



Material Safety Data Sheet



Stainless Steel Spray Cleaner

Section 1. Chemical product and company identification

Manufacturer : HG International b.v. **Code** : 341164
Address : Damsluisweg 70 1332 EJ Almere **MSDS#** : 1.02
Country : Netherlands **Validation date** : 1/29/2010.
Telephone No.: : +31 (0)36 54 94 700 **Print date** : 1/29/2010.
Fax : +31 (0)36 54 94 744 **Responsible name** : P. Stienstra
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Supplier : Solstrand Trading **Fax** : +1.705.734.0857
Address : 60 Lockhart road Barrie, Ontario L4N 9G8 **Country** : Canada
Material uses : Cleaner.
In Case of Emergency : Chem. Tel Inc. (813) 248 0585 or Toll free (800) 255 3924

Section 2. Composition, Information on Ingredients

Name	CAS #	% by weight	Exposure limits
Pentane	109-66-0	1 - 5	

Section 3. Hazards identification

Physical State and Appearance : Liquid.

Emergency overview : DANGER
CAUTION
FLAMMABLE.
CONTENTS UNDER PRESSURE.
Vapor may cause fire.
Container explosion may occur under fire conditions or when heated.
Do not smoke.
Do not breathe fumes.
Do not puncture or incinerate container.
Use only in well-ventilated areas.
Keep away from heat, sparks and flame.

Routes of entry : Dermal contact. Eye contact. Inhalation.

Potential acute health effects

Eyes : May cause eye irritation.
Skin : May cause skin irritation.
Inhalation : Vapors may cause drowsiness and dizziness.
Ingestion : Ingestion is not likely while the product will not easily enter the human body

Potential chronic health effects : **CARCINOGENIC EFFECTS:** Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

Medical conditions aggravated by overexposure: : None known.

Over-exposure signs/symptoms : Not available.

[See toxicological Information \(section 11\)](#)

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Section 4. First aid measures

- Eye Contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Skin Contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Notes to Physician** : Not available.

Section 5. Fire fighting measures

- Flammability of the product** : Flammable.
- Auto-ignition Temperature** : Not available.
- Flash Points** : Closed cup: -18 to 23°C (-0,4 to 73,4°F)
- Flammable limits** : Lower: 1%
Upper: 10%
- Products of combustion** : No specific data.
- Fire hazards in presence of various substances** : Not available.
- Explosion hazards in presence of various substances** : Not available.
- Fire fighting media and instructions** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
In a fire or if heated, a pressure increase will occur and the container may burst. Bursting aerosol containers may be propelled from a fire at high speed.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Special remarks on fire hazards** : Not available.
- Special remarks on explosion hazards** : Not available.

Section 6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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Methods for cleaning up : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Empty containers retain product residue and can be hazardous.

Storage : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure Controls, Personal Protection

Engineering controls : Do not inhale aerosols.

Personal protection

Eyes : Recommended: safety glasses with side shields

Skin : Recommended: Work uniform or laboratory coat.

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands : >8 hours (breakthrough time): polyvinyl alcohol (PVA)

Other protection : Not available.

Personal protective equipment (Pictograms) :



Personal protection in case of a large spill : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be adequate. Consult a specialist before handling this product.

[Consult local authorities for acceptable exposure limits.](#)

Section 9. Physical and chemical properties

Physical State and Appearance : Liquid.

Color : Clear. Colorless.

Odor : Characteristic.

pH : 9,7

Relative density : 0,85 g/cm³ [20°C (68°F)]

Viscosity : Not available.

Solubility : Very slightly soluble in the following materials: cold water and hot water.

Flash point : Closed cup: -18 to 23°C (-0,4 to 73,4°F)

Explosive properties : Not available.

Explosion Limits : Lower: 1%
Upper: 10%

Oxidizing properties : Not available.

Physical chemical comments : Not available.

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Section 10. Stability and reactivity

- Stability and Reactivity** : The product is stable.
- Conditions of instability** : Keep away from heat, sparks and flame. Stable under recommended storage and handling conditions (see section 7).
- Incompatibility with various substances** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous Decomposition Products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Will not occur.

Section 11. Toxicological information

- Chronic effects on humans** : Not available.
- Other toxic effects on humans** : Slightly hazardous by the following route of exposure: of skin contact (irritant), of eye contact (irritant).
- Special remarks on toxicity to animals** : Not available.
- Special remarks on chronic effects on humans** : Not available.
- Special remarks on other toxic effects on humans** : Not available.
- Specific effects**
- Carcinogenic effects** : No known significant effects or critical hazards.
- Mutagenic effects** : No known significant effects or critical hazards.
- Reproduction toxicity** : No known significant effects or critical hazards.






Section 12. Ecological information

- BOD and COD** : Not available.
- Biodegradable/OECD** : Readily biodegradable
- Mobility** : Not available.
- Products of degradation** : carbon oxides (CO, CO₂) and water
- Toxicity of the products of biodegradation** : Not available.
- Special remarks on the products of biodegradation** : Not available.

Section 13. Disposal considerations

- Waste information** : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Do not puncture or incinerate container.
- Waste stream** : Not available.
- [Consult your local or regional authorities.](#)

Section 14. Transport information

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	1950	"dangerous goods in limited quantities of class 2" UN 1950, PG III Aerosol. Marine pollutant	2.1	III		Marine pollutant Marine pollutant (P) Limited quantity Yes. Remarks Limited Quantity
TDG Classification	1950	"dangerous goods in limited quantities of class 2" UN 1950, PG III Aerosol. Marine pollutant	2.1	III		Marine pollutant Marine pollutant (P) Remarks Limited Quantity
ADR/RID Class	1950	UN 1950, "dangerous goods in limited quantities of class 2", III, Aerosol, ADR	2	III		Hazard identification number None Reportable quantity 30 Limited quantity LQ2 Remarks Dangerous goods in limited quantities
IMDG Class	1950	"dangerous goods in limited quantities of class 2" UN 1950, PG III, Aerosol (Pentane). Marine pollutant	2.1	III		Emergency schedules (EmS) F-D, S-U Marine pollutant Marine pollutant (P) Reportable quantity 30 Remarks Dangerous goods in limited quantities
IATA-DGR Class	1950	"dangerous goods in limited quantities of class 2" UN 1950, PG III, Aerosol (Pentane)	2.1	III		-

Section 15. Regulatory information

WHMIS (Canada)

: Class B-1: Flammable gas.

CEPA Toxic substances: None of the components are listed.

Canadian ARET: None of the components are listed.

Canadian NPRI: None of the components are listed.

Alberta Designated Substances: None of the components are listed.

Ontario Designated Substances: None of the components are listed.

Quebec Designated Substances: None of the components are listed.

[International regulations](#)

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EINECS :

DSCL (EEC) : R12- Extremely flammable.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

International lists : **Australia inventory (AICS):** Not determined.
China inventory (IECSC): Not determined.
Korea inventory (KECI): Not determined.
Philippines inventory (PICCS): Not determined.
Japan inventory (ENCS): Not determined.

Section 16. Other information

Label Requirements : CONTENTS UNDER PRESSURE.
Vapor may cause fire.
Container explosion may occur under fire conditions or when heated.

Hazardous Material Information System (U.S.A.)

Health	1
Fire hazard	4
Reactivity	0
Personal protection	C

National Fire Protection Association (U.S.A.)



References : Not available.

Other special considerations : Not available.

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Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.