

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

1.1 Product identifier

Trade name: PROTEAN STAINLESS STEEL CLEANER

Article number: F420

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

Use of substance / mixture: PC35: Washing and cleaning products (including solvent based products).

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: TYGRIS Industrial
Unit 31
Kyle Road Industrial Estate
Irvine
Ayrshire
KA12 8LE
Tel +44 (0) 1294 311 066
Fax +44 (0) 1294 277 115
Email technical@tygrisindustrial.com

Further information obtainable from: Technical Department

1.4 Emergency telephone number: Tel +44 (0) 1294 311 066

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Aquatic Chronic 2: H411; Flam. Aerosol 1: H222; -: H229

Most important adverse effects: Extremely flammable aerosol. Pressurised container: May burst if heated. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard statements:
H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated
H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms:
GHS02: Flame
GHS09: Environmental



Signal word: Danger

Precautionary statements:
P102: Keep out of reach of children.
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/face protection. P410
+412: Protect from sunlight. Do not expose to temperatures exceeding 50°C.

2.3. Other hazards

Other hazards: In use, may form flammable / explosive vapour-air mixture.

PBT: This product is not identified as a PBT/vPvB substance.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

ISOPAR G - REACH registered number(s): 01-2119471991-29

EINECS	CAS	PBT / WEL	CLP Classification	Percent
923-037-2	-	-	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226	30-50%

PROPANE

200-827-9	74-98-6	Substance with a Community workplace exposure limit.	Flam. Gas 1: H220; Press. Gas: H280	30-50%
-----------	---------	--	-------------------------------------	--------

BUTANE

203-448-7	106-97-8	Substance with a Community workplace exposure limit.	Flam. Gas 1: H220; Press. Gas: H280	10-30%
-----------	----------	--	-------------------------------------	--------

ISOBUTANE

200-857-2	75-28-5	Substance with a Community workplace exposure limit.	Flam. Gas 1: H220; Press. Gas: H280	1-10%
-----------	---------	--	-------------------------------------	-------

D40 NAPHTHA (PETROLEUM), HYDROTREATED HEAVY, DE-AROMATISED - REACH registered number(s): 01-2119463258-33-XXXX

919-857-5	64742-48-9	-	Flam. Liq. 3: H226; STOT SE 3: H336; Asp. Tox. 1: H304; -: EUH066	1-10%
-----------	------------	---	---	-------

PENTANE - REACH registered number(s): 01-2119459286-30

203-692-4	109-66-0	-	Flam. Liq. 2: H225; Asp. Tox. 1: H304; STOT SE 3: H336; Aquatic Chronic 2: H411; -: EUH066	1-10%
-----------	----------	---	--	-------

PROPAN-2-OL

200-661-7	67-63-0	-	Flam. Liq. 2: H225; Eye Irrit. 2: H319; STOT SE 3: H336	1-10%
-----------	---------	---	---	-------

SECTION 4: First aid measures

4.1. Description of first aid measures

Skin contact:	Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin.
Eye contact:	Bathe the eye with running water for 15 minutes. Consult a doctor.
Ingestion:	Do not induce vomiting. Consult a doctor.
Inhalation:	Move to fresh air in case of accidental inhalation of vapours.

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

Skin contact:	There may be mild irritation at the site of contact.
Eye contact:	There may be irritation and redness.
Ingestion:	There may be soreness and redness of the mouth and throat.
Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects:	No data available.
-------------------------------------	--------------------

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

Immediate / special treatment:	Not applicable.
---------------------------------------	-----------------

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media:	Suitable extinguishing media for the surrounding fire should be used.
-----------------------------	---

5.2. Special hazards arising from the substance or mixture

Exposure hazards:	Extremely flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. Vapour may travel considerable distance to source of ignition and flash back.
--------------------------	---

5.3. Advice for fire-fighters

Advice for fire-fighters:	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.
----------------------------------	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Eliminate all sources of ignition. If outside do not approach from downwind.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Do not use equipment in clean-up procedure which may produce sparks. Clean-up should be dealt with only by qualified personnel familiar with the specific substance.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Smoking is forbidden. Use non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Keep away from direct sunlight. Keep away from sources of ignition.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): PC35: Washing and cleaning products (including solvent based products).

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
Hazardous ingredients:

PROPANE

Workplace exposure limits:
Respirable dust:

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1800 mg/m ³	7200 mg/m ³	-	-

BUTANE

UK	1450 mg/m ³	1810 mg/m ³	-	-
----	------------------------	------------------------	---	---

ISOBUTANE

UK	2400 mg/m ³	9600 mg/m ³	-	-
----	------------------------	------------------------	---	---

D40 NAPHTHA (PETROLEUM), HYDROTREATED HEAVY, DE-AROMATISED

UK	150ppm 1000mg/m ³	-	-	-
----	------------------------------	---	---	---

PENTANE

UK	1800 mg/m ³	-	-	-
----	------------------------	---	---	---

PROPAN-2-OL

UK	999 mg/m ³	1250 mg/m ³	-	-
----	-----------------------	------------------------	---	---

DNEL/PNEC Values
Hazardous ingredients:

D40 NAPHTHA (PETROLEUM), HYDROTREATED HEAVY, DE-AROMATISED

Type	Exposure	Value	Population	Effect
DNEL	Dermal	208 mg/kg/day	Workers	Systemic
DNEL	Inhalation	871 mg/m ³	Workers	Systemic
DNEL	Dermal	125 mg/kg/day	Consumers	Systemic
DNEL	Inhalation	185 mg/m ³	Consumers	Systemic
DNEL	Oral	125 mg/kg/day	Consumers	Systemic

8.2. Exposure controls
Engineering measures:

Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

Respiratory equipment:

Respiratory protection not required.

Hand protection:

Chemically resistant gloves.

Eye protection:

Safety glasses. Ensure eye bath is to hand.

Skin protection:

Protective clothing.

Environmental:

Prevent from entering in public sewers or the immediate environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Aerosol
Colour:	Colourless
Odour:	Characteristic odour
Solubility in water:	Insoluble
Also soluble in:	Most organic solvents
Flash point°C:	-60
Relative density:	0.74

9.2. Other information

Other information:	No data available.
--------------------	--------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity:	Stable under recommended transport or storage conditions.
-------------	---

10.2. Chemical stability

Chemical stability:	Stable under normal conditions. Stable at room temperature.
---------------------	---

10.3. Possibility of hazardous reactions

Hazardous reactions:	Hazardous reactions will not occur under normal transport or storage conditions.
----------------------	--

10.4. Conditions to avoid

Conditions to avoid:	Direct sunlight. Heat. Hot surfaces. Sources of ignition. Flames.
----------------------	---

10.5. Incompatible materials

Materials to avoid:	Strong oxidising agents. Strong acids.
---------------------	--

10.6. Hazardous decomposition products

Haz. decomp. products:	In combustion emits toxic fumes.
------------------------	----------------------------------

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

ISOPAR G

DERMAL	RBT	LD50	>2000	mg/kg
ORAL	RAT	LD50	>2000	mg/kg

D40 NAPHTHA (PETROLEUM), HYDROTREATED HEAVY, DE-AROMATISED

DERMAL	RBT	LD50	>5000	mg/kg
GASES	RAT	4H LC50	>5000	mg/l
ORAL	RAT	LD50	>5000	mg/kg

PENTANE

ORAL	RAT	LD50	>2000	mg/kg
------	-----	------	-------	-------

PROPAN-2-OL

IVN	RAT	LD50	1088	mg/kg
ORL	MUS	LD50	3600	mg/kg
ORL	RAT	LD50	5045	mg/kg
SCU	MUS	LDLO	6	gm/kg

Toxicity values: No data available.

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: No data available.

Other information: Not applicable.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

D40 NAPHTHA (PETROLEUM), HYDROTREATED HEAVY, DE-AROMATISED

ALGAE	72H IC50	>1000	mg/l
Daphnia magna	48H EC50	>1000	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	>1000	mg/l

PENTANE

FISH	96H LC50	1-10	mg/l
------	----------	------	------

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: Insoluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Not applicable.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

14.1. UN number

UN number: UN1950

14.2. UN proper shipping name

Shipping name: AEROSOLS

14.3. Transport hazard class(es)

Transport class: 2

14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: D

Transport category: 2

SECTION 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical safety assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

Phrases used in s.2 and s.3:

- EUH066: Repeated exposure may cause skin dryness or cracking.
- 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
- H304: May be fatal if swallowed and enters airways.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.
- H411: Toxic to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.