

SAFETY DATA SHEET

Bitumastic Underseal

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

1.1. Product identifier

Product name Bitumastic Underseal
Product number LS 57

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

Identified uses Aerosol applied specialist coating

1.3. Details of the supplier of the safety data sheet

Supplier Beal (UK) Ltd
Sterling Works
Texas Street
Tingley (A650)
Leeds, West Yorkshire
LS27 0HG
T 0113 253 8888
F 0113 253 0223
sales@beal.org.uk

1.4. Emergency telephone number

Emergency telephone 0113 253 8888

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Aerosol 1 - H222, H229
Health hazards Skin Irrit. 2 - H315 STOT SE 3 - H336 STOT RE 1 - H372
Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Xn;R20/21/22. Carc. Cat. 3;R40. F+;R12. R52/53.

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

Environmental The product contains a substance which may have hazardous effects on the environment.

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. The product is extremely flammable.

2.2. Label elements

Pictogram



Signal word

Danger

Bitumastic Underseal

Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H372 Causes damage to organs through prolonged or repeated exposure. 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. P260 Do not breathe vapour/spray. 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. P262 Do not get in eyes, on skin, or on clothing.
Supplemental label information	RCH002b For professional users only.
Contains	ALIPHATIC HYDROCARBON, HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

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

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS			30-60%
CAS number: 68476-85-7	EC number: 270-704-2		
Classification	Classification (67/548/EEC or 1999/45/EC)		
Flam. Gas 1 - H220	F+;R12 Carc. Cat. 1;R45 Muta. Cat. 2;R46		
Press. Gas, Liquefied - H280			
ALIPHATIC HYDROCARBON			10-30%
CAS number: 64742-82-1	EC number: 265-185-4	REACH registration number: 01-2119490979-12	
Classification	Classification (67/548/EEC or 1999/45/EC)		
Flam. Liq. 3 - H226	Xn;R65. N;R51/53. R10,R66.		
STOT SE 3 - H336			
STOT RE 1 - H372			
Asp. Tox. 1 - H304			
Aquatic Chronic 2 - H411			

Bitumastic Underseal

HEXANE-norm <1%		
CAS number: 110-54-3	EC number: 203-777-6	REACH registration number: 01-2119480412-44
Classification Flam. Liq. 2 - H225 STOT RE 2 - H373 Skin Irrit. 2 - H315 Repr. 2 - H361f STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) F;R11 Repr. Cat. 3;R62 Xn;R48/20,R65 Xi;R38 R67 N;R51/53	
TOLUENE <1%		
CAS number: 108-88-3	EC number: 203-625-9	REACH registration number: 01-2119471310-51
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 3 - H412	Classification (67/548/EEC or 1999/45/EC) F;R11 Repr. Cat. 3;R63 Xn;R48/20,R65 Xi;R38 R67	

The Full Text for all R-Phrases and Hazard Statements are 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.
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.
----------------------------	---

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

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Bitumastic Underseal

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

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. Containers can burst violently or explode when heated, due to excessive pressure build-up.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.

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.

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.

6.4. Reference to other sections

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

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 Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

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

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

ALIPHATIC HYDROCARBON

Bitumastic Underseal

Long-term exposure limit (8-hour TWA): WEL 600 mg/m³

HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Long-term exposure limit (8-hour TWA): WEL 1200 mg/m³

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 441 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 125 ppm(Sk) 552 mg/m³(Sk)

HEXANE-norm

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³

TOLUENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 191 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 384 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Ingredient comments

WEL = Workplace Exposure Limits

XYLENE (CAS: 1330-20-7)

DNEL

Consumer - Oral; Long term systemic effects: 12.5 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 1872 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 65.3 mg/m³
 Consumer - Inhalation; Short term : 260 mg/m³
 Industry - Dermal; Long term systemic effects: 3182 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 221 mg/m³
 Industry - Inhalation; Short term : 442 mg/m³

PNEC

This product is a UVCB substance and its composition will be variable, so reported properties may vary or require a range of values to describe them.
 - Fresh water; 0.327 mg/l
 - Marine water; 0.327 mg/l
 - Intermittent release; 0.327 mg/l
 - STP; 6.58 mg/l
 - Sediment (Freshwater); 12.46 mg/kg
 - Sediment (Marinewater); 12.46 mg/kg
 - Soil; 2.31 mg/kg

TOLUENE (CAS: 108-88-3)

DNEL

General population - Inhalation; : 226 mg/m³

PNEC

- Fresh water; 0.68 mg/l
 - Marine water; 0.68 mg/l
 - Soil; 2.89 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.

Bitumastic Underseal

Personal protection	When using the aerosol 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. 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.
Hygiene measures	Wash hands after handling. Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying 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	Black.
Odour	Organic solvents. Xylene.
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
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 550 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

Bitumastic Underseal

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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

ATE dermal (mg/kg) 18,333.33

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 183.33

General information Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation Vapours in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.

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 Gas or vapour in high concentrations may irritate the respiratory system.

Route of entry 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.

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.

12.2. Persistence and degradability

Persistence and degradability Not available.

12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

Bitumastic Underseal

Partition coefficient log Pow: ca. 2.3 to 2.8

12.4. Mobility in soil

Mobility Not known.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects

Other adverse effects Not available.

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.

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

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

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

Bitumastic Underseal

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010.
Guidance	Workplace Exposure Limits EH40. CHIP for everyone HSG228. 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 comments	Supplemental information added.
Revision date	02/03/2015
Revision	2
SDS number	12763
SDS status	Approved.

Bitumastic Underseal

Risk phrases in full

R10 Flammable.
R11 Highly flammable.
R12 Extremely flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R38 Irritating to skin.
R40 Limited evidence of a carcinogenic effect.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52 Harmful to aquatic organisms.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62 Possible risk of impaired fertility.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H229 Pressurised container: may burst if heated
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H361f Suspected of damaging fertility.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful 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.