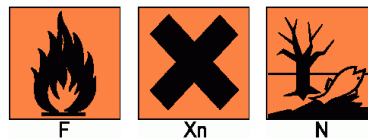


# Safety Data Sheet

## Spirit 3 Extra liquid



Safety Data Sheet dated 25/11/2011, version 3.6

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product Identifier

Mixture identification:  
Trade name: Spirit 3 Extra liquid  
Trade code: 10550/50

#### 1.2. Relevant identified uses of the substance/mixture and uses advised against

Recommended use:

Releasing agent lubricant with silicone

#### 1.3. Details of the supplier of the safety data sheet:

**STRIMA Sp. z o.o.** Swadzim, ul. Poznańska 54 62-080 Tarnowo Podgórne tel. 0-61- 8950950, faks 0-61- 8950951

Competent person responsible for the safety data sheet:

Paweł Skowroński Tel: 606 370 2777, e-mail: p.skowronski@strima.com

#### 1.4. Emergency telephone number

112 (emergency telephone number), 998 (fire brigade), 999 (ambulance)

### 2. HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

F Highly flammable  
Xn Harmful  
Xi Irritant  
N Dangerous for the environment

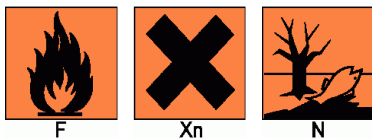
R Phrases:

R11 Highly flammable.  
R38 Irritating to skin.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness.

Adverse physicochemical, human health and environmental effects:

No other hazards

#### 2.2. Label elements



Symbols:

F Highly flammable  
Xn Harmful  
N Dangerous for the environment

R Phrases:

R11 Highly flammable.  
R38 Irritating to skin.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness.

S Phrases:

S2 Keep out of reach of children.  
S16 Keep away from sources of ignition - No smoking.  
S24/25 Avoid contact with skin and eyes.  
S29 Do not empty into drains.  
S33 Take precautionary measures against static discharges.  
S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contents

# Safety Data Sheet

## Spirit 3 Extra liquid

hexane, reaction mass of isomers (containing < 5 % n-hexane (203-777-6))

### 2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

---

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

N.A.

### 3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

70% - 80% hexane, reaction mass of isomers (containing < 5 % n-hexane (203-777-6))

Index number: 601-007-00-7, CAS: 107-83-5, EC: 203-523-4

F,Xn,Xi,N; R11-38-51/53-65-67



2.6/2 Flam. Liq. 2 H225



3.10/1 Asp. Tox. 1 H304



3.2/2 Skin Irrit. 2 H315



4.1/C2 Aquatic Chronic 2 H411



3.8/3 STOT SE 3 H336

7% - 10% 1,2-dichloropropane; propylene dichloride

Index number: 602-020-00-0, CAS: 78-87-5, EC: 201-152-2

F,Xn; R11-20/22



2.6/2 Flam. Liq. 2 H225



3.1/4/Oral Acute Tox. 4 H302



3.1/4/Inhal Acute Tox. 4 H332

For the wording of the listed risk phrases refer to section 16

---

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

### 4.2. Most important symptoms and effects, both acute and delayed

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

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## 5. FIRE-FIGHTING MEASURES

# Safety Data Sheet

## Spirit 3 Extra liquid

- 5.1. Extinguishing media  
Suitable extinguishing media:  
CO2 or Dry chemical fire extinguisher.  
Extinguishing media which must not be used for safety reasons:  
None in particular.
- 5.2. Special hazards arising from the substance or mixture  
Do not inhale explosion and combustion gases.  
Burning produces heavy smoke.
- 5.3. Advice for fire-fighters  
Use suitable breathing apparatus .  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Move undamaged containers from immediate hazard area if it can be done safely.

---

### 6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures  
Wear personal protection equipment.  
Remove all sources of ignition.  
Remove persons to safety.  
See protective measures under point 7 and 8.
- 6.2. Environmental precautions  
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.  
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up  
Wash with plenty of water.
- 6.4. Reference to other sections  
See also section 8 and 13

---

### 7. HANDLING AND STORAGE

- 7.1. Precautions for safe handling  
Avoid contact with skin and eyes, inhalation of vapours and mists.  
Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities  
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.  
Avoid accumulating electrostatic charge.  
Keep away from food, drink and feed.  
Incompatible materials:  
None in particular.  
Instructions as regards storage premises:  
Cool and adequately ventilated.  
Safety electric system.
- 7.3. Specific end use(s)  
None in particular

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. Control parameters  
hexane, reaction mass of isomers (containing < 5 % n-hexane (203-777-6)) - CAS: 107-83-5  
TLV TWA: 600 ppm (1770mg/m3)  
TLV STEL: 750 ppm (2210mg/m3)  
1,2-dichloropropane; propylene dichloride - CAS: 78-87-5  
TLV TWA: ppm 75 A4  
TLV STEL: ppm 110 A4  
DNEL Exposure Limit Values  
N.A.  
PNEC Exposure Limit Values  
N.A.
- 8.2. Exposure controls

# Safety Data Sheet

## Spirit 3 Extra liquid

### Eye protection:

Wear goggles with lateral protection EN166 .

If exposure to vapours cause a sense of bother to eyes, use antigas mask with complete facial.

### Protection for skin:

It is not necessary in case of brief contact except for wearing antistatic clean and covering garments.

In case of long and frequent contact use protective and waterproof garments to this material.

Choosing specific protection as peak, gloves, boots, overalls depends on the type of operations.

### Protection for hands:

During normal manipulation it is not necessary a particular protection.

In case of frequent contacts protect hands with gloves resistant to solvents (OVC,PE, neoprene, not natural rubber).

### Respiratory protection:

The levels of air concentration should be maintained under the exposure limits. If inhalation are over exposure limit use a supplied air respirator with cartridge filter. Filter type EN 141.

### Thermal Hazards:

None

### Environmental exposure controls:

Keep the container and use the product only in well ventilated place. A located ventilation may be necessary for some operations.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance and colour: Clear liquid, colourless

Odour: Odourless

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Solid/gas flammability: Yes

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Flash point: <21 °C

Evaporation rate: N.A.

Vapour pressure: <1 KPa (a 20°C)

Relative density: 0,75 g/ml (a 25°C)

Solubility in water: Not

Lipid solubility: yes soluble in hydrocarbon aliphatic, aromatic, chlorinated

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: >200°C

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

### 9.2. Other information

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

Substance Groups relevant properties N.A.

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## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

### 10.2. Chemical stability

### 10.3. Possibility of hazardous reactions

None

### 10.4. Conditions to avoid

Avoid accumulating electrostatic charge.

### 10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

### 10.6. Hazardous decomposition products

None.

---

## 11. TOXICOLOGICAL INFORMATION

# Safety Data Sheet

## Spirit 3 Extra liquid

### 11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

hexane, reaction mass of isomers (containing < 5 % n-hexane (203-777-6)) - CAS: 107-83-5

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 20 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 3000 mg/kg

1,2-dichloropropane; propylene dichloride - CAS: 78-87-5

LD50 Oral (RABBIT)>1900mg/Kg

LD50 Skin (RABBIT): 8750 mg/Kg

LC50 Inhal (RAT 8h):3000 ppm

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

---

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 12.2. Persistence and degradability

None

N.A.

### 12.3. Bioaccumulative potential

N.A.

### 12.4. Mobility in soil

N.A.

### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

### 12.6. Other adverse effects

None

---

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions.

In so doing, comply with the local and national regulations currently in force.

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## 14. TRANSPORT INFORMATION

### 14.1. UN number

ADR-UN number: 1993

IATA-Un number: 1993

IMDG-Un number: 1993

### 14.2. UN proper shipping name

ADR-Shipping Name: Flammable liquid

IATA-Technical name: Flammable liquid

IMDG-Technical name: Flammable liquid

N.A.

### 14.3. Transport hazard class(es)

ADR-Class: 3,31

ADR-Label: 3

ADR - Hazard identification number: F1

IATA-Class: 3,31

IATA-Label: 3

IMDG-Class: 3,31

# Safety Data Sheet

## Spirit 3 Extra liquid

N.A.	
14.4. Packing Group	
ADR-Packing Group:	III
N.A.	
14.5. Environmental hazards	
Marine pollutant:	No
N.A.	
14.6. Special Precautions for User	
ADR-Tunnel Restriction Code:	D/E
IMDG-Technical name:	Flammable liquid
N.A.	
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	
N.A.	

---

### 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n. 1272/2008 (CLP), Regulation (CE) n. 790/2009 (1° ATP CLP), Regulation (EU) n. 453/2010 (Annex I).

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.  
Regulation (EC) nr 648/2004 (detergents).  
1999/13/EC (VOC directive)

15.2. Chemical Safety Assessment  
No

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### 16. OTHER INFORMATION

Full text of phrases referred to in Section 3:

R11 Highly flammable.  
R20/22 Harmful by inhalation and if swallowed.  
R38 Irritating to skin.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness.

H225 Highly flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H411 Toxic to aquatic life with long lasting effects.  
H336 May cause drowsiness or dizziness.  
H302 Harmful if swallowed.  
H332 Harmful if inhaled.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold  
CCNL - Appendix 1  
Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended. This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CLP: Classification, Labeling, Packaging.  
DNEL: Derived No Effect Level.  
EINECS: European Inventory of Existing Commercial Chemical Substances.

# Safety Data Sheet

## Spirit 3 Extra liquid

GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.