



SAFETY DATA SHEET

Sol-X Copper Grease Spray

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

1.1. Product identifier

Product name Sol-X Copper Grease Spray

Product number SXCG500

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

Identified uses Anti-seize aerosol

1.3. Details of the supplier of the safety data sheet

Supplier Central Solutions (GB) Ltd
 Sol-X House
 Windmill Lane
 Doncaster
 DN6 9AT
 England
 Tel.: +44(0) 1302 708895
 email: info@solxsolutions.com www.solxsolutions.com

1.4. Emergency telephone number

Emergency telephone +44(0)1302 708 895

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards STOT SE 3 - H336

Environmental hazards Aquatic Chronic 2 - H411

Human health Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environmental The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Sol-X Copper Grease

Pictogram



Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.
 H229 Pressurised container: may burst if heated.
 H336 May cause drowsiness or dizziness.
 H411 Toxic to aquatic life with long lasting effects.

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.
 P271 Use only outdoors or in a well-ventilated area.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 P102 Keep out of reach of children.
 P501 Dispose of contents/ container in accordance with local regulations.
 P260 Do not breathe vapour/ spray.

Contains

PENTANE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PENTANE	30-60%
CAS number: 109-66-0	EC number: 203-692-4
	REACH registration number: 01-2119459286-30
Classification	
Flam. Liq. 2 - H225	
STOT SE 3 - H336	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	
PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS	10-30%
CAS number: 68476-85-7	EC number: 270-704-2
Classification	
Flam. Gas 1 - H220	
Press. Gas (Liq.) - H280	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move affected person to fresh air at once.

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Inhalation	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. Extremely flammable. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
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5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Do not spray on a naked flame or any incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Extremely flammable. Keep away from heat, sparks and open flame. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

PENTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm

Short-term exposure limit (15-minute): WEL 750 ppm

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

PENTANE (CAS: 109-66-0)

DNEL Industry - Dermal; Long term systemic effects: 432 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 3000 mg/m³
 Consumer - Oral; Long term systemic effects: 214 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 214 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 643 mg/m³

PNEC - water; 0.23 mg/l
 - Sediment; 1.2 mg/kg
 - Soil; 0.55 mg/kg
 - STP; 3.60 mg/l

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

Personal protection When using do not smoke.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber). The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

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Hygiene measures Wash hands after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate hand lotion to prevent defatting and cracking of skin.

Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Brown.
Odour	Organic solvents.
Initial boiling point and range	-40 to -2°C @ 1013 hPa
Flash point	< -40°C
Upper/lower flammability or explosive limits	Lower : 1.8% - Upper 9.5%
Vapour pressure	ca. 590 to 1760 kPa @ 45°C
Vapour density	ca. 1.5 at 15°C
Relative density	1.2 @ 20°C
Partition coefficient	log Pow: ca. 2.3 to 2.8
Auto-ignition temperature	410-580°C
Comments	Information given is applicable to the major ingredient.

9.2. Other information

Other information	Not available.
Volatile organic compound	This product contains a maximum VOC content of 430 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable at normal ambient temperatures and when used as recommended.

10.2. Chemical stability

Stability Avoid the following conditions: Heat, sparks, flames.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Keep away from oxidising materials, heat and flames.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

General information	Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.
Inhalation	In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.
Skin contact	Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting.
Acute and chronic health hazards	Arrhythmia (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Route of exposure	Inhalation
Target organs	Central nervous system Respiratory system, lungs
Medical symptoms	Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

Toxicological information on ingredients.

PENTANE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

Inhalation May cause respiratory system irritation. Vapours may cause drowsiness and dizziness.

Ingestion Harmful: may cause lung damage if swallowed.

SECTION 12: Ecological Information

Ecotoxicity This product has not been tested but contains ingredients which are toxic or very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. During normal use the volatility of the components and the packaging form, pressurised container, make entry into the aquatic environment unlikely, however, do not empty or discharge into drains or watercourses. Ensure container is empty before disposal to prevent contents entering watercourses.

12.1. Toxicity

Toxicity Not available.

Ecological information on ingredients.

PENTANE

Toxicity Not available.

Acute aquatic toxicity

Acute toxicity - fish LC50, <: < 10 mg/l,

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Acute toxicity - aquatic invertebrates EC₅₀, <: < 10 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, <: < 100 mg/l,

Acute toxicity - microorganisms EC₅₀, >: > 100 mg/l,

12.2. Persistence and degradability

Persistence and degradability Not available.

Ecological information on ingredients.

PENTANE

Persistence and degradability Not available.

12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

Partition coefficient log Pow: ca. 2.3 to 2.8

Ecological information on ingredients.

PENTANE

Bioaccumulative potential Not available.

Partition coefficient : 3.39

12.4. Mobility in soil

Mobility Not known.

Ecological information on ingredients.

PENTANE

Mobility Not known.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not available.

Ecological information on ingredients.

PENTANE

Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects

Other adverse effects Not available.

Ecological information on ingredients.

PENTANE

Other adverse effects Not available.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Do not puncture or incinerate, even when empty.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion.

SECTION 14: Transport information

General	This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.
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14.1. UN number

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AEROSOLS (PENTANE)
Proper shipping name (IMDG)	AEROSOLS (PENTANE)
Proper shipping name (ICAO)	AEROSOLS (PENTANE)
Proper shipping name (ADN)	AEROSOLS (PENTANE)

14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

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EmS F-D, S-U
Tunnel restriction code (D)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations EH40/2005 Workplace exposure limits.
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EU legislation Commission Regulation (EU) No 453/2010 of 20 May 2010.

Guidance Workplace Exposure Limits EH40.
Safety Data Sheets for Substances and Preparations.
Approved Classification and Labelling Guide (Sixth edition) L131.
British Aerosol Manufacturers Code of Practice 7th. Edition 1999

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date 15/07/2015

Revision 1

SDS number 20883

SDS status Approved.

Hazard statements in full H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly 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.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.