

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 03.04.2014

Revision: 03.04.2014

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

- **Product identifier**
- **Trade name:** *FLAW AND CRACK PENETRANT PACK 2 AERO.*
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Coating compound/ Surface coating/ paint
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Spanjaard EU BV  
C/O ACT Management Services B.V.  
Veembroederhof 109  
1019 HD Amsterdam  
The Netherlands
- **Further information obtainable from:**  
Clinton Palmer - Technical Director  
clinton@spanjaard.biz
- **Emergency telephone number:** +27 11 386 7100 (SWB), +27 83 564 2625 (cellular)

### 2 Hazards identification

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



GHS02 flame

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



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R36: Irritating to eyes.



F+; Extremely flammable

R12: Extremely flammable.

R67: Vapours may cause drowsiness and dizziness.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **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

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**· Hazard-determining components of labelling:**Solvent naphtha (petroleum), medium aliph.  
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.

**· Additional information:**










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

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

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

### 3 Composition/information on ingredients

**· Chemical characterization: Mixtures****· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous components:**

CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 RTECS: NT 8050000	propan-2-ol  Xi R36;  F R11 R67  Flam. Liq. 2, H225;  Eye Irrit. 2, H319; STOT SE 3, H336	36,0%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 RTECS: EJ 4200000	butane  F+ R12  Flam. Gas 1, H220; Press. Gas, H280	30,0%
CAS: 64742-88-7 EINECS: 265-191-7 Index number: 649-405-00-X	Solvent naphtha (petroleum), medium aliph.  Xn R65 R10  Flam. Liq. 3, H226;  Asp. Tox. 1, H304	25,0%

**· Additional information:** For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

**· 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.

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- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents
- **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.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Pressurized 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.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Do not seal receptacle gas tight.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

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### 8 Exposure controls/personal protection

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

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

#### 67-63-0 propan-2-ol

WEL (Great Britain)	Short-term value: 1250 mg/m <sup>3</sup> , 500 ppm Long-term value: 999 mg/m <sup>3</sup> , 400 ppm
AGW (Germany)	Long-term value: 500 mg/m <sup>3</sup> , 200 ppm 2(II);DFG, Y

#### 106-97-8 butane

WEL (Great Britain)	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm Carc (if more than 0,1% of buta-1,3-diene)
AGW (Germany)	Long-term value: 2400 mg/m <sup>3</sup> , 1000 ppm 4(II);DFG

#### 64742-88-7 Solvent naphtha (petroleum), medium aliph.

MAK (Germany)	vgl.Abschn.Xb
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· **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 Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton

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

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
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

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· **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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Compressed liquefied gas

Colour: Dark red

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 0 °C (32 °F)

· **Flash point:** -60 °C (-76 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 265 °C (509 °F)

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Not determined.

· **Explosion limits:**

Lower: 0,6 Vol %

Upper: 12,0 Vol %

· **Vapour pressure at 20 °C (68 °F):** 2100 hPa (1575 mm Hg)

· **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.

· **Solvent content:**

Organic solvents: 91,0 %

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<b>VOC (EC)</b>	91,00 %
<b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

**64742-88-7 Solvent naphtha (petroleum), medium aliph.**

Oral	LD50	>6500 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)
Inhalative	LC50/4 h	>14 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- |   |                       |
|---|-----------------------|
| · <b>UN-Number</b>  | UN1950                |
| · <b>ADR, IMDG, IATA</b>  |                       |
| · <b>UN proper shipping name</b>  | 1950 AEROSOLS         |
| · <b>ADR</b>  | AEROSOLS              |
| · <b>IMDG</b>   | AEROSOLS              |
| · <b>IATA</b>   | AEROSOLS, flammable   |
| · <b>Transport hazard class(es)</b>   |                       |
| · <b>ADR</b>  |                       |
|   |                       |
| · <b>Class</b>  | 2 5F Gases.           |
| · <b>Label</b>  | 2.1                   |
| · <b>IMDG, IATA</b>   |                       |
|  |                       |
| · <b>Class</b>  | 2.1                   |
| · <b>Label</b>  | 2.1                   |
| · <b>Packing group</b>  |                       |
| · <b>ADR, IMDG, IATA</b>  | Void                  |
| · <b>Environmental hazards:</b>   |                       |
| · <b>Marine pollutant:</b>  | No                    |
| · <b>Special precautions for user</b>   | Warning: Gases.       |
| · <b>Danger code (Kemler):</b>  | -                     |
| · <b>EMS Number:</b>  | F-D,S-U               |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>    | Not applicable.       |
| · <b>Transport/Additional information:</b>  |                       |
| · <b>ADR</b>  |                       |
| · <b>Limited quantities (LQ)</b>  | 1L                    |
| · <b>Transport category</b>   | 2                     |
| · <b>Tunnel restriction code</b>  | D                     |
| · <b>UN "Model Regulation":</b>   | UN1950, AEROSOLS, 2.1 |

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### 15 Regulatory information

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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.  
H226 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.

R10 Flammable.  
R11 Highly flammable.  
R12 Extremely flammable.  
R36 Irritating to eyes.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness.

- **Department issuing MSDS:** 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 Harmonized 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

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