SECTION 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 or mixture and uses advised against
   Recommended use:
   Releasing agent lubricant with silicone.

1.3. Details of the supplier of the safety data sheet
   Company:
   Strima Sp. z o.o.
   Swadzim, ul. Poznańska 54
   62-080 Tarnowo Podgórne
   Competent person responsible for the safety data sheet:
   mail@strima.com

1.4. Emergency telephone number
   Strima Sp. z o.o. +48 61 8950950

SECTION 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.

   EC regulation criteria 1272/2008 (CLP)
   ⚠️ Danger, Flam. Liq. 2, Highly flammable liquid and vapour.
   ☢️ Warning, Skin Irrit. 2, Causes skin irritation.
   ☢️ Warning, Eye Irrit. 2, Causes serious eye irritation.
   ☢️ Warning, STOT SE 3, May cause drowsiness or dizziness.
   ⚠️ Danger, Asp. Tox. 1, May be fatal if swallowed and enters airways.
   ⚠️ Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

   Adverse physicochemical, human health and environmental effects:
   No other hazards

2.2. Label elements
   Symbols:
   ⚠️ Danger
   ⚠️ Hazard statements:
   H225 Highly flammable liquid and vapour.
   H315 Causes skin irritation.
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H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P362 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contents
Hydrocarbons, C6, Isoalkanes, <5 % n-Hexane
ethyl acetate

Special provisions according to Annex XVII of REACH and subsequent amendments:
Restricted to professional users.

2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other hazards

SECTION 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% Hydrocarbons, C6, Isoalkanes, <5 % n-Hexane
REACH No.: 01-2119484651-34, EC: 931-254-9
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
3.8/3 STOT SE 3 H336
4.1/C2 Aquatic Chronic 2 H411

>= 7% - < 10% ethyl acetate
REACH No.: 01-2119475103-46, Index number: 607-022-00-5, CAS: 141-78-6, EC: 205-500-4
F,Xi; R11-36-66-67
2.6/2 Flam. Liq. 2 H225
3.3/2 Eye Irrit. 2 H319
3.8/3 STOT SE 3 H336

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

SECTION 4: First aid measures
4.1. Description of first aid measures
In case of skin contact:

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

**SECTION 5: Firefighting measures**

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 firefighters
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.

**SECTION 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.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

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 for recommended protective equipment.

**SECTION 7: Handling and storage**

7.1. Precautions for safe handling
Do not use near fire or other possible sources of ignition. During work phase do not smoke.
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. See also section number 10
Instructions as regards storage premises:
Cool and adequately ventilated.
Safety electric system.

7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
- Hydrocarbons, C6, Isoalkanes, <5 % n-Hexane
  TLV TWA - 1200 mg/m³
- ethyl acetate - CAS: 141-78-6
  TLV TWA - ppm 400

DNEL Exposure Limit Values
- Hydrocarbons, C6, Isoalkanes, <5 % n-Hexane
  Consumer: 1301 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects - Notes: bw/day
  Worker Industry: 13964 19141.03 - Consumer: 1377 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: bw/day
  Worker Industry: 5306 19141.03 - Consumer: 1137 19141.03 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: bw/day

PNEC Exposure Limit Values
- N.A.

8.2. Exposure controls
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 manipulation is necessary protect hands with gloves resistant to chemical products Type EN374 (PVC, PE, neoprene, Nitrile, Viton, not natural Rubber). It is recommended gloves with Protective Index 6: corresponding to >480min of permeation according to EN374, Thickness >0.3mm. Change used gloves in case of signs, cracks or internal contamination.

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.

SECTION 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.
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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: No
Solubility in oil: Yes, it is soluble in aliphatic, aromatic, chlorinated hydrocarbons
Partition coefficient (n-octanol/water): 6
Auto-ignition temperature: >200°C
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.

SECTION 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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological information of the mixture: N.A.
Toxicological information of the main substances found in the mixture:
Hydrocarbons, C6, Isoalkanes, <5 % n-Hexane
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
ethyl acetate - CAS: 141-78-6
   LD50 (RABBIT) ORAL: 4935 MG/KG

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.

SECTION 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.
Hydrocarbons, C6, Isoalkanes, <5 % n-Hexane
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a) Aquatic acute toxicity:
   Endpoint: LC50 - Species: Fish = 55 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata

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

SECTION 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.

SECTION 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

14.3. Transport hazard class(es)
   ADR-Class: 3
   ADR-Label: 3+Pericolo Ambiente
   ADR - Hazard identification number: F1
   IATA-Class: 3
   IATA-Label: 3
   IMDG-Class: 3

14.4. Packing group
   ADR-Packing Group: III
   IATA-Packing group: III
   IMDG-Packing group: III

14.5. Environmental hazards
   Marine pollutant: Marine pollutant

14.6. Special precautions for user
   ADR-Tunnel Restriction Code: D/E
   IMDG-Technical name: Flammable liquid
   IMDG-EMS: F-E
   IMDG-MFAG: S-E

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
   N.A.

SECTION 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/EC (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/EC
   Regulation (EC) n. 1907/2006 (REACH)
   Regulation (EC) n. 1272/2008 (CLP)
   Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
   Regulation (EU) n. 453/2010 (Annex I)
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Regulation (UE) n. 286/2011 (ATP 2 CLP)
Regulation (UE) n. 618/2012 (ATP 3 CLP)
Regulation (UE) n. 487/2013 (ATP 4 CLP)
Regulation (UE) n. 944/2013 (ATP 5 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
None

Where applicable, refer to the following regulatory provisions:
- Directive 2003/105/CE ("Activities linked to risks of serious accidents") and subsequent amendments.
- 1999/13/EC (VOC directive)

15.2. Chemical safety assessment
No

SECTION 16: Other information

Full text of phrases referred to in Section 3:
R11 Highly flammable.
R36 Irritating to eyes.
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.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
R225 Highly flammable liquid and vapour.
R304 May be fatal if swallowed and enters airways.
R315 Causes skin irritation.
R336 May cause drowsiness or dizziness.
R411 Toxic to aquatic life with long lasting effects.
R319 Causes serious eye irritation.

Classification of substances according to 1272/2008/CE (CLP-GHS) and further ATP and Regulation 790/2009/CE.

SDS drafted in accordance with 1907/2006/CE REACH and 453/2010/CE.

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.
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).
INCI: International Nomenclature of Cosmetic Ingredients.
KSI: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LTE: Long-term exposure.
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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.