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

1.1. Product identifier

Jokisch Ignis Nuro 2.K

Further trade names

Old product name: Jokisch EPC 17 Flüssig 2-Kammer Spraydose

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

Use of the substance/mixture

Parting agent.

1.3. Details of the supplier of the safety data sheet

Company name:	Jokisch GmbH	
Street:	Industriestraße 5	
Place:	DE-33813 Oerlinghausen	
Telephone:	+49(0)5202/9734-0	Telefax: +49(0)5202/9734-49
e-mail:	info@jokisch-fluids.de	
e-mail (Contact person):	MSDS@jokisch-fluids.de	
Internet:	www.jokisch-fluids.de	

1.4. Emergency telephone number:

Giftnotruf Berlin: +49 (0) 30 / 30686 790

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Aerosol: Aerosol 3
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Pressurised container: May burst if heated.
Harmful to aquatic life with long lasting effects.

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

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Hazard statements

H229	Pressurised container: May burst if heated.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P501	Dispose of contents/container to hazardous waste.

Special labelling of certain mixtures

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

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
	Fettsäure, ethoxyliert			10 - < 15 %
102-71-6	Triethanolamin			5 - < 10 %
	203-049-8		01-2119486482-31	
57-55-6	1,2-Propylenglykol1,2-Propylenglykol			2.5 - < 5 %
	200-338-0		01-2119456809-23	
25265-71-8	Dipropylene glycol			0.1 - < 1 %
	246-770-3		01-2119456811-38	
055406-53-6	Iodpropinylbutylcarbamat			< 0.1 %
	259-627-5		01-2120762115-60	
	Acute Tox. 3, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, STOT RE 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 1); H331 H302 H318 H317 H372 H400 H410			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. Move victim to fresh air. Put victim at rest and keep warm.

After contact with skin

After contact with skin, wash immediately with: Water. Change contaminated clothing.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

If swallowed, immediately drink: Water. Move victim to fresh air. Put victim at rest and keep warm.
In case of respiratory tract irritation, consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

No special measures are necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin.
Avoid contact with eyes.
The following must be prevented: Inhalation

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Suitable material for taking up: Sand, Universal binding agent. Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

See section 8. refer to chapter 7. No further action is necessary.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.
When using do not eat, drink or smoke.
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Handle and open container with care.

Advice on protection against fire and explosion

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

Further information on handling

High slip hazard because of leaking or spilled product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.
Recommended storage temperature: 5-40 °C
Do not store at temperatures over: 50 °C
Maximum period of storage (time): 2 Years
Official regulations for the storage of compressed gas containers are to be observed

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.
Do not store with strong oxidizing agents.

Further information on storage conditions

te regulations relating to storage premises apply to workshops where the product is hanled.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	WEL

8.2. Exposure controls

Protective and hygiene measures

Change contaminated clothing. Wash hands before breaks and after work. @1501.B015713 Use personal protection equipment as per Directive 89/686/EEC.

Eye/face protection

Eye protection: not required.

Hand protection

Protect skin by using skin protective cream.
Wear protective gloves if advisable under safety aspects.
Wash hands before breaks and after work.
Gloves of appropriate material (i.e. nitrilic rubber, specification: penetration time: level 6, >480 min., thickness 0,9-1 mm; CE-certified acc. EN 374 cat III)

Skin protection

Take off immediately all contaminated clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	red
Odour:	characteristic

		Test method
pH-Value:	not determined	
Changes in the physical state		
Melting point:	not determined	
Initial boiling point and boiling range:	100 °C	

Explosive properties

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Danger of bursting container. In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Vapour pressure: (at 20 °C)	5000-8000 hPa	
Density (at 20 °C):	1,0 g/cm³	
Viscosity / kinematic: (at 20 °C)	not determined	ASTM D 445
Solvent content:	0%	

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

@1001.B010008

10.4. Conditions to avoid

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

10.5. Incompatible materials

The following must be prevented: Oxidizing agents, strong. acid.

10.6. Hazardous decomposition products

Hazardous decomposition products: none

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
	Fettsäure, ethoxyliert					
	oral	LD50 mg/kg	>2000	RAT		
102-71-6	Triethanolamin					
	oral	LD50 mg/kg	5530	RAT		
	dermal	LD50 mg/kg	> 2000	RABBIT		
57-55-6	1,2-Propylenglykol1,2-Propylenglykol					
	oral	LD50 mg/kg	>22000	Ratte		
	dermal	LD50 mg/kg	>2001	Rabbit		
055406-53-6	Iodpropinylbutylcarbamat					
	oral	LD50 mg/kg	1056	Rat		
	dermal	LD50 mg/kg	> 2000	Rabbit		
	inhalation (4 h) aerosol	LC50 mg/l	0,763	Rat		
	inhalation gas	ATE	700 ppm			

Irritation and corrosivity

Irritant effect on the skin: mild irritant.
Irritant effect on the eye: mild irritant.

Sensitising effects

none

Additional information on tests

No risks worthy of mention. Practical experience.
The statement is derived from the properties of the single components.
The classification was undertaken in accordance with the calculation method governed by the Preparations

Directive (1999/45/EC).

SECTION 12: Ecological information

12.1. Toxicity

According to the present state of knowledge negative ecological effects are not expected.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
	Fettsäure, ethoxyliert						
	Acute fish toxicity	LC50	86 mg/l	96 h	Goldorfe	DIN 38412 T.15	
102-71-6	Triethanolamin						
	Acute fish toxicity	LC50 mg/l	11800	96 h	Pimephales Promelas		
	Acute crustacea toxicity	EC50 mg/l	2038	48 h	Großer Wasserfloh	24h	
57-55-6	1,2-Propylenglykol1,2-Propylenglykol						
	Acute fish toxicity	LC50 mg/l	40613	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute crustacea toxicity	EC50 mg/l	18800	48 h	Mysidopsis bahia		
055406-53-6	Iodpropinylbutylcarbamat						
	Acute fish toxicity	LC50 mg/l	0,067	96 h			
	Acute algae toxicity	ErC50 mg/l	0,022	72 h	@1201.B120239		
	Acute crustacea toxicity	EC50 mg/l	0,16	48 h	Daphnia magna		
	Fish toxicity	NOEC mg/l	0,0084	35 d	Pimephales promelas (fathead minnow)		
	Acute bacteria toxicity	(44 mg/l)		3 h	Toxicity to microorganisms		

12.2. Persistence and degradability

Product is biodegradable.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
	Fettsäure, ethoxyliert			
	OECD 301 E	95 %	28	
	leicht biologisch abbaubar			
57-55-6	1,2-Propylenglykol1,2-Propylenglykol			
	CO2-Entwicklung OECD 301 F	81 %		
055406-53-6	Iodpropinylbutylcarbamat			
	OECD 301 F	25 %	28	
	leicht			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
102-71-6	Triethanolamin	-2,53
055406-53-6	Iodpropinylbutylcarbamat	2,81

12.4. Mobility in soil

in delivery condition: liquid

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

Avoid release to the environment. According to the present state of knowledge negative ecological effects are not expected.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Completely emptied packings can be re-cycled. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

120199 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; wastes not otherwise specified

Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Water (with cleaning agent).

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
Hazard label:	2.2



Classification code:	5A
Limited quantity:	LQ2
Tunnel restriction code:	E

Other applicable information (land transport)

Special provisions: 190 625
E0
Transport category: 3

Inland waterways transport (ADN)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
Hazard label:	2.2



Classification code: 5A
Limited quantity: LQ2

Other applicable information (inland waterways transport)

Special provisions: 190 327 625
E0

Marine transport (IMDG)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2, see SP63

Limited quantity: See SP277
EmS: F-D, S-U

Other applicable information (marine transport)

Special provisions: 63, 190, 277, 327, 959
E0

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS, non-flammable
14.3. Transport hazard class(es): 2.2
14.4. Packing group: -
Hazard label: 2.2



Special Provisions: A98 A145 A167 A802
Limited quantity Passenger: 30 kg G

IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

Other applicable information (air transport)

E0
: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Personal protection equipment: see section 8

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

2004/42/EC (VOC): 0%

Additional information

@1501.B150213

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
Triethanolamin

SECTION 16: Other information

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 3; H229	
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)