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

1.1 Product identifier

Product name: GRABFAST THE ROOFING SOLUTION (Aerosol)

Product code:

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

Intended use: Industrial adhesive

1.3 Details of the supplier of the safety data sheet:

Address: Gemini Adhesives Ltd, New Building, Top Road, Osgathorpe, Leicestershire, LE12 9TB

Telephone no: 01530 224712

Fax no: 01530 223514

E-mail address of person responsible for this SDS: info@geminiadhesivesgroup.com

1.4 Emergency telephone number

Hours of operation:

Telephone no: 01530 224712

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Flammable gases (Category 1), H220

Gases under pressure (Liquefied gas), H280

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Carcinogenicity (Category 2), H351

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Specific target organ toxicity - repeated exposure (Category 2), Liver, Blood, Central nervous system, H373

2.2: Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms:

Signal word:

Danger

Hazard statements:

H220: Extremely flammable gas

H280: Contains gas under pressure; may explode if heated

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H351: Suspected of causing cancer

H336: May cause drowsiness or dizziness.

H335: May cause respiratory irritation

H373: May cause damage to organs (Liver, Blood, Central nervous system) through prolonged or repeated exposure.

Precautionary statements:

P210: Keep away from sources of ignition - No smoking

P261: Avoid breathing dust/fume/gas/mist/vapours/spray

P281: Use personal protective equipment as required.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P410 + P403: Protect from sunlight. Store in a well ventilated place.

Supplemental Hazard information (EU)

SECTION 3: Composition/information on ingredients

Description of the mixture:

Hazardous ingredients:

CAS No	EC No	Index No.	REACH Registration No.	% [weight]	Name	Classification according to Regulation (EC) No 1278/2008 (CLP).
75-09-2	200-838-9	602-004-00-3		20-25%	Dichloromethane	Skin irrit. 2 Eye Irrit. 2 Carc 2 STOT SE 3, Central nervous system, STOT SE 3, Repr.2, STOT RE 2 Liver, Blood, Central nervous system H315, H319, H351, H336, H335, H373
74-98-6	200-827-9	601-003-00-5		10-15%	Propane	Flam. Gas 1; H220 Press. Gas; H280
75-28-5	200-857-2	601-004-00-0		5-10%	Isobutane	Flam. Gas 1; H220 Press. Gas; H280
106-97-8	203-448-7	601-004-00-0		5-10%	Butane	Flam. Gas 1; H220 Press. Gas; H280

SECTION 4.1 Description of first aid measures

4.1 Description of first aid measures

- General notes: Consult a physician. Show this safety data sheet to the doctor in attendance.
- Following inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- Following skin contact: Wash skin with soap and water, launder soaked clothing before re-use
- Following eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Following ingestion: DO NOT induce vomiting. If patient vomits turn to the recovery position. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Fire fighting measures

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No Data Available

5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

6.2 Environmental precautions:

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations

6.3 Methods and material for containment and cleaning up:

6.3.1 for containment:

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth

6.3.2 for cleaning up:

Place in container for disposal according to local regulations (see section 13). Preferably clean with a detergent.

6.3.3 Other information:

6.4 Reference to other sections:

For disposal see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Flash back is possible over considerable distance. Container explosion may occur under fire conditions. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

For precautions see section 2.2.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Flammable liquids

7.3 Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Substance	Limit value - Eight hours		Limit value - Short term*		Legal basis
	ppm	mg/m³	ppm	mg/m³	
Dichloromethane	100 ppm	350mg/m3	300ppm	1060 mg/m3	EH40/2005 WELs (UK) 3/2005
Propane					
Iso-butane	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3	
Butane	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3	

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Substance/mixture related measures to prevent exposure during identified uses:

Structural measures to prevent exposure:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction

Organisational measures to prevent exposure:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Technical measures to prevent exposure:

8.2.2 Personal protection equipment:

8.2.2.1 Eye and face protection:

If there is a risk to eyes use safety glasses & goggles to approved standard such as EN166(EU)

8.2.2.2 Skin protection:

Hand protection: Use impervious gloves

Other skin protection: Use impervious overalls

8.2.2.3 Respiratory protection:

Independent air fed respirators must be worn when handling this product where adequate ventilation is not available or there is a risk of the WEL being exceeded

8.2.2.4 Thermal hazards:

8.2.3 Environmental exposure controls:

Substance/mixture related measures to prevent exposure:

Instruction measures to prevent exposure:

Do not allow to enter the drains or water courses

Organisational measures to prevent exposure:

Technical measures to prevent exposure:

SECTION 9: Physical and chemical properties

(a) Appearance:	Clear	(k) Vapour pressure;	70psig @ 21.1C
(b) Odour:	Solvent odour	(l) Vapour density;	(AIR =1) 2.15
(c) Odour threshold;	No data available	(m) Relative density;	1.3 g/mL at 25 °C
(d) pH:	No data available	(n) Solubility (ies);	insoluble
(e) Melting point / freezing point;	-97 °C - lit.	(o) Partition coefficient: n-octanol/water;	log Pow: 1.25
(f) Initial boiling point and boiling range;	40°C	(p) Auto-ignition temperature;	> 556.1 °C
(g) Flash point;	-90 °C - closed cup	(q) Decomposition temperature;	No data available
(h) Evaporation rate;	No data available	(r) Viscosity;	No data available
(i) Flammability (solid, gas);	No data available	(s) Explosive properties;	No data available
(j) Upper/lower flammability or explosive limits;	UEL: 19%(V) LEL: 12%(V)	(t) Oxidising properties	No data available

9.2 Other information

SECTION 10: Stability and Reactivity

10.1 Reactivity

10.2 Chemical stability:

Stable under normal storage and handling conditions

10.3 Possibility of hazardous reactions.

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid.

Heat, flames and other sources of ignition

10.5 Incompatible materials.

Keep away from the following materials to prevent strong exothermic reactions: oxidising agents

10.6 Hazardous decomposition products.

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Di-chloromethane

LD50 Oral - Rat - > 2,000 mg/kg
LC50 Inhalation - Rat - 52,000 mg/m3
LD50 Dermal - Rat - > 2,000 mg/kg
(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit
Result: Irritating to skin. - 24 h
(Draize Test)

Serious eye damage/eye irritation

Eyes - Rabbit
Result: Irritating to eyes. - 24 h
(Draize Test)

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

Rat
DNA damage

Carcinogenicity

Carcinogenicity - Rat - Inhalation
Tumorigenic: Carcinogenic by RTECS criteria. Endocrine: Tumours.
Limited evidence of carcinogenicity in animal studies
Suspected human carcinogens
IARC: 2B - Group 2B: Possibly carcinogenic to humans (Methylene chloride)

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation.
May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Inhalation - May cause damage to organs through prolonged or repeated exposure. - Central nervous system
Oral - May cause damage to organs through prolonged or repeated exposure. - Liver, Blood

Aspiration hazard

No data available

Additional Information

RTECS: PA8050000

Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood., Acts as a simple asphyxiant by displacing air., anaesthetic effects, Difficulty in breathing, Headache, Dizziness,
Prolonged or repeated contact with skin may cause:, defatting, Dermatitis, Contact with eyes can cause:, Redness, Blurred vision, Provokes tears., Effects due to ingestion may include:, Gastrointestinal discomfort, Central nervous system depression, Paraesthesia., Drowsiness, Convulsions, Conjunctivitis., Pulmonary oedema. Effects may be delayed, Irregular breathing, Stomach/intestinal disorders, Nausea, Vomiting, Increased liver enzymes, Weakness, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material, Abdominal pain

Propane

Acute toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS: TX2275000
Dizziness, Drowsiness, Unconsciousness
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Butane

Acute toxicity
no data available
LC50 Inhalation - rat - 4 h - 658,000 mg/m3
Skin corrosion/irritation
no data available
Serious eye damage/eye irritation
no data available
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity
no data available
Specific target organ toxicity - single exposure
no data available
Specific target organ toxicity - repeated exposure
no data available
Aspiration hazard
no data available
Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.

Signs and Symptoms of Exposure
Central nervous system depression, giddiness, Shortness of breath, narcosis, Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite., Exposure can cause numbness, tingling, and weakness in extremities., Cyanosis, Pulmonary edema. Effects may be delayed. Abdominal pain, Nausea, Vomiting
Additional Information
RTECS: EJ4200000

SECTION 12: Ecological information

Di-chloromethane

12.1 Toxicity
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 193.00 mg/l - 96 h
NOEC - Cyprinodon variegatus (sheepshead minnow) - 130 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 1,682.00 mg/l - 48 h

12.2 Persistence and degradability
Biodegradability Result: < 26 % - Not readily biodegradable.
(OECD Test Guideline 301C)

12.3 Bio accumulative potential
Does not bio accumulate.

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Propane

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bio accumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal:

Waste codes EWC: 14 06 03* other solvents and solvent mixtures A

Packaging: 15 01 04(metal)

Other disposal recommendations:

Ensure packaging is completely empty before recycling. Dispose of uncured residues in the same way as the product itself.

SECTION 14: Transport Information

		ADR/RID:	IMDG:	IATA:
14.1.	**UN number**	1950	1950	1950
14.2.	**UN proper shipping name**	Aerosols, flammable,		
14.3.	**Transport hazard class(es)**	2.1	2.1	2.1
14.4.	**Packing group**	11	11	11

14.5. Environmental hazards

No information

14.6. Special precautions for user

No information

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

SECTION 15: Regulatory information

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

EU regulations

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorisation Substances of very high concern

EU Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Waste Framework Directive 2008/98/EC

Other EU regulations:

National regulations (UK):

Management of Health and Safety at Work Regulations (1999)

Control of Substances Hazardous to Health Regulations (COSHH 2002)

Personal Protective Equipment Regulations (2002)

15.2 Chemical Safety Assessment:

This product contains substances for which Chemical Safety Assessments are still required

SECTION 16: Other information

Full text of abbreviated H Statements referred to under sections 2 and 3.

Asp. Tox. Aspiration hazard
Flam. Liq. Flammable liquids
H220 Extremely flammable liquid and vapour
H280 Compressed. Gas
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
Repr. Reproductive toxicity
Skin Irrit. Skin irritation
STOT RE Specific target organ toxicity - repeated exposure

Full text of classifications [CLP/GHS]

Eye Irrit. 2, H319 Serious Eye Damage/ Eye Irritation - Category 2
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3

(ii) Key literature references and sources for data

EH40/2005 Workplace Exposure Limits (2011)

E U regulation (EC) No 1272/2008
Table 3.1 List of harmonised classification and labelling of hazardous substances
Table 3.2 The list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC
EWC (European Waste Catalogue) code

(iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Notice to our reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

Version: 3.0 - Replaces Version 2 **Issue Date: May 2015**