Revision Date 23/11/2015

Revision 14

Supersedes date 23/11/2015

SAFETY DATA SHEET Linemarkers CLP

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Linemarkers CLP

Product No. Various

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

Identified uses Paint aerosol

1.3. Details of the supplier of the safety data sheet

Supplier Blue Diamond STL

Sandall Stones Road Kirk Sandall Ind Estate

Doncaster, DN3 1QR, England 01302 310113 sales@bdstl.com

1.4. Emergency telephone number

National Emergency Telephone Number Hazchem line: 0044 (0) 1302 310113

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Flam. Aerosol 1 - H222

Human health EUH066; Eye Irrit. 2 - H319; STOT SE 3 - H336

Environment Not classified.

Classification (1999/45/EEC) F+;R12. R66, R67.

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

Human health

Vapours/aerosol spray may irritate the respiratory system. May irritate eyes and skin. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Environment

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

Physical and Chemical Hazards

The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. 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. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word Danger

Hazard Statements

H222 Extremely flammable aerosol.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Precautionary Statements

P102 Keep out of reach of children.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P271 Use only outdoors or in a well-ventilated area.

P261 Avoid breathing vapour/spray.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P337+313 If eye irritation persists: Get medical advice/attention.

Supplementary Precautionary Statements

P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash contaminated skin thoroughly after handling.

IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P403+233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410+412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°

F.

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

Supplemental label information

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains:

SOL024 Acetone

H229 Pressurised container: May burst if heated

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

P304+340

3.2. Mixtures

1-METHOXY-2-PROPANOL			1-5%
CAS-No.: 107-98-2	EC No.: 203-539-1		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 3 - H226 STOT SE 3 - H336		R10 R67	

ACETONE		10-30%
CAS-No.: 67-64-1	EC No.: 200-662-2	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
EUH066	Xi;R36
Eye Irrit. 2 - H319	R66
STOT SE 3 - H336	R67

BUTANE 5-10%

CAS-No.: 106-97-8 EC No.: 203-448-7

Classification (EC 1272/2008) Classification (67/548/EEC)

Flam. Gas 1 - H220 F+;R12

BUTYL ACETATE -norm			10-30%
CAS-No.: 123-86-4	EC No.: 204-658-1		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 3 - H226		R10	
EUH066		R66	
STOT SE 3 - H336		R67	

DIMETHYL ETHER			10-30%
CAS-No.: 115-10-6	EC No.: 204-065-8		
Classification (EC 1272/2008) Flam. Gas 1 - H220		Classification (67/548/EEC) F+;R12	

CAS-No.: 75-28-5	EC No.: 200-857-2
Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Gas 1 - H220	F+:R12

1-5%

PROPANE			5-10%
CAS-No.: 74-98-6	EC No.: 200-827-9		
Classification (EC 1272/2008) Flam. Gas 1 - H220		Classification (67/548/EEC) F+:R12	

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

Composition Comments

ISOBUTANE

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation

Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

DO NOT INDUCE VOMITING! Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues.

Skin contact

Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation

In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

Ingestion

Due to the physical nature of this material it is unlikely that swallowing will occur.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

Irritating and may cause redness and pain.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

When heated, vapours/gases hazardous to health may be formed.

Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire.

Specific hazards

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

5.3. Advice for firefighters

Special Fire Fighting Procedures

Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours.

Protective equipment for fire-fighters

Wear full protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Follow precautions for safe handling described in this safety data sheet. Wear protective gloves. Do not smoke, use open fire or other sources of ignition. Avoid inhalation of vapours and aerosol spray. Avoid contact with skin and eyes.

6.2. Environmental precautions

Not relevant considering the small amounts used.

6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Let evaporate. Keep out of confined spaces because of explosion risk. If leakage cannot be stopped, evacuate area.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Store in a cool and well-ventilated place. Store in accordance with the advice of insurers and/or relevant authority.

Storage Class

Store in a dry, well ventilated, moisture free area.

7.3. Specific end use(s)

Decorative paint coating for a range of substrates

Usage Description

Aerosolised paint spray

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
1-METHOXY-2-PROPANOL	WEL	100 ppm(Sk)	375 mg/m3(Sk)	150 ppm(Sk)	560 mg/m3(Sk)	
ACETONE	WEL	500 ppm	1210 mg/m3	1500 ppm	3620 mg/m3	
BUTANE	WEL	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3	
BUTYL ACETATE -norm	WEL	150 ppm	724 mg/m3	200 ppm	966 mg/m3	
DIMETHYL ETHER	WEL	400 ppm	766 mg/m3	500 ppm	958 mg/m3	
PROPANE		Asphyxiating	Asphyxiating.	Asphyxiating	Asphyxiating.	

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment





Process conditions

No specific process measures

Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

Recommended filter type for the main constituent (Acetone) Filter apparatus, type AX (EN371)

Hand protection

Use protective gloves.

Eye protection

Use approved safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Personal protection

It is advisable to wear suitable eye protection (goggles)

Skin protection

Suitable gloves

Thermal hazards

No specfic thermal hazards noted

Environmental Exposure Controls

Due to the method of dispense, the product is likely to have a minimal environmental impact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Aerosol.
Colour White.

Odour Ketonic. Characteristic of a solvent based paint product

Solubility Insoluble in water

Initial boiling point and boiling range (°C)

Technically not feasible.

The boiling point of the lowest boiling point material is minus 40 degrees Celcius (-40). This is the boiling

point of the propellant (LPG - Liquified Petroleum Gas).

Melting point (°C)

Scientifically unjustified.

The resin binder in the paint film begins to soften at temperatures in excess of 80 degrees Celcius.

Relative density Not relevant

<1.000 Ambient Not applicable

Bulk Density

Not relevant

Not applicable

Vapour density (air=1) Not determined.

>1

The vapours are heavier than air.

Vapour pressure

Not determined.

Propellant vapour pressure 590 - 1760 KPa

Flash point (°C)

Technically not feasible.

The flash point of the lowest flash point material is minus 104 degrees Celcius (-104). This is the flash

point of the propellant (LPG - Liquified Petroleum Gas).

Flammability Limit - Lower(%) 0.8 Flammability Limit - Upper(%) 9.0

9.2. Other information

Volatile Organic Compound (VOC) Maximum 839 g/litre

Aerosol products which are used for vehicle refinishing are classed as Annex IIB subcategory (e). The maximum permitted VOC's are 840 g/l. The typical VOC content for this range of products is between 625 and 675 g/l. The VOC regulations do not apply to any other aerosol products except those which are

used for vehicle refinishing

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product may form explosive vapours/air mixtures even at normal room temperatures.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not available.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with: Strong oxidising agents. Strong alkalis. Strong mineral acids. Avoid exposing aerosol containers to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong alkalis. Strong oxidising substances.

10.6. Hazardous decomposition products

Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system. Irritating to respiratory system.

Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach.

Skin contact

Prolonged or repeated exposure may cause severe irritation. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. May cause allergic contact eczema. May cause sensitisation by skin contact. Irritating to skin.

Eye contact

Irritating to eyes. May cause chemical eye burns.

Route of entry

Inhalation. Skin and/or eye contact. Ingestion.

SECTION 12: ECOLOGICAL INFORMATION

Fcotoxicity

Under normal use conditions, this material is unlikely to accumulate in sufficient quantities to present any aquatic toxicity hazard.

12.1. Toxicity

Data set not currently available.

12.2. Persistence and degradability

The majority of the constituents are readily degradeable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements. Industrial and institutional users should dispose of aerosols through a registered waste disposal company.

SECTION 14: TRANSPORT INFORMATION

General For industrial and institutional users can transport these products as "Limited Quantities" (LQ). For the

final stages of retail distribution within the UK (only), unpackaged LQ product may be transported without external packaging under the DfT road derogation 4. The user must confirm the condition of the

derogation prior to road consignment.

14.1. UN number

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

14.2. UN proper shipping name

Proper Shipping Name AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class 2

ADR/RID/ADN Class Class 2: Gases

ADR Label No. 2.1

IMDG Class 2.1

ICAO Class/Division 2.1

Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group N/A
IMDG Packing group N/A
ICAO Packing group N/A

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

Not relevant

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

Chemicals (Hazard Information & Packaging) Regulations.

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002.

Control of Substances Hazardous to Health.

The Aerosol Dispensers Regulations 2009

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40.

Introduction to Local Exhaust Ventilation HS(G)37.

CHIP for everyone HSG(108).

EU Legislation

Dangerous Preparations Directive 1999/45/EC.

Dangerous Substance Directive 67/548/EEC.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

The Aerosol Dispensers Directive 1975/324 EEC

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 23/11/2015

Revision 14

Supersedes date 23/11/2015
Safety Data Sheet Status Approved.
Date 27/03/2015
Signature A. Taylor

Risk Phrases In Full

R12 Extremely flammable.

R10 Flammable.
R11 Highly flammable
R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H319 Causes serious eye irritation.
H222 Extremely flammable aerosol.
H220 Extremely flammable gas.
H226 Flammable liquid and vapour.
H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

Disclaimer

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.