. = not available / n.t. = not tested / n.d.a. = no data available /
n.c.d. = not called differently

VbF = regulation on inflammable liquids

MAK = maximum concentration at workplace in mg/m³ = ppm

WGK = hazard category for water