

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

### 1.1 Product identifier

Trade name: X-IN-1 MULTI FOAM CLEANER

This safety data sheet pertains to the following products:  
408468 = X-IN-1 MULTI FOAM CLEANER

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

General use: Cleaning agent.  
For commercial user only.

### 1.3 Details of the supplier of the safety data sheet

Company name: Berner Produkten b.v.

Street/POB-No.: Vogelzankweg 175

Postal Code, city: 6374 AC Landgraaf  
Netherlands

WWW: www.berner.nl

E-mail: info@berner.nl

Telephone: +31 45 53 39 133

Department responsible for information:

E-mail: Productsafety.Chemicals@berner-group.com

### 1.4 Emergency telephone number

**Poisons information service:**

**National Poisons Information Service (Birmingham Unit): 844 892 0111**

**Transport:**

**CONSULTANK Lutz Harder GmbH (Contract Qualisys/Berner)**

**Telephone: +49 (178) 4337434 (from USA: 01149 178 4337434)**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to EC regulation 1272/2008 (CLP)**

Aerosol 1; H222; H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Eye Irrit. 2; H319 Causes serious eye irritation.

### 2.2 Label elements

#### Labelling (CLP)



Signal word: **Danger**

Hazard statements: H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H319 Causes serious eye irritation.

Precautionary statements:	P210      Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211      Do not spray on an open flame or other ignition source. P251      Do not pierce or burn, even after use. P280      Wear protective gloves/protective clothing/eye protection. P305+P351+P338      IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P410+P412      Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
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### 2.3 Other hazards

Potentially explosive mixtures may form if adequate ventilation is not provided. Inhaling can lead to irritations of the respiratory tract and mucous membrane. Higher doses may lead to a narcotic effect.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

## SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

### 3.2 Mixtures

Chemical characterisation: Blend of active ingredients with propellant.

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119457558-25-xxxx EC No. 200-661-7 CAS 67-63-0	Isopropyl alcohol Flam. Liq. 2; H225. Eye Irrit. 2; H319. STOT SE 3; H336.	< 10 %
EC No. 203-905-0 CAS 111-76-2	2-butoxyethanol Acute Tox. 4; H302. Acute Tox. 4; H312. Acute Tox. 3; H331. Skin Irrit. 2; H315. Eye Irrit. 2; H319. Acute toxicity estimate (ATE): Oral: 1200 mg/kg bw. Inhalative, vapours: 3 mg/L.	< 10 %
EC No. 215-647-6 CAS 1336-21-6	Ammonia solution Skin Corr. 1B; H314. STOT SE 3; H335. Aquatic Acute 1; H400. Specific concentration limits (SCL): STOT SE 3; H335: C ≥ 5 %	< 1 %
EC No. 203-815-1 CAS 110-91-8	Morpholine Flam. Liq. 3; H226. Acute Tox. 4; H302. Acute Tox. 3; H311. Acute Tox. 3; H331. Skin Corr. 1B; H314.	< 1 %
REACH 01-2119486944-21-xxxx EC No. 200-827-9 CAS 74-98-6	Propane Flam. Gas 1; H220. Press. Gas (Comp.); H280.	< 10 %
REACH 01-2119474691-32-xxxx EC No. 203-448-7 CAS 106-97-8	Butane, <0,1% Butadiene Flam. Gas 1; H220. Press. Gas (Comp.); H280.	< 10 %
REACH 01-2119485395-27-xxxx EC No. 200-857-2 CAS 75-28-5	i-Butane, <0,1% Butadiene Flam. Gas 1; H220. Press. Gas (Comp.); H280.	< 1 %

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

Additional information: Labelling for contents according to regulation (EC) No 648/2004, annex VII:  
Contains:  
- 5% or over but less than 15%: aliphatic hydrocarbons  
- less than 5%: anionic surfactants, perfumes.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General information: IF exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection! If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash it before reuse.

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.

Following skin contact: Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After swallowing: Rinse mouth and seek medical attention immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

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

Causes serious eye irritation.

### 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: Water spray jet, Extinguishing powder, alcohol resistant foam, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

### 5.2 Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurised container: May burst if heated.

### 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Hazchem-Code: -

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Do not allow fire water to penetrate into surface or ground water.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours and spray. Avoid contact with the substance.  
In case of leakage, eliminate all ignition sources. Provide adequate ventilation.  
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.  
Cordon off downwind area at risk and warn inhabitants.

### 6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains. Danger of explosion!  
In case of release, notify competent authorities.

### 6.3 Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

Thoroughly clean surrounding area. Do not remove residual product with water and detergent.  
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

### 6.4 Reference to other sections

Refer additionally to section 8 and 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe vapours and spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.  
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.  
Take off contaminated clothing and wash it before reuse.  
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.  
Have eye wash bottle or eye rinse ready at work place. When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.  
Keep container dry. Keep only in the original container.  
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
Store containers in upright position.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
67-63-0	Isopropyl alcohol	Great Britain: WEL-STEL	1250 mg/m <sup>3</sup> ; 500 ppm
		Great Britain: WEL-TWA	999 mg/m <sup>3</sup> ; 400 ppm
111-76-2	2-butoxyethanol	Great Britain: WEL-STEL	246 mg/m <sup>3</sup> ; 50 ppm (may be absorbed through the skin)
		Great Britain: WEL-TWA	123 mg/m <sup>3</sup> ; 25 ppm (may be absorbed through the skin)
1336-21-6	Ammonia solution	Great Britain: WEL-STEL	25 mg/m <sup>3</sup> ; 35 ppm
		Great Britain: WEL-TWA	18 mg/m <sup>3</sup> ; 25 ppm
110-91-8	Morpholine	Great Britain: WEL-STEL	72 mg/m <sup>3</sup> ; 20 ppm (may be absorbed through the skin)
		Great Britain: WEL-TWA	36 mg/m <sup>3</sup> ; 10 ppm (may be absorbed through the skin)
106-97-8	Butane, <0,1% Butadiene	Great Britain: WEL-STEL	1810 mg/m <sup>3</sup> ; 750 ppm
		Great Britain: WEL-TWA	1450 mg/m <sup>3</sup> ; 600 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
111-76-2	2-butoxyethanol	Great Britain: BMGV, urine	240 mmol/mol creatinine	Butoxyacetic acid	end of exposure or end of shift

DNEL/DMEL:

Information about Isopropyl alcohol:

DNEL consumers, long-term, systemic, oral: 26 mg/kg bw/d

DNEL consumers, long-term, systemic, dermal: 319 mg/kg bw/d

DNEL workers, long-term, systemic, dermal: 888 mg/kg bw/d

 DNEL consumers, long-term, systemic, inhalative: 89 mg/m<sup>3</sup>

 DNEL workers, long-term, systemic, inhalative: 500 mg/m<sup>3</sup>

### 8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

### Personal protection equipment

#### Occupational exposure controls

Respiratory protection:

Respiratory protection must be worn whenever the WEL levels have been exceeded.

The filter class must be suitable for the maximum contaminant concentration

(gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Use filter type ABEK/P2 according to EN 14387.

Hand protection:

Protective gloves according to BS EN 374.

Glove material: Nitrile rubber - Layer thickness: ≥ 0.5 mm.

Breakthrough time (maximum wearing time): 480 min

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection:

Tightly sealed goggles according to BS EN ISO 16321-1:2022.

Body protection:

Flame retardant, antistatic and chemical resistant protective clothing.

## General protection and hygiene measures:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.

Do not breathe vapours and spray. Do not get in eyes, on skin, or on clothing.

When using do not eat or drink.

Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.

Have eye wash bottle or eye rinse ready at work place. When handling large quantities, supply emergency spray.

**Environmental exposure controls**

Refer to "6.2 Environmental precautions".

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Appearance:	Physical state at 20 °C and 101.3 kPa: liquid Form: Aerosol Colour: colourless
Odour:	Characteristic
Odour threshold:	Not determined
pH:	at 20 °C: 10
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	-44.5 °C
Flash point/flash point range:	-97 °C
Evaporation rate:	Not applicable
Flammability:	Extremely flammable aerosol.
Explosion limits:	LEL (Lower Explosion Limit): 1.10 Vol-% UEL (Upper Explosive Limit): 12.00 Vol-%
Vapour pressure:	at 20 °C: 23 hPa
Vapour density:	Not determined
Density:	at 20 °C: 0.913 g/mL
Water solubility:	Slightly miscible
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition temperature:	Not self-igniting
Decomposition temperature:	No data available
Viscosity, dynamic:	Not determined
Viscosity, kinematic:	Not determined
Explosive properties:	Product is not explosive. Vapours can form explosive mixtures with air.
Oxidizing characteristics:	No data available

**9.2 Other information**

Ignition temperature:	365 °C
Solvent content:	21.1 %
Solid content:	0.6 %
Water content:	78.1 %

**SECTION 10: Stability and reactivity****10.1 Reactivity**

Extremely flammable aerosol

Vapours can form explosive mixtures with air.

## 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

Pressurised container: May burst if heated.

## 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

## 10.5 Incompatible materials

No data available

## 10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

Skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Other information: Information about Isopropyl alcohol:

LD50, Rat, oral: 5,840 mg/kg

LD50, Rabbit, dermal: 13,900 mg/kg

LC50, Rat, inhalative: > 25 mg/L/4h

Information about 2-Butoxyethanol:

LD50, Rabbit, oral: 300 mg/kg

LD50, Rat, oral: 470 mg/kg

LD50, Rabbit, dermal: 2,000 mg/kg

**Symptoms**

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

**SECTION 12: Ecological information****12.1 Toxicity**

Aquatic toxicity: Information about Isopropyl alcohol:  
Fish toxicity:  
LC50 Pimephales promelas (fathead minnow): 9,640 mg/L/96h  
Daphnia toxicity:  
LC50 Daphnia magna (Big water flea): 9,714 mg/L/24h  
Algae toxicity:  
LOEC: 1,000 mg/L/8d  
Information about 2-Butoxyethanol:  
Fish toxicity:  
LC50 Lepomis macrochirus (bluegill): 1,490 mg/L  
Further details: Product is not readily biodegradable.

**12.2 Persistence and degradability**

Further details: The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

**12.3 Bioaccumulative potential**

Partition coefficient: n-octanol/water:  
Not determined

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other adverse effects**

General information: Do not allow to enter into ground-water, surface water or drains.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Waste key number: 16 05 04\* = Gases in pressure containers (including halons) containing hazardous substances/Aerosol  
\* = Evidence for disposal must be provided.

Recommendation: Do not pierce or burn, even after use.  
Special waste. Dispose of waste according to applicable legislation.  
Do not dispose of with household waste.

**Package**

Recommendation: Dispose of waste according to applicable legislation.  
Empty carefully and completely, if possible. Handle empty containers with care. Incineration may cause explosion.



**SECTION 14: Transport information****14.1 UN number**

ADR/RID, IMDG, IATA-DGR: UN 1950

**14.2 UN proper shipping name**

ADR/RID, IMDG: UN 1950, AEROSOLS

IATA-DGR: UN 1950, AEROSOLS, FLAMMABLE

**14.3 Transport hazard class(es)**

ADR/RID: Class 2, Code: 5F

IMDG: Class 2.1, Subrisk -

IATA-DGR: Class 2.1

**14.4 Packing group**

ADR/RID, IATA-DGR: not applicable

IMDG: -

**14.5 Environmental hazards**

Marine pollutant: no

**14.6 Special precautions for user****Land transport (ADR/RID)**

Warning board: RID: Kemmler-number 23, UN number UN 1950  
Hazard label: 2.1  
Special Provisions: 190 327 344 625  
Limited quantities: 1 L  
EQ: E0  
Package - Instructions: P207 LP200  
Package - Special Provisions: PP87 RR6 L2  
Special provisions for packing together: MP9  
Tunnel restriction code: D

**Sea transport (IMDG)**

EmS: F-D, S-U  
Special Provisions: 63 190 277 327 344 381 959  
Limited quantities: 1000 mL  
Excepted quantities: E0  
Package - Instructions: P207, LP200  
Package - Provisions: PP87, L2  
IBC - Instructions: -  
IBC - Provisions: -  
Tank instructions - IMO: -  
Tank instructions - UN: -  
Tank instructions - Provisions: -  
Stowage and handling: SW1 SW22  
Segregation: SG69  
Properties and observations: -  
Segregation group: none

**Air transport (IATA)**

Hazard label:	Flamm. gas
Excepted Quantity Code:	E0
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft:	Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg
Cargo Aircraft only:	Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg
Special Provisions:	A145 A167 A802
Emergency Response Guide-Code (ERG):	10L

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

No data available

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - Great Britain**

Hazchem-Code:

-  
No data available**National regulations - EC member states**

Further regulations, limitations and legal requirements:

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances  
[Seveso-III-Directive]

Physical hazards: Code P3a, Quantity threshold 150 000 kg / 500 000 kg

Use restriction according to REACH annex XVII, no.: 3, 40, 75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances  
[Seveso-III-Directive]: P3a**15.2 Chemical Safety Assessment**

For this mixture a chemical safety assessment is not required.

**SECTION 16: Other information****Further information**

Wording of the H-phrases under paragraph 2 and 3:

- H220 = Extremely flammable gas.
- H222 = Extremely flammable aerosol.
- H225 = Highly flammable liquid and vapour.
- H226 = Flammable liquid and vapour.
- H229 = Pressurised container: May burst if heated.
- H280 = Contains gas under pressure; may explode if heated.
- H302 = Harmful if swallowed.
- H311 = Toxic in contact with skin.
- H312 = Harmful in contact with skin.
- H314 = Causes severe skin burns and eye damage.
- H315 = Causes skin irritation.
- H319 = Causes serious eye irritation.
- H331 = Toxic if inhaled.
- H335 = May cause respiratory irritation.
- H336 = May cause drowsiness or dizziness.
- H400 = Very toxic to aquatic life.

Abbreviations and acronyms:	Acute Tox.: Acute toxicity
	ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
	Aerosol: Aerosol
	Aquatic Acute: Hazardous to the aquatic environment - acute
	AS/NZS: Australian Standards/New Zealand Standards
	Bw: Body weight
	CAS: Chemical Abstracts Service
	CFR: Code of Federal Regulations
	CLP: Classification, Labelling and Packaging
	DMEL: Derived minimal effect level
	DNEL: Derived no-effect level
	EC: European Community
	EN: European Standard
	EQ: Excepted quantities
	EU: European Union
	Eye Irrit.: Eye irritation
	Flam. Gas: Flammable gases
	Flam. Liq.: Flammable liquid
	IATA: International Air Transport Association
	IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
	IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
	IMDG Code: International Maritime Dangerous Goods Code
	LC50: Median lethal concentration
	LD50: Lethal dose 50%
	LEL: Lower Explosion Limit
	MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
	OEL: Occupational Exposure Limit Value
	OSHA: Occupational Safety and Health Administration
	PBT: Persistent, bioaccumulative and toxic
	PNEC: Predicted no-effect concentration
	Press. Gas: Gases under pressure
	REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
	RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
	Skin Corr.: Skin corrosion
	Skin Irrit.: Skin irritation
	STOT SE: Specific target organ toxicity - single exposure
	TLV: Threshold Limit Value
	TRGS: Technical Rules for Hazardous Substances
	UN: United Nations
	vPvB: Very persistent and very bioaccumulative
	WEL: Workplace Exposure Limit

Reason of change: **Changes in section 3: Composition/information on ingredients (CAS 111-76-2)**

Date of first version: **3/8/2021**

### Department issuing data sheet

Contact person: **see section 1: Department responsible for information**

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.