

## SECURITY DATA SHEET

Updating date: 04.04.2023

Version: 174

(\*\*) Indicates changes from the previous version

### SECTION 1. IDENTIFICATION OF THE PRODUCT

**1.1 Product identifier:** **F110 Unlocking and lubricant MoS2 Spray 400ml**  
Other forms of identification: **110010**

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

Use of the substance/Mixture:

Consumer uses: Private households/general public/consumers.

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Recommended restrictions on use: No further relevant information available.

**1.3 Details of the supplier of the safety data sheet:** (See SDS Headline).

**1.4 Emergency telephone:** 93 860 49 23 (8:30-13:00) (15:00-17:30).

### SECTION 2. HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture:**  
**Classification (REGULATION (EC) No1272/2008)**



Flame

Aerosol

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

Aquatic Chronic 3

H412 Harmful to aquatic life with long lasting effects.

**2.2 Label elements:**

**Labelling according to Regulation (EC) No1272/2008**

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

**Hazard pictograms:**



GHS02

**Signal word:**

Danger.

**Hazard Statements:**

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

H412: Harmful to aquatic life with long lasting effects.

**Precautionary Statements:**

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

P102: Keep out of reach of children.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211: Do not spray on an open flame or other ignition source.

P251: Do not pierce or burn, even after use.

P260: Do not breathe spray.

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

P501: Dispose of contents / container in accordance with regional regulations.

**Additional information:**

EUH066 Repeated exposure may cause skin dryness or cracking.  
 Buildup of explosive mixtures possible without sufficient ventilation.

**2.3 Other hazards:**

**Results of PBT and vPvB assessment:**

**PBT:** Not applicable.

**vPvB:** Not applicable.

## SECTION 3. COMPOSITION/ INFORMATION ON INGREDIENTS

**3.1 Substance:**

Non-applicable.

**3.2 Mixtures:**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

Identification	Chemical name/ Classification	Concentration
CAS: - EC: 918-481-9 Index: - REACH: 01-2119457273-39	<b>Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>  Asp. Tox.1, H304: EUH066	25-<50%
CAS : 64742-55-8 EC: 265-158-7 Index: 649-468- 00-3 REACH: 01-2119487077-29	<b>Distillates (petroleum), hydrotreated light paraffinic</b>  Asp.Tox.1, H304	25-<50%
CAS: 109-66-0 EC: 203-692-4 Index: 601-006- 00-1 REACH: 01-2119459286-30	<b>Pentane</b>  Flam.Liq.2, H225; Asp.Tox.1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336; EUH066	12,5-<20%
CAS: 74-98-6 EC: 200-827-9 Index: 601-003- 00-5 REACH: 01-2119486944-21	<b>Propane</b>  Flam.Gas 1A, H220; Press. Gas (Comp.), H280	5-<10%
CAS : 106-97-8 EC: 203-448-7 Index: 601-004- 00-0 REACH 01-2119474691-32	<b>Butane (containing &lt;0,1% butadiene (203-450-8))</b>  Flam.Gas 1A, H220; Press. Gas (Comp.), H280	5-<10%
CAS : 75-28-5 EC: 200-857-2 Index: 601-004- 00-0 REACH 01-2119485395-27	<b>Isobutane (containing &lt;0,1% butadiene (203-450-8))</b>  Flam.Gas 1A, H220; Press. Gas (Comp.), H280	5-<10%

**Additional information:**

The content of Benzene (EINECS-Nr.200-753-7) in the ingredients is less than 0,1% (Note P Annex 1A 1272/2008 EU), so the classification as carcinogen need not to apply.

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.

**After swallowing:**

Drink plenty of water and provide fresh air.

Call for a doctor immediately.

#### **4.2 Most important symptoms and effects, both acute and delayed:**

No further relevant information available.

#### **4.3 Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

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### **SECTION 5. FIREFIGHTING MEASURES**

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#### **5.1 Extinguishing media:**

**Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.

#### **5.2 Special hazards arising from the substance or mixture:**

During heating or in case of fire poisonous gases are produced.

#### **5.3 Advice for firefighters:**

**Protective equipment:**

Mouth respiratory protective device.

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### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

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#### **6.1 Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation

Mount respiratory protective device.

Wear protective equipment.

Keep unprotected persons away.

Keep away from ignition sources.

#### **6.2 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.

#### **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.

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### **SECTION 7. HANDLING AND STORAGE**

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#### **7.1 Precautions for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

No special measures required.

**Information about fire - and explosion protection:**

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

Keep ignition sources away - Do not smoke.

Keep respiratory protective device available.

## 7.2 Conditions for safe storage, including any incompatibilities:

### Storage:

#### A.- Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

#### B.- Information about storage in one common storage facility:

Not required.

#### C.- Further information about storage conditions:

Keep container tightly sealed.

#### D.- Storage class:

2 B.

## 7.3 Specific end use(s):

No further relevant information available.

## SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

### 8.1 Control parameters:

#### Ingredients with limit values that require monitoring at the workplace:

Identification	Control parameters	
Pentane CAS: 109-66-0	WEL	Long-term value: 1800 mg/m <sup>3</sup> , 600 ppm
Butane (containing <0,1% butadiene (203-450-8)) CAS: 106-97-8	WEL	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm
	WEL	Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm
	WEL	Carc (if more than 0.1% of buta-1.3-diene)

#### Additional information:

The lists valid during the making were used as basis.

### 8.2 Exposure controls:

#### A.- Appropriate engineering controls:

No further data; see item 7.


#### Individual protection measures, such as personal protective equipment:

#### B.- General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Do not inhale gases/fumes/aerosols.

#### C.- Respiratory protection:

Pictogram	
	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. Filter A2/P3.

#### D.- Hand protection:

Not required.

#### Material of gloves:

Not required.

#### Penetration time of glove material:

Not required.

#### E.- Eye/face protection:

Not required.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties:

#### General information:

Physical state:

Aerosol.

Colour:

Transparent.

Odour:

Solvent-like.

Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range:	Not applicable, as aerosol.
Flammability:	Not applicable.
<b>Lower and upper explosion limit:</b>	
Lower:	0.6 Vol% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics).
Upper:	10,9 Vol % (74-98-6 propane).
Flash point:	Not applicable, as aerosol.
Ignition temperature:	285°C.
Decomposition temperature:	Not determined.
pH	Mixture is non-soluble (in water).
<b>Viscosity:</b>	
Kinematic viscosity:	Not determined.
Dynamic viscosity:	Not determined.
<b>Solubility:</b>	
Water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure at 20°C (68°F):	3500 hPa.
<b>Density and/or relative density:</b>	
Density at 20°C (68°F):	0,7 g/cm <sup>3</sup> .
Relative density:	Not determined.
Vapour density:	Not determined.

## 9.2 Other information:

### Appearance:

Form: Aerosol.

### Important information on protection of health and environment, and on safety:

Explosive properties: Not determined.

### Solvent content:

Organic solvents: 70,00%.

VOC (EC): 498,4 g/l

VOC-EU%: 70,00%.

Solids content: 0,2%

### Change in condition:

Evaporation rate: Not applicable.

### Information with regard to physical hazard classes:

Explosives: Void.

Flammable gases: Void.

Aerosols: Extremely flammable aerosol.

Pressurised container: May burst if heated.

Oxidising gases: Void.

Gases under pressure: Void.

Flammable liquids: Void.

Flammable solids: Void.

Self-reactive substances and mixtures: Void.

Pyrophoric liquids: Void.

Pyrophoric solids: Void.

Self-heating substances and mixtures: Void.

Substances and mixtures, which emit flammable gases in contact with water: Void.

Oxidising liquids: Void.

Oxidising solids: Void.

Organic peroxides: Void.

Corrosive to metals: Void.

Desensitised explosives: Void.

## SECTION 10. STABILITY AND REACTIVITY

### 10.1 Reactivity:

No further relevant information available.

### 10.2 Chemical stability:

**Thermal decomposition/ conditions to be avoided:**

No decomposition if used according to specifications.

### 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.

## SECTION 11. TOXICOLOGICAL INFORMATION\*\*

### 11.1 Information on hazard classes as defined in Regulation (EC) No1272/2008:

#### A.- Acute toxicity:

LD/LC50 values relevant for classification			
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	Oral	LD50	>5000 mg/kg (rat)
	Dermal	LD50	>3000 mg/kg (rab)
	Inhalative	LC50/4h	>4951 mg/m3 (rat)
Pentane CAS: 109-66-0	Oral	LD50	>5000 mg/kg (rat)
	Inhalative	LC50/4h	25,3 mg/l (rat)

#### B.- Skin corrosion/irritation:

No irritant effect.

#### C.- Serious eye damage/eye irritation:

No irritant effect.

#### D.- Respiratory or skin sensitisation:

No sensitising effects known.

### 11.2 Information on other hazards:

#### Endocrine disrupting properties:

None of the ingredients is listed.

## SECTION 12. ECOLOGICAL INFORMATION\*\*

### 12.1 Toxicity:

Identification	Aquatic toxicity	
Pentane CAS: 109-66-0	EC50/ 48h	9,7 mg/l (daphnia magna)
	EC50/ 96h	4,26 mg/l (fish)
	LC50/ 96h	4,26 mg/l (fish)

### 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.

### 12.5 Results of PBT and vPvB assessment:

**PBT:** Not applicable.

**vPvB:** Not applicable.

### 12.6 Endocrine disrupting properties:

The product does not contain substances with endocrine disrupting properties.

### 12.7 Other adverse effects:

**Remark:** Harmful for fish

**Additional ecological information:**

**General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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## SECTION 13. DISPOSAL CONSIDERATIONS

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### 13.1 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.

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## SECTION 14. TRANSPORT INFORMATION\*\*

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ADR:



**14.1 UN number or ID number:**

UN1950.

**14.2 UN proper shipping name:**

1950 AEROSOLS.

**14.3 Transport hazard class(es):**

Class:

2 5F Gases.

Label:

2.1

**14.4 Packing group:**

Not regulated.

**14.5 Environmental hazards:**

Not applicable.

**14.6 Special precautions for user:**

Warning: Gases.

Hazard identification number (Kemler code): -

EMS Number:

F-D,S-U.

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

Segregation Code:

SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

**14.7 Maritime transport in bulk according to IMO instruments:**

**Transport/Additional information:**

Limited quantities (LQ):

Excepted quantities (EQ):

Transport category:

Tunnel restriction code:

**UN "Model Regulation":**

Not applicable.

1L.

Code: E0. Not permitted as Excepted Quantity.

2.

D.

UN 1950 AEROSOLS.

**IMDG:**



**14.1 UN number or ID number:**

**14.2 UN proper shipping name:**

**14.3 Transport hazard class(es):**

Class:

Label:

**14.4 Packing group:**

**14.5 Environmental hazards:**

**14.6 Special precautions for user:**

Hazard identification number (Kemler code): -

EMS Number:

Stowage Code:

Segregation Code:

UN1950.

AEROSOLS.

2.1 Gases.

2.1

Not regulated.

Not applicable.

Warning: Gases.

F-D,S-U.

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

Not applicable.

**14.7 Maritime transport in bulk according to IMO instruments:**

**Transport/Additional information:**

Limited quantities (LQ):

Excepted quantities (EQ):

**UN "Model Regulation":**

1L.

Code: E0. Not permitted as Excepted Quantity

Code: E0. Not permitted as Excepted Quantity.

UN 1950 AEROSOLS, 2.1.

**IATA:**



**14.1 UN number or ID number:**

**14.2 UN proper shipping name:**

**14.3 Transport hazard class(es):**

Class:

Label:

UN1950.

AEROSOLS, flammable.

2.1 Gases.

2.1



**14.4 Packing group:**

Not regulated.

**14.5 Environmental hazards:**

Not applicable.

**14.6 Special precautions for user:**

Warning: Gases.

Hazard identification number (Kemler code): -

EMS Number:

F-D,S-U.

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity

of 1 litre: Category A. For AEROSOLS with a

capacity above 1 litre: Category B. For WASTE

AEROSOLS: Category C, Clear of living quarters.

SG69 For AEROSOLS with a maximum capacity

of 1 litre: Segregation as for class 9. Stow

"separated from" class 1 except for division 1.4.

For AEROSOLS with a capacity above 1 litre:

Segregation as for the appropriate subdivision

of class 2. For WASTE AEROSOLS: Segregation

as for the appropriate subdivision of class 2.

Segregation Code:

Not applicable.

**14.7 Maritime transport in bulk according to IMO instruments:****UN "Model Regulation":**

UN 1950 AEROSOLS, 2.1.

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## SECTION 15. REGULATORY INFORMATION

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**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.

**LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (UK ANNEX XIV):****Regulation (EC) No273/2004 on drug precursors:**

None of the ingredients is listed.

**15.2 Chemical Safety Assessment:**

A Chemical Safety Assessment has not been carried out.

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## SECTION 16. OTHER INFORMATION

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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.

H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects.

EUH066: Repeated exposure may cause skin dryness or cracking.

**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).

ICAO: International Civil Aviation Organisation.

ADR: Accord relatif au transport international 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 1A: Flammable gases - Category 1A.

Aerosol 1: Aerosols - Category 1.

Press.Gas (Comp.): Gases under pressure - Compressed gas.

Flam.Liq.2: Flammable liquids - Category 2.

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

Asp.Tox.1: Aspiration hazard - Category 1.

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2.

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.