



MATERIAL SAFETY DATA SHEET

Product name: AWF 1400 in aerosol can

Revised on: 17/09/08

1. Material, preparation and company name:

Trade name: AWF 1400 in aerosol can

Product information: Pressure gas packing 150 ml, 400 ml

Use of material/Preparation: Lubrication of ejector pins and mould parts in die casting and injection moulding moulds

Manufacturer/Supplier: Drei-S-Werk GmbH & Co. KG
Schmauser-Straße 3
D-91564 Neuendettelsau

Information given by: Department Zentrale Technik
Mr. Pius Eichinger
Tel.: 09874 / 5042-281

2. Hazards Identification:

Classification: F+ highly flammable N environmentally dangerous

Additional danger warnings for man and environment: Danger of cans cracking if overheated – formation of explosive vapour-/air mixtures is possible. Spray jet is flammable – content is “combustible”. Toxic for water organisms, can cause damages to waters in the long-term. Vapours can cause somnolence and drowsiness.

3. Composition/Information on ingredients:

Chemical characterisation

Description: Pressure gas packing with preparation of pressure gas, lubricating grease of highly refined mineral oil and addition of solid lubricants and EP additives.

Hazardous Substances (preparation):

CAS-No.	EINECS-No.	Denomination	%	Code letter	R-Phrases
106-97-8	203-448-7	n-Butane) Pressure Gas-) =	45-60	F+	R 12
74-98-6	200-827-9	Propane) Mixture)			
64742-49-0	265-151-9	aliphatic Hydrocarbons	*Xn = 15-30	*R 65 N	R 51/53-38-67

For aerosol packagings not applicable (RL 67/548/EWG, Annex 6, number 9.4.)

4. First Aid Measures:

General notes: Generally: In case of prolonged disorders contact a doctor.

After inhalation: Fresh air.

After skin contact: Wash immediately with plenty of water and soap.

After eye contact: Rinse for several minutes with water.

After ingestion: See immediately a doctor.



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5. Fire fighting measures:

Suitable extinguishing media:	CO ² , dry powder or water spray jet. For bigger fires use water spray jet or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents:	Full water jet.
Special hazards due to preparation:	Overheated pressure gas packages crack, are catapulted with force. (Danger of injury/danger of explosive vapours).
Hazardous combustion products or gases:	Carbon monoxide and possibly others, not known.
Particular protective equipment:	Breathing apparatus.
Further statements:	In case of no direct fire or high temperature yet, take stock to a not endangered place or protect against overheating (e.g. by spraying with water).

6. Accidental release measures:

Personal protection:	Air sufficiently, remove ignition sources, wear protective gloves, sort out leaky cans.
Environmental measures:	Do not let it get into canalisation, soil or water.
After spillage/leakage:	Mechanical absorption with fluid binding material. Disposal of contaminated material as hazardous waste.

7. Handling and storage:

Handling:	
Details for safe handling <u>and</u> for fire and explosion protection:	Can is under pressure. Protect from insolation and temperatures over 50°C. Even after use do not open by force or burn. Do not spray against a flame or on glowing object. Keep away from ignition sources – do not smoke. Without sufficient airing the production of explosive mixtures is possible. Vapours can cause somnolence and drowsiness. May not get into the hands of children. Do not breathe aerosols. Toxic to water organisms, can cause damages to water in the long term. Never put or stock cans near sources of sparking, ignition or heating.
Storage:	
Demands on storerooms and containers:	Well aired rooms without frost, heating and dampness. Follow stocking regulation according to TRG 300.
Details for combined storage:	For combined storage of pressure gas cans with



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flammable fluids see No. 6.11 Abs. 6 TRbF 110. pressure gas cans containing hazardous materials see § 24 GefStoffV.

Other details regarding storage: None

Storage class: TRG 300

8. Exposure controls and personal protection:

Additional notes for the organisation of technical facilities: None s. point 7.

Components with work-related threshold values, to be controlled:

CAS-Nr.	Denomination	%	Type	Value	Unit
106-97-8	n-Butane) Pressure Gas-) =	45-60	MAK	1000	ml/m ³ (ppm)
74-98-6	Propane) Mixture)				
64742-49-0	aliph. Hydrocarbons =	15-30	MAK	170	- „ -

Personal protective equipment: None

**Respiratory protection: - Hand protection: -
Eye protection: - Body protection: -** None

Protective and hygiene measures: Ensure sufficient airing, avoid contact to eyes and skin, do not eat, do not smoke.

9. Physical and chemical properties:

Appearance: Aerosol/fluid
Colour: Creamy
Odour: Product-specific
Change of state: Sprayed pressure gas quantity turns immediately gaseous. Sprayed solvents evaporate quickly.
Boiling point/boiling range: n.a.* (not applicable)
Flash point: n.a.* (not applicable)
Ignition: Atomized spray and evaporating vapours are highly flammable.
Ignition temperature: n.a.* (not applicable)
Self ignition: No
Ignition favouring characteristics: At overheating
Explosion danger: If overheated the cans crack/break. Formation of explosive vapour/air mixtures possible.
Explosion range: n.a.* (not applicable)
Vapour pressure - here: Spray can inner pressure; at 50 °C max. 2/3 of can test pressure.
Pressure - here: Fill factor/density at 20 °C = 0,634
Solubility in water: No
Solvent content: 15-30 %

* The ready preparation in the pressure gas can is produced after the addition of the pressure gas.

*-information is not measurable in the hermetically closed can under pressure.



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10. Stability and reactivity:

Terms to avoid: At overheating danger that cans crack.
Substances to avoid: Strong oxidants.
Dangerous decomposition products: On combustion or high temperature: carbon monoxide and possibly others, not known.

11. Toxicological information:

Acute toxicity:

Classified LD/LC 50 values:

Component	Type	Value	Species
Propane-Butane pressure gas mixture	Inhalation 4h	>20 mg/l	rat
aliph.KWS	oral	6000 mg/kg	rat

Primary irritation:

Skin irritation: Hardly

Eye irritation: Hardly

Sensitisation: None known.

Additional toxicological notes: Direct breathing in of atomized spray/vapours in high concentration has a dazing effect.

12. Ecological information:

General details: Water contamination class: 1 (self evaluation)
Do not let it get into watercourses, canalisation and soil.

13. Disposal considerations:

Product:

Fully sprayed = completely empty pressure gas cans: Acc. to § 3 Abs.11 Verpackungsverordnung (packaging instruction) EAK No. 150104 metallic packaging

Filled pressure gas cans: EAK-No.: 120112 used waxes and fats.

Recommendation: Filled pressure gas cans and those with rest content are hazardous waste and have to be disposed accordingly. Only completely empty pressure gas cans may be disposed as recyclable material.

14. Transport information:

Transport by ground: ADR/RID class 2, letter 5F
1950 pressure gas cans, 2 5F, LQ2 (LQ=Limited quantities)

Transport by sea: IMDG/GGVSea class 2.1, UN No. 1950
EmS: 2-13 MFAG:620- Technical name: aerosols
Note in the transport document: transport acc. to 28, Amdt., limited quantities

Transport by air: ICAO and IATA class 2.1 UN No. 1950, PG:-
Technical name: aerosols, flammable
UN certified packaging compulsory

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ICAO/IATA-Klasse: -
Further information:

Not hazardous goods acc. to the above regulations.

15. Regulatory information:

according to EC-Directive 1999/45/EC for the classification, packing and designation of hazardous materials and preparations.

Aerosol directive 75/324/EWG of 20.05.1975 amended by Aerosol directive 94/1/EC of 06.01.1994:

Code letter and hazard designation of the product:



F+ highly combustible



N hazardous to environment

R phrases:

R 12 highly combustible
R 51/53 hazardous to water organisms, can have hazardous effects in watercourses in the long term
R 67 Vapours can cause somnolence and drowsiness.

S phrases:

S 2 May not get into the hands of children.

According to annex to the aerosol directive point 2.2 letter a:

"Can is under pressure. Protect against insolation and temperatures above 50°C. Even after use do not open by force or burn."

According to annex of the aerosol directive point 2.3 letter b:

"Do not spray against a flame or on glowing object. Keep away from ignition sources – Do not smoke. May not get into the hands of children."

Voluntary addition:

"Without sufficient airing the production of explosive mixtures is possible."

Hazard designating components of labelling:

Can is under pressure. Protect from insolation and temperatures above 50°C. Even after use do not open by force or burn. Do not spray against a flame or on glowing object. Keep away from ignition sources – Do not smoke. May not get into the hands of children. Without sufficient airing the production of explosive mixtures is possible. Hazardous to water organisms, can have hazardous effects in watercourses in the long term. Vapours can cause somnolence and drowsiness.

National directives:

Gefahrstoffverordnung (Ordinance on Hazardous Substances), TRG 300 and Aerosol Richtlinie (Aerosol Directive)



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16. Other information:

The information contained herein is given exclusively for the description of safety necessities.