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

1.1 Product identifier

Product name: GRABFAST GOLD BIO Spray Adhesive

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

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

Flammable liquids (Category 2) H225

2.2: Label elements

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

Hazard pictograms:

Signal word:

Danger

Hazard statements:

H220: Extremely flammable gas

H225: Highly flammable liquid and vapour

H319: Causes serious eye irritation.

Precautionary statements:

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

P233: Keep container tightly closed

P240: Ground/bond container and receiving equipment

P241: Use explosion-proof lighting, ventilating electrical equipment

P280: Wear protective gloves, protective clothing, eye protection, face shield

P370+P378: In case of fire: Use foam, CO^2 and Powder for extinction.

P403+P235: Store in a cool and well-ventilated place

P410: Protect from sunlight.

P501: Dispose of contents/container to dispose in a safe manner in accordance with local/national regulations.

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).
74-98-6	200-827-9	601-003-00-5		10-15%	propane	Flam. Gas 1 H220 Pres. Gas H280
75-28-5	200-857-2	601-004-00-0		10-15%	isobutane	Flam. Gas 1 H220
646-06-0	211-463-5	605-017-00-2	01-2119490744-29-0001	<12.5%	1,3-dioxolane	Flam. Liq 2 H225 Eye Irrit. 2 H319
109-87-5	203-714-2			<12.5%	di-methoxymethane	Flam. Liq 2 H225

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	
propane	-	-	-	-	EH40/2005 WELs (UK) 3/2005
isobutane	600	1450	750	1810	
1,3-dioxolane	-	-	-	-	
di-methoxymethane	1,000	3,160	1,250	3,950	

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:	Low odour	(l) Vapour density;	>2 (Air=1)
(c) Odour threshold;	No data available	(m) Relative density;	0.83-0.90g/cm^2
(d) pH:	No data available	(n) Solubility (ies);	No data available
(e) Melting point / freezing point;	-160 °C - lit.	(o) Partition coefficient: n-octanol/water;	No data available
(f) Initial boiling point and boiling range;	75-76^{o}C	(p) Auto-ignition temperature;	No data available
(g) Flash point;	18 °C	(q) Decomposition temperature;	No data available
(h) Evaporation rate;	15.5	(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: 17.6%(V) LEL: 1.4%(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.

When exposed to high temperatures may produce hazardous decomposition products

10.5 Incompatible materials.

Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, and strong acids.

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:

1,3-Dioxolane

LD50 Oral - rat - 3,000 mg/kg

LC50 Inhalation - rat - 4 h - 20,650 mg/m3

LD50 Dermal - rat - 15,000 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Rat

DNA damage

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: JH6760000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Dimethoxymethane

LD50 Oral - rabbit - 5,708 mg/kg

LC50 Inhalation - mouse - 7 h - 57,000 mg/m3

Skin corrosion/irritation

Serious eye damage/eye irritation

Eyes - rabbit

Result: Moderate eye irritation

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: PA8750000

prolonged or repeated exposure can cause:, narcosis, Dermatitis, Blurred vision, Effects due to ingestion may include:

SECTION 12: Ecological information

1,3-Dioxolane

12.1 Toxicity

Toxicity to fish LC50 - Cyprinodon variegatus (sheepshead minnow) - 8,294 - 12,057 mg/l – 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 6,203 - 7,787 mg/l - 48 h

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

Dimethoxymethane

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 6,990 mg/l - 96 h

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

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**	3161	3161	3161
14.2.	**UN proper shipping name**	Liquefied gas, flammable,		
14.3.	**Transport hazard class(es)**	2	2	2
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

E U 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.

H220 Extremely flammable gas.
H225. Highly flammable liquid and vapour
H319 Causes serious eye irritation.

Full text of classifications [CLP/GHS]

Eye Irrit. 2, H319 Serious Eye Damage/ Eye Irritation - Category 2
Flam. Liq. 2, H225 Flammable liquids - Category 2
Flam. Gas 1, H220 Flammable Gas - Category 1
Press. Gas, H280 Compressed. Gas,

(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**