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

- · 1.1 Product identifier
- · Trade name: FLAW AND CRACK AERO PACK 1
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Life cycle stages IS Use at industrial Sites
- · Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- · Product category PC35 Washing and cleaning products (including solvent based products)
- · Technical function Cleaning agent
- · Application of the substance / the mixture Cleaner solvent
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Spanjaard Ltd.

748-750 Fifth Street, Wynberg, Sandton

South Africa, 2090

· Further information obtainable from:

Clinton Palmer - Technical Director

clinton@spanjaard.biz

· 1.4 Emergency telephone number: +27 11 386 7100 (SWB), +27 83 564 2625 (cellular)

### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · Hazard pictograms GHS02, GHS07
- · Signal word Danger
- · Hazard-determining components of labelling:

propan-2-ol

· Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H319 Causes serious eye irritation.H336 May cause drowsiness or dizziness.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P103 Read label before use.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P405 Store locked up.

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

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

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- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

### SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 64742-89-8 EINECS: 265-192-2 Index number: 649-267-00-0	Solvent naphtha (petroleum), light aliph.  Solvent naphtha (petroleum), light aliph.  Solvent naphtha (petroleum), light aliph.	10-25%
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 RTECS: KQ 6300000	ethanol Flam. Liq. 2, H225	10-25%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 RTECS: EJ 4200000	butane  Flam. Gas 1, H220 Press. Gas C, H280	10-25%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 RTECS: NT 8050000	propan-2-ol Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	10-25%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 RTECS: TX 2275000	propane Flam. Gas 1, H220 Press. Gas C, H280	0-10%

<sup>·</sup> Additional information: For the wording of the listed hazard phrases refer to section 16.

### **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot$  4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

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### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### **SECTION 7: Handling and storage**

- · 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray onto a naked flame or any incandescent material.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

#### SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

64742-89-8 Solvent n	aphtha (petroleum), light aliph.	
MAK (Germany)	vgl.Abschn.Xb	
64-17-5 ethanol		
WEL (Great Britain)	Long-term value: 1920 mg/m³, 1000 ppm	
AGW (Germany)	Long-term value: 960 mg/m³, 500 ppm 2(II);DFG, Y	
106-97-8 butane		
WEL (Great Britain)	Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)	
AGW (Germany)	Long-term value: 2400 mg/m³, 1000 ppm 4(II);DFG	
67-63-0 propan-2-ol		
WEL (Great Britain)	Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm	
AGW (Germany)	Long-term value: 500 mg/m³, 200 ppm 2(II);DFG, Y	

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74-98-6 propane

AGW (Germany) Long-term value: 1800 mg/m³, 1000 ppm 4(II);DFG

Ingredients with biological limit values:

67-63-0 propan-2-ol

BGW (Germany) 25 mg/l
Untersuchungsmaterial: Vollblut
Probennahmezeitpunkt: Expositionsende bzw. Schichtende
Parameter: Aceton

25 mg/l
Untersuchungsmaterial: Urin

· Additional information: The lists valid during the making were used as basis.

Probennahmezeitpunkt: Expositionsende bzw. Schichtende

- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Parameter: Aceton

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

#### · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### · Eye protection:

Safety glasses



Tightly sealed goggles

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9.1 Information on basic physical and ch	nemical properties
General Information Appearance:	
Form:	Compressed liquefied gas
Colour:	Colourless
Odour:	Like alcohol
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	0 °C
Flash point:	-60 °C
Flammability (solid, gas):	Not applicable.
Ignition temperature:	365 °C
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Not determined.
Explosion limits:	
Lower:	1.5 Vol %
Upper:	15.0 Vol %
Vapour pressure at 20 °C:	2100 hPa
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.

### SECTION 10: Stability and reactivity

- $\cdot \textbf{10.1 Reactivity} \ \textit{No further relevant information available}.$
- · 10.2 Chemical stability

· 9.2 Other information

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

No further relevant information available.

- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:			
106-97-8 b	106-97-8 butane		
Inhalative	LC50/4 h	658 mg/l (rat)	
64-17-5 eti	64-17-5 ethanol		
Oral	LD50	7060 mg/kg (rat)	
Inhalative	LC50/4 h	20000 mg/l (rat)	
67-63-0 pr	67-63-0 propan-2-ol		
Oral	LD50	5045 mg/kg (rat)	
Dermal	<i>LD50</i>	12800 mg/kg (rabbit)	
Inhalative	LC50/4 h	30 mg/l (rat)	

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure

May cause drowsiness or dizziness.

- $\cdot \textbf{STOT-repeated exposure } \textit{Based on available data, the classification criteria are not met.} \\$
- · Aspiration hazard Based on available data, the classification criteria are not met.

#### SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

#### SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information	i
14.1 UN-Number	
ADR, IMDG, IATA	UN1950
14.2 UN proper shipping name	
ADR	1950 AEROSOLS
<i>IMDG</i>	AEROSOLS
IATA	AEROSOLS, flammable
14.3 Transport hazard class(es)	
ADR	
Class	2 5F Gases.
Label	2.1
IMDG, IATA	
Class	2.1
Label	2.1
14.4 Packing group ADR, IMDG, IATA	Void
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Gases.
Danger code (Kemler):	-
EMS Number:	F- $D$ , $S$ - $U$
Stowage Code	SW1 Protected from sources of heat.
	SW22 For AEROSOLS with a maximum capacity of 1 litro
	Category A. For AEROSOLS with a capacity above 1 litra
	Category B. For WASTE AEROSOLS: Category C, Clea
	of living quarters.
Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litro
	Segregation as for class 9. Stow "separated from" class
	except for division 1.4. For AEROSOLS with a capaci
	above 1 litre: Segregation as for the appropria
	subdivision of class 2. For WASTE AEROSOLS
	Segregation as for the appropriate subdivision of class 2.
14.7 Transport in bulk according to Annex I Marpol and the IBC Code	<b>I of</b> Not applicable.
Transport/Additional information:	
ADR	
TIDIC	IL
Limited quantities (LQ)	IL .
	Code: E0

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Transport category	2
· Tunnel restriction code	D
$\cdot$ IMDG	
$\cdot$ Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
· UN ''Model Regulation'':	UN 1950 AEROSOLS, 2.1

## SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P3a FLAMMABLE AEROSOLS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

- · Department issuing SDS: Technical Department
- · Contact: Mr Clinton Palmer
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases - Category 1

Aerosol 1: Aerosols – Category 1

Press. Gas C: Gases under pressure - Compressed gas

Flam. Liq. 2: Flammable liquids - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

\* \* Data compared to the previous version altered.

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