

Safety Data Sheet

SPIRIT 21



Safety Data Sheet dated 7/1/2015, version 3.7


SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier
Mixture identification:
Trade name: Spirit 21
Trade code: 13410/04FIB
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Lubricant (aerosol).
- 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+ Extremely flammable
R Phrases:
R12 Extremely flammable.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

EC regulation criteria 1272/2008 (CLP)

 Danger, Flam. Aerosol 1, Extremely flammable aerosol.

Aquatic Chronic 3, Harmful 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:

- H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H412 Harmful 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.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P261 Avoid breathing spray.
P271 Use only outdoors or in a well-ventilated area.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P501 Dispose of container in accordance with national regulation.

Special Provisions:

The manufacturer cannot be held responsible in case of damages caused by incorrect use of the product.

Special provisions according to Annex XVII of REACH and subsequent amendments:

Restricted to professional users.

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- 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:

>= 40% - < 50% Hydrocarbons, C3-4

REACH No.: 01-2119486557-22, Index number: 649-199-00-1, CAS: 68476-40-4, EC: 270-681-9

F+; R12; substance with a Community workplace exposure limit



2.5 Press. Gas H280



2.2/1 Flam. Gas 1 H220

Note K* The substance contains < 0,1 % weight/weight 1,3-butadiene (EINECS No. 203-450-8).

>= 7% - < 10% 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

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:

Wash with plenty of water and soap.

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:

N.A. as aerosol preparation.

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

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.

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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.

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Pressurized container. Do not perforate or burn even after use.

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.

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.

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.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrocarbons, C3-4 - CAS: 68476-40-4

TLV TWA - 1000 ppm (2400mg/m³)

TLV STEL - 4000 ppm (9600mg/m³)

Hydrocarbons, C6, Isoalkanes, <5 % n-Hexane

TLV TWA - 1200 mg/m³

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.

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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:

The aerosol container if overheated, deforms, breaks and it can be thrown a considerable distance

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:	Pressurized container with liquefied gases
Odour:	Characteristic
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	2
Flash point:	< 0 ° C
Evaporation rate:	N.A.
Vapour pressure:	3-5 bar
Relative density:	N.A.
Solubility in water:	Not soluble
Solubility in oil:	Yes
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	> 400°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.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Keep away from sunlight, overheating. Keep at temperature not exceeding 50°C. Keep away from oxidant agents.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

None.

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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

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.
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SECTION 12: Ecological information

12.1. Toxicity

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

It doesn't Contain CHLORINE-FLUORINE-CARBIDE.

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

Hydrocarbons, C6, Isoalkanes, <5 % n-Hexane

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. Aerosol container can explode at temperature Above 50°C if contains little gas residue. Spray all the aerosol content before disposal. The product has to be considered: special dangerous disposal.

Waste disposal key:

The aerosol as a domestic waste is excluded from the application of such a normative for industrial activity, the empty aerosol for professional use can be classified as follow: 15.01.10: packaging containing residues of dangerous substances or residues contaminated by these substances.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 1950

IATA-Un number: 1950

IMDG-Un number: 1950

14.2. UN proper shipping name

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ADR-Shipping Name:	AEROSOLS, Flammable
IATA-Technical name:	AEROSOLS, Flammable
IMDG-Technical name:	AEROSOLS
Limited Quantity: max 1000ml	Total gross mass of package not exceed 30 kg LQ2
14.3. Transport hazard class(es)	
ADR-Class:	2, 5F
ADR-Label:	<UN1950 AEROSOLS>
IATA-Class:	2.1
IATA-Label:	<UN1950 AEROSOLS>
IMDG-Class:	2
14.4. Packing group	
14.5. Environmental hazards	
Marine pollutant:	No
14.6. Special precautions for user	
IMDG-Technical name:	AEROSOLS
Limited Quantity: max 1000ml	Total gross mass of package not exceed 30 kg LQ2
IMDG-EMS:	F-D
IMDG-MFAG:	S-U
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)
 - Regulation (EU) n. 286/2011 (ATP 2 CLP)
 - Regulation (EU) n. 618/2012 (ATP 3 CLP)
 - Regulation (EU) n. 487/2013 (ATP 4 CLP)
 - Regulation (EU) 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.
 - Regulation (EC) nr 648/2004 (detergents).
 - 1999/13/EC (VOC directive)
- Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):
- N.A.
- 15.2. Chemical safety assessment
- No

SECTION 16: Other information

Full text of phrases referred to in Section 3:

- R11 Highly flammable.
 - R12 Extremely 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.
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- H280 Contains gas under pressure; may explode if heated.
 - H220 Extremely flammable gas.
 - H225 Highly flammable liquid and vapour.
 - H304 May be fatal if swallowed and enters airways.

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H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

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.
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.