

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

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

1.1. Product identifier

Trade name: Steel Cleaner

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

Recommended uses: Cleaner

1.3. Details of the supplier of the safety data sheet

Supplier

Company: Guardian Protection Products A/S
Address: Knudevejen 22
Zip code: 6600
City: Vejen
Country: DENMARK
Email: guardian@guardian.dk
Phone: +45 75471767
Fax: +45 75471787

1.4. Emergency Telephone Number

+45 75 47 17 67 (Guardian Protection Products A/S)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Aerosol 1;H222
Aerosol 1;H229
Aquatic Chronic 2;H411

Most serious harmful effects: Extremely flammable aerosol. Pressurised container: May burst if heated. Toxic to aquatic life with long lasting effects. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication.

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

2.2. Label elements

Pictograms



Signal word:

Danger

Hazard Statements

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statements

P101

If medical advice is needed, have product container or label at hand.

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.

P410+412

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

P501

Dispose of contents/container in accordance with local regulation.

Supplemental information

EUH066

Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

The product does not contain any PBT or vPvB substances.
Endocrine disrupting properties: None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS No./ EC No./ REACH Reg. No.	Concentration	Notes	CLP-classification
hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2 01-2119471991-29	40 - 60 %		Flam. Liq. 3;H226 Asp. Tox. 1;H304 Aquatic Chronic 2;H411 EUH066
White mineral oil (petroleum)	8042-47-5 232-455-8 01-2119487078-27	25 - 40 %	3	Asp. Tox. 1;H304
Ethanol	64-17-5 200-578-6 01-2120063206-63	10 - 15 %		Flam. Liq. 2;H225 Eye Irrit. 2;H319 C ≥ 50%: Eye Irrit. 2;H319
Carbon dioxide	124-38-9 204-696-9	5 - 10 %	12	Press. Gas liq. gas;H280
propan-2-ol	67-63-0 200-661-7	1 - 3 %		Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336

Please see section 16 for the full text of H- / EUH-phrases.

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

3 = H304 is not applicable due to use as aerosols.

12 = The substance is included in the EU list of limit values for occupational exposure.

Ingredient comments: Pursuant to Regulation (EC) No. 648/2004 on detergents:
15% or over but less than 30%:
aliphatic hydrocarbons

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Seek fresh air. Seek medical advice in case of persistent discomfort.

Ingestion: Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Seek medical advice in case of persistent discomfort.

Skin contact: Remove contaminated clothing. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.

Eye contact: Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

Burns: Flush with water until pain ceases. Remove clothing that is not stuck to the skin - seek medical advice/transport to hospital. If possible, continue flushing until medical attention is obtained.

General: When obtaining medical advice, show the safety data sheet or label.

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

Inhalation of spray mist is irritating to the upper airways. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. May cause eye irritation.

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

Treat symptoms. No special immediate treatment required.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Extinguish with powder, foam or water mist. Use water or water mist to cool non-ignited stock.

Unsuitable extinguishing media: Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

Heating will cause a rise in pressure in packaging with a risk of bursting. CAUTION! Aerosol containers may explode. Product decomposes in fire conditions or when heated to high temperatures, and inflammable and toxic gases may be released.

5.3. Advice for firefighters

Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases - seek fresh air. Wear Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

For non-emergency personnel: Stay upwind/keep distance from source. Provide adequate ventilation. Smoking and naked flames prohibited. Wear safety goggles if there is a risk of eye splash. Wear gloves.

For emergency responders: In addition to the above: Protective suit equivalent to EN 368, type 3, is recommended.

6.2. Environmental precautions

Avoid unnecessary release to the environment.

6.3. Methods and material for containment and cleaning up

Wipe up drops and splashes with a cloth.

6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Running water and eye wash equipment must be available. Wash hands before breaks, before using restroom facilities, and at the end of work. Smoking and naked flames prohibited.

7.2. Conditions for safe storage, including any incompatibilities

To be stored safely out of reach of children and not together with food, feed, medicine and the like. Pressurized container: Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not store with the following: Strong alkalis/ Strong oxidisers/ Strong reducing agents/ Strong acids. Store cold, but frost-free.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit

Substance name	Time period	ppm	mg/m ³	Fiber/cm ³	Remarks	Notation
Carbon dioxide	8h	5000	9000			

Measuring methods: Compliance with occupational exposure limits may be checked by occupational hygiene measurements.

Legal basis: Commission Directive 2000/39/EC (Occupational Exposure Limits) as subsequently amended. Last amended by Commission Directive 2019/1831/EU. Directive 2004/37/EC (Exposure to carcinogens or mutagens at work) as subsequently amended. Last amended by Directive 2024/869/EU. Directive 2009/148/EC (Exposure to asbestos at work) as subsequently amended. Last amended by Directive 2023/2668/EU.

PNEC

Ethanol, cas-no 64-17-5				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC aqua (freshwater)	0,96 mg/l			
PNEC aqua (marine water)	0,79 mg/l			
PNEC aqua (intermittent releases)	2,75 mg/l			

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

PNEC soil	0,63 mg/kg dw			
PNEC sediment (freshwater)	3,6 mg/kg			
PNEC STP (wastewater-treatment facilities)	580 mg/l			
PNEC sediment (marine water)	2,9 mg/kg dw			
propan-2-ol, cas-no 67-63-0				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC sediment (marine water)	552 mg/kg			
PNEC aqua (freshwater)	140,9 mg/l			
PNEC soil	28 mg/kg			
PNEC aqua (marine water)	140,9 mg/l			
PNEC aqua (intermittent releases)	140,9 mg/l			
PNEC STP (wastewater-treatment facilities)	251 mg/l			
PNEC sediment (freshwater)	552 mg/l			

DNEL - workers

White mineral oil (petroleum), cas-no 8042-47-5					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - systemic effects)	164,56 mg/m³				
Dermal DNEL (long-term exposure - systemic effects)	217,05 mg/kg bw/day				
Ethanol, cas-no 64-17-5					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	343 mg/kg bw/day				
Inhalation DNEL (acute/short-term exposure - local effects)	1900 mg/m³				
Inhalation DNEL (long-term exposure - systemic effects)	950 mg/m³				
propan-2-ol, cas-no 67-63-0					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	888 mg/kg bw/day				
Inhalation DNEL (long-term exposure - systemic effects)	500 mg/m³				

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

Inhalation DNEL (acute/short-term exposure - systemic effects)	1000 mg/m ³				
---	------------------------	--	--	--	--

DNEL - general population

White mineral oil (petroleum), cas-no 8042-47-5

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	93,02 mg/kg bw/day				
Inhalation DNEL (long-term exposure - systemic effects)	34,78 mg/m ³				
Oral DNEL (long-term exposure - systemic effects)	25 mg/kg bw/day				

Ethanol, cas-no 64-17-5

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	206 mg/kg bw/day				
Inhalation DNEL (acute/short-term exposure - local effects)	950 mg/m ³				
Inhalation DNEL (long-term exposure - systemic effects)	114 mg/m ³				
Oral DNEL (long-term exposure - systemic effects)	87 mg/kg bw/day				

propan-2-ol, cas-no 67-63-0

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	319 mg/kg bw/day				
Inhalation DNEL (long-term exposure - systemic effects)	89 mg/m ³				
Oral DNEL (long-term exposure - systemic effects)	26 mg/kg bw/day				
Inhalation DNEL (acute/short-term exposure - systemic effects)	178 mg/m ³				
Oral DNEL (acute/short-term exposure - systemic effects)	51 mg/kg bw/day				

8.2. Exposure controls

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

Appropriate engineering controls:	Use the product under well-ventilated conditions, preferably outdoors. Wear the personal protective equipment specified below.
Personal protective equipment, eye/face protection:	Wear safety goggles if there is a risk of eye splash. Eye protection must conform to EN 16321.
Personal protective equipment, hand protection:	In the event of direct skin contact, wear protective gloves: Type of material: Nitrile rubber. Gloves must conform to EN 374. The suitability and durability of a glove is dependant on usage, e.g. frequency and duration of contact, glove material thickness, functionality and chemical resistance. Always seek advice from the glove supplier.
Personal protective equipment, respiratory protection:	In case of spraying/formation of spraying mists: Light use (small volume, short term contact (below 10 min.)): Not required. Medium use (medium volume, medium contact (below 2 hours)): Filter type: A/P. Respiratory protection must conform to one of the following standards: EN 136/140/145.
Environmental exposure controls:	Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Aerosol
Colour	Clear
Odour	Characteristic
Solubility	No data

Parameter	Value/unit	Remarks
Odour threshold	No data	
Melting point	No data	
Freezing point	No data	
Boiling point or initial boiling point and boiling range	No data	
Flammability	No data	
Flammability limits	No data	
Lower and upper explosion limit	No data	
Flash Point	12 °C	
Auto-ignition temperature	No data	
Decomposition temperature	No data	
pH (solution for use)	No data	
pH (concentrate)	No data	
Kinematic viscosity	No data	
Viscosity	No data	
Partition coefficient n-octanol/water (log value)	No data	
Vapour pressure	No data	
Density	0.8 g/cm³	
relative density	No data	
Relative vapour density	No data	
Relative density (sat. air)	No data	
Particle characteristics	No data	

9.2. Other information

Parameter	Value/unit	Remarks
VOC (Volatile organic compounds):	96 g/L	

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

Other Information: None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with the following: Strong alkalis/ Strong oxidisers/ Strong reducing agents/ Strong acids.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid heating and contact with ignition sources. Avoid direct sunlight. Avoid temperatures >50°C.

10.5. Incompatible materials

Strong alkalis/ Strong oxidisers/ Strong reducing agents/ Strong acids.

10.6. Hazardous decomposition products

Product decomposes in fire conditions or when heated to high temperatures, and inflammable and toxic gases may be released.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - oral

Ethanol, cas-no 64-17-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		10470 mg/kg			

propan-2-ol, cas-no 67-63-0

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		5840 mg/kg			

Spray mist in mouth may irritate mucous membranes in mouth and throat. The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - dermal

Ethanol, cas-no 64-17-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		> 17100 mg/kg			

propan-2-ol, cas-no 67-63-0

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		> 2000 mg/kg			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - inhalation

Ethanol, cas-no 64-17-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50		124.7 mg/l			

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

Carbon dioxide, cas-no 124-38-9

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50	0,5h	470000 ppm			

propan-2-ol, cas-no 67-63-0

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50	8h	47.5 mg/l			
Rat	LC50	4h	66.1 mg/l			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Skin corrosion/irritation: Degreases and dries the skin. Repeated exposure may cause skin dryness or cracking. The product does not have to be classified. Test data are not available.

Serious eye damage/eye irritation: May cause eye irritation. The product does not have to be classified. Test data are not available.

Respiratory sensitisation or skin sensitisation: The product does not have to be classified. Test data are not available.

Germ cell mutagenicity: The product does not have to be classified. Test data are not available.

Carcinogenic properties: The product does not have to be classified. Test data are not available.

Reproductive toxicity: The product does not have to be classified. Test data are not available.

Single STOT exposure: Inhalation of spray mist is irritating to the upper airways. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication.

Repeated STOT exposure: The product does not have to be classified. Test data are not available.

Aspiration hazard: The product does not have to be classified. Test data are not available.

11.2. Information on other hazards

Endocrine disrupting properties: None known.

Other toxicological effects: None known.

SECTION 12: Ecological information

12.1. Toxicity

Ethanol, cas-no 64-17-5

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish			96hLC50	1100 mg/l			
Crustacea			48hLC50	9268 - 14221 mg/l			

propan-2-ol, cas-no 67-63-0

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish			96hLC50	8970 - 9280 mg/l			
Crustacea			24hEC50	9714 mg/l			
Algae			8dNOEC	> 1800 mg/l			

Toxic to aquatic life with long lasting effects.

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

12.2. Persistence and degradability

Ethanol, cas-no 64-17-5

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
					Readily biodegradable.		

propan-2-ol, cas-no 67-63-0

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
				95 %	Readily biodegradable.	OECD 301 E	

Expected to be biodegradable.

12.3. Bioaccumulative potential

Carbon dioxide, cas-no 124-38-9

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
			Log Pow	0.83	No bioaccumulation expected.		

propan-2-ol, cas-no 67-63-0

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
					No bioaccumulation expected.		

No bioaccumulation expected.

12.4. Mobility in soil

Test data are not available for all substances.

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Avoid unnecessary release to the environment.

Do not dispose of aerosol sprays in refuse collection, even when empty. The sprays must be sent to the municipal chemical waste collection facility.

Aerosol sprays: EWC code: 16 05 04* gases in pressure containers (including halons) containing hazardous substances
Absorbent/cloth contaminated with the product: EWC code: 15 02 02* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances

SECTION 14: Transport information

Land transport (ADR/RID)

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

14.1. UN number or ID number:	1950	14.4. Packing group:		The product must be labelled as an environmental hazard (symbol: fish and tree) in packaging sizes of more than 5 kg/l.
14.2. UN proper shipping name:	AEROSOLS	14.5. Environmental hazards:		
14.3. Transport hazard class(es):	2.1			
Hazard label(s):	2.1			
Hazard identification number:		Tunnel restriction code:	D	
Inland water ways transport (ADN)				
14.1. UN number or ID number:	1950	14.4. Packing group:		The product must be labelled as an environmental hazard (symbol: fish and tree) in packaging sizes of more than 5 kg/l.
14.2. UN proper shipping name:	AEROSOLS	14.5. Environmental hazards:		
14.3. Transport hazard class(es):	2.1			
Hazard label(s):	2.1			
Transport in tank vessels:	Not applicable.			
Sea transport (IMDG)				
14.1. UN number or ID number:	1950	14.4. Packing group:		The product must be labelled as a Marine Pollutant (MP) in packaging sizes of more than 5 kg/l.
14.2. UN proper shipping name:	AEROSOLS	14.5. Environmental hazards:		
14.3. Transport hazard class(es):	2.1	Environmental Hazardous Substance Name(s):	hydrocarbons, C10-C12, isoalkanes, <2% aromatics	
Hazard label(s):	2.1			
EmS:	F-D, S-U	IMDG Code segregation group:	- None -	
Air transport (ICAO-TI / IATA-DGR)				
14.1. UN number or ID number:	1950	14.4. Packing group:		The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.2. UN proper shipping name:	AEROSOLS, FLAMMABLE	14.5. Environmental hazards:		
14.3. Transport hazard class(es):	2.1			
Hazard label(s):	2.1			
14.6. Special precautions for user				
None.				
14.7. Maritime transport in bulk according to IMO instruments				
Not applicable.				

SECTION 15: Regulatory information

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

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

Special Provisions:

Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product.
Directive 2012/18/EU (Seveso), P3a FLAMMABLE AEROSOLS: Column 2: 150 (net) t,
Column 3: 500 (net) t.

Covered by:

Council Directive (EC) on the protection of young people at work.
Regulation (EC) of the European Parliament and of the Council on detergents.

15.2. Chemical Safety Assessment

REACH Reg. No.	Substance name
01-2119471991-29	hydrocarbons, C10-C12, isoalkanes, <2% aromatics
01-2119487078-27	White mineral oil (petroleum)
01-2120063206-63	Ethanol

SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
1.0.0	08/03/2025	JST	

Abbreviations:

DNEL: Derived No Effect Level
PBT: Persistent, Bioaccumulative and Toxic
PNEC: Predicted No Effect Concentration
STOT: Specific Target Organ Toxicity
UFI: Unique formula identifier.
vPvB: Very Persistent and Very Bioaccumulative

Other Information:

This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with 1907/2006/EC (REACH) as subsequently changed.

Training advice:

A thorough knowledge of this safety data sheet should be a prerequisite condition.

Classification method:

Calculation based on the hazards of the known components.

Hazard statements

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.
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.

Safety Data Sheet

Steel Cleaner

Issued: 08/03/2025
Version: 1.0.0

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

SDS is prepared by

Company: Bureau Veritas Solutions Denmark A/S
Address: Oldenborggade 25-31
Zip code: 7000
City: Fredericia
Country: DENMARK
Email: solutions-dk@bureauveritas.com
Phone: +45 77 31 10 00
Homepage: www.bureauveritas.dk

Country: EU