

Product Ref: (DsC61-1019) Issue No: 01-1019

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE

1.1. Product identifier

Product name: Langley Gun Cleaner Aerosol.

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

Identified uses: Cleaner

Uses advised against:No specific uses advised against are identified.

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification

Physical hazards: Aerosol 1 - H222, H229

Health hazards: Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Carc.2 - STOT SE 3 - H336

Environmental hazards: Not Classified

Human health: Vapours/aerosol spray may irritate the respiratory system.

Physicochemical: Aerosol containers can explode when heated, due to excessive pressure build-up. When

sprayed on a naked flame or any incandescent material the aerosol vapours can be

ignited.

2.2. Labels elements

Pictogram





Signal word: Danger.

Hazard statements: H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

H315 Causes skin irritation.
H319 Causes serious eye irritation
H351 Suspected of causing cancer.

H336 May cause drowsiness or dizziness.

Precautionary statements: A1 Pressurised container: protect from sunlight and do not expose to temperatures

exceeding 50°c. Do not pierce of burn, even after use.

A2 Do not spray on a naked flame or any incandescent materials.

A3 Keep away from sources of ignition - No smoking.

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.



Product Ref: (DsC61-1019) Issue No: 01-1019

P260 Do not breath vapours.

P281 Use personal protective equipment as required.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P501 Dispose of contents/container in accordance with national regulations.

RCH002a Restricted to professional use.

Contains: Dichloromethane

2.3. Other hazards

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Mixtures

DICHLOROMETHANE 60-100%		
CAS number: 75-90-2	EC number: 200-838-9	REACH registration number: 01-2119480404-41-0007
Classification		
Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Carc. 2 - H351 STOT SE 3 - H336		
BUTANE	10-30%	
CAS number: 106-97-8	EC number 203-448-7	REACH registration number:01-2119474691-32-0000
Classification		
Flam. Gas 1 - H220 Press. Gas (liq) - H280		
PROPANE 10-30	NE 10-30%	
CAS number: 74-98-6	EC number 200-827-9	REACH registration number:01-2119486944-21-0000
Classification		
Flam. Gas 1 - H220 Press. Gas (liq) - H280		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.



Product Ref: (DsC61-1019) Issue No: 01-1019

4. FIRST AID MEASURES

4.1. Description of first aid measures

General information: Remove affected person from source of contamination.

Inhalation: Move affected person to fresh air at once. Get medical attention if any discomfort

continues.

Ingestion: DO NOT induce vomiting. Get medical attention immediately.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. Get

medical attention if any discomfort continues.

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. Get medical attention if irritation persists

after washing. Show this Safety Data Sheet to the medical personnel.

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.

Inhalation: Irritation of nose, throat and airway. Coughing, chest tightness, feeling of chest pressure.

Ingestion: May cause discomfort if swallowed.

Skin contact: Prolonged skin contact may cause redness and irritation.

Eye contact: Vapour, spray or dust may cause chronic eye irritation or eye damage.

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

Notes for doctor No specific recommendations. If in doubt, get medical attention promptly.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

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.

Hazardous combustion products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting: Containers close to fire should be removed or cooled with water. Do not allow water to contact

any leaked material.

Special protective equipment for

firefighters:

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and

gloves.



Product Ref: (DsC61-1019) Issue No: 01-1019

ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precaution: Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precaution: Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up:Absorb spillage with non-combustible, absorbent material. Absorb spillage with non-

combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or

watercourses.

6.4. Reference to other sections

Reference to other section: Wear protective clothing as described in Section 8 of this safety data sheet. For waste

disposal, see section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Usage precautions: Avoid inhalation of vapours and spray/mists. Avoid contact with skin and eyes. Do not use

in confined spaces without adequate ventilation and/or respirator. Spraying is permitted

only in closed systems, spray cabinets or spray boxes with adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions: Store in closed original container at temperatures between 5°C and 25°C.

Storage class: Chemical storage.

7.3. Specific end use(s)

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

DICHLOROMETHANE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m^3 Short-term exposure limit (15-minute): WEL 300 ppm 1060 mg/m^3



Product Ref: (DsC61-1019) Issue No: 01-1019

BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³ Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

Ingredient comments WEL = Workplace Exposure Limit

DICHLOROMETHANE (CAS: 75-09-2)

Langley Gun Cleaner Aerosol

DNEL Consumer - Dermal; Short term systemic effect: 353mg/ m³

Workers - Dermal; Short term systemic effects: 706 mg/ m³

PNEC Fresh water; 0.54 mg/l

Sediment (fresh water); 4.47 mg/kg Intermittent release; 0.27 mg/l

Sediment (marine water); 1.61 mg/kg - Marine water; 0.194 mg/l

STP; 26 mg/l Soil; 0.583 mg/kg

8.2. Exposure controls











Appropriate engineering controls: Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational

exposure limits for the product or ingredients.

Eye/face protection: The following protection should be worn: Chemical splash goggles.

Hand protection: 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. It should be noted that liquid may

penetrate the gloves. Frequent changes are recommended.

Other skin and body protection: Wear suitable protective clothing as protection against splashing or contamination. Wear

apron or protective clothing in case of contact.

Hygiene measures: Use engineering controls to reduce air contamination to permissible exposure level.

Provide eyewash station. Wash contaminated clothing before reuse. Wash hands

thoroughly after handling. Wash at the end of each work shift and before eating, smoking

and using the toilet.

Respiratory protection: In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear a

respirator fitted with the following cartridge: Gas filter, type AX. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational

exposure limit.

Environmental exposure controls: Keep containers tightly sealed when not in use.



Product Ref: (DsC61-1019) Issue No: 01-1019

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: Aerosol.

Colour: Various colours.

Odour: Characteristic.

Odour threshold: Not available.

pH: Not available.

Melting point: Not available.

Boiling Point: Estimated value. 39-40C °C @

Flash point: 4 Estimated value <40°C

Evaporation rate: Not determined. Flammability (solid, gas): Not available.

Lower Explosive Limit: 1.8
Upper Explosive Limit: 9

Vapour pressure:Not available.Vapour density:Not available.

Relative density: @ 20°C

Bulk density:Not available.Solubility:Insoluble in water.Partition coefficient:Not available.Decomposition temperature:Not available.Viscosity:20-50 mPas @ 25°C

Explosive properties: Not available.

Explosive under the influence of a flame: Not considered to be explosive

Oxidizing properties: Not available.

Comments: Information given is applicable to the product as supplied.

9.2. Other information

Other information: No information required.

Refractive index:

Particle size:

Molecular weight:

Volatility:

Not available.

Not available.

Not available.

Not available.

Critical temperature:

Not available.



Product Ref: (DsC61-1019) Issue No: 01-1019

10. STABILITY AND REACTIONS

10.1. Reactivity

Reactivity: There are no known reactivity hazards associated with this product.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reaction: Not applicable. Not relevant.

10.4. Conditions to avoid

Conditions to avoid: Avoid contact with water. Avoid heat, flames and other sources of ignition. Avoid exposure

to high temperatures or direct sunlight.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours. Oxides of carbon. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity - Oral

Acute toxicity oral

(LD50 mg/kg) 2,000.0

Species Rat

ATE oral (mg/kg) 3,333.33

Acute toxicity - Dermal

Acute toxicity dermal

(LD50 mg/kg) 2,000.0

Species Rat

Acute toxicity - Inhalation

Species Rat.

Skin corrosion/irritation

Animal data Irritating.



Product Ref: (DsC61-1019) Issue No: 01-1019

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Carcinogenicity

Carcinogenicity Suspected carcinogen based on limited evidence.

Target organ for carcinogenicity No specific target organs known.

Reproductive toxicity

Reproductive toxicity - development This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - repeated exposure

STOT - epeated exposure Morphological changes that are potentially reversible but provide clear evidence of

marked organ dysfunction.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Ingestion: May cause stomach pain or vomiting.

Skin contact: Irritating to skin. May cause sensitisation by skin contact.

Eye contact: Irritation of eyes and mucous membranes.

Acute and chronic health hazards: May cause sensitisation by skin contact. The product contains small quantities of

isocyanate. May cause respiratory allergy. May cause respiratory system irritation.

Frequent inhalation of vapours may cause respiratory allergy.

Route of entry: Inhalation, skin and/or eye contact.

Medical symptoms: Irritation of eyes and mucous membranes. Coughing, chest tightness, feeling of chest

pressure.

Medical considerations: Chronic respiratory and obstructive airway diseases.

Toxicological information on ingredients

Dichloromethane

Toxicological effects: The toxicity of this substance has been assessed during REACH registration.

Acute toxicity - Oral Acute toxicity oral

(LD50 mg/kg) 2,000.0

Species Rat

ATE oral (mg/kg) 3,333.33

Acute toxicity - Dermal Acute toxicity dermal

(LD50 mg/kg) 2,000.0



Product Ref: (DsC61-1019) Issue No: 01-1019

Species Rat

Acute toxicity - Inhalation Acute toxicity inhalation

(LD50 mg/l) 86.0

Species Rat

ATE oral (mg/l) 86.0

Skin corrosion/irritation

Serious eye damage/irritation

Serious eye damage/irritation Causes eye Irritation.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Positive.

Genotoxicity - in vivo Negative.

Carcinogenicity

IARC Carcinogenicity IARC group 2B. Possibly carcinogenic to humans.

Reproductive toxicity

Reproductive toxicity - No evidence of reproductive toxicity in animal studies.

Fertility Reproductive toxicity

development No evidence of reproductive toxicity in animal studies.

Butane

Acute toxicity - Inhalation

Acute toxicity inhalation

(LC50 gases ppmV) 685,000.0

Species Rat

ATE inhalation (gases ppm) 685,000.0



Product Ref: (DsC61-1019)
Issue No: 01-1019

12. ECOLOGICAL INFORMATION

Ecotoxicity: The product is not expected to be hazardous to the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish: LC50, 96 hours: > 193 mg/l, Freshwater fish.

LC50, 96 hours: > 97 mg/l, Marinewater fish.

Acute toxicity -

aquatic invertebrates: EC_{50} , 48 hours: >27 mg/l.

 EC_{50}° , 48 hours: >500 mg/l, Daphnia magna.

Acute toxicity - aquatic plants: IC₅₀, 72 hours: 550 mg/l, Algae.

Dichloromethane

Acute aquatic toxicity

Acute toxicity - fish: LC_{50} , 96 hours: 193 mg/l, Pimephales promelas (Fat-head minnow).

LS₅₀, 48 hours: 97 mg/l, Fundulus heteroclitus.

Acute toxicity - aquatic

invertebrates: EC_{50} , 48 hours: 27 mg/l, Daphnia magna.

LC₅₀, 48 hours: 109 mg/l, Daphnia magna.

Acute toxicity - aquatic plants: NOEC, 192 hours: 550 mg/l, Microcystis aeruginosa - Algae, blue, cyanobacteria.

Acute toxicity - microorganisms: EC_{50} , 0.67 hours: 2590 mg/l, Bacteria.

Chronic aquatic toxicity

Chronic toxicity - fish early

life stage: NOEC, 28 days: 83 mg/l, Pimephales promelas (Fat-head minnow).

Butane

Acute toxicity - fish: LC₀, 96 hours: 24,11 mg/l, Fish.

Acute toxicity - aquatic

invertebrates: LC₀, 48 hours: 14,22 mg/l, Daphnia magna.

LC₅₀, 48 hours: 109 mg/l, Daphnia magna.

Acute toxicity - aquatic plants: LC_0 , 96 hours: 7,71 mg/l, Daphnia magna.



Product Ref: (DsC61-1019) Issue No: 01-1019

Propane

Acute toxicity - fish: LC_0 , 96 hours: 24 mg/l, Fish.

Acute toxicity - aquatic

invertebrates: LC₀, 48 hours: 7 mg/l, Daphnia magna.

Acute toxicity - aquatic plants: LC_0 , 96 hours: 8 mg/l.

12.2. Persistence and degradability

Persistence and degradability: The product is not readily biodegradable.

Stability (hydrolysis): Reacts with water.

Biological oxygen demand: $< 10 \text{ g O}_2/\text{g substance}.$

12.3. Bioaccumulative potential

Bioaccumulative potential: The product does not contain any substances expected to be bioaccumulating.

Partition coefficient: Not available.

Ecological information on ingredients

Dichloromethane

Bioaccumulative potential: The product is not bioaccumulating.

Partition coefficient: Not available.

12.4. Mobility in soil

Mobility: The product contains volatile organic compounds (VOCs) which will evaporate easily

from all surfaces.

Ecological information on ingredients

Dichloromethane

Bioaccumulative potential: The product contains volatile organic compounds (VOCs) which will evaporate easily from

all surfaces.

12.5. Results of PBT and vPvB Assessment

Results of PBT and vPvB assessment: This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients



Product Ref: (DsC61-1019) Issue No: 01-1019

Dichloromethane

Results of PBT and vPvB assessment: This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Dichloromethane

Other adverse effects: Not applicable.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

General information: Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal

site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods: Dispose of waste to licensed waste disposal site in accordance with the requirements of

the local Waste Disposal Authority.

14. TRANSPORT INFORMATION

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): AREOSOLS.

Proper shipping name (IMDG): AREOSOLS.

Proper shipping name (ICAO): AREOSOLS.

Proper shipping name (ADN): AREOSOLS.

14.3. Transport hazard class(es)

ADR/RID class: 2.1 ADR/RID subsidiary risk: 6.1 ADR/RID label: 2.1 & 6.1 IMDG class: 2.1 IMDG subsidiary risk: 6.1 ICAO class/division: 2.1 ICAO subsidiary risk: 6.1 AND class: 2.1



Product Ref: (DsC61-1019) Issue No: 01-1019

Transport:





14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant: No

14.6. Special precautions for user

EmS: F-D, S-U

Tunnel restriction code: (D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

15. REGULATORY INFORMATION

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

National regulations: Control of Pollution Act 1974.

EU legislation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Guidance: The spraying of flammable liquids HSG178.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

16. OTHER INFORMATION

Hazard statements in full: H220 Extremely flammable gas.

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer.

Store Between: Store between 5°c - 25°c

Contains SVHC: No

This document is only a guide.

Langley Waterproofing Systems Ltd reserves the right to change the composition and fixing recommendations of products as a result of the evolution of knowledge and technology.