

Safety Data Sheet

Spirit 1 liquid



Safety Data Sheet dated 30/11/2011, version 3.6

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

1.1. Product Identifier

Mixture identification:
Trade name: Spirit 1 liquid
Trade code: 11710/04

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

Recommended use:

Unlocking, Penetrating (aerosol)

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, fax 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+ Extremely flammable

R Phrases:

R12 Extremely flammable.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements



Symbols:

F+ Extremely flammable

R Phrases:

R12 Extremely flammable.

S Phrases:

S2 Keep out of reach of children.

S23 Do not breathe aerosols.

S51 Use only in well-ventilated areas.

Special Provisions:

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Avoid to inhale directly and to spray into for eyes

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Keep out of reach of children. For professional use only.

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

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






Safety Data Sheet

Spirit 1 liquid

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:
30% - 40% Hydrocarbons, C3-4; Petroleum gas
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
K Note

25% - 30% Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen
Index number: 649-327-00-6, CAS: 64742-48-9, EC: 265-150-3
Xn; R65
 3.10/1 Asp. Tox. 1 H304
P Note

20% - 25% IDROCARBURO PARAFFINICO
Index number: 604-001-02-5, CAS: 124-18-5, EC: 204-686-4
Xn; R10-65-66
 2.6/3 Flam. Liq. 3 H226
 3.10/1 Asp. Tox. 1 H304

1% - 3% 2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve
Index number: 603-014-00-0, CAS: 111-76-2, EC: 203-905-0
Xn,Xi; R20/21/22-36/38
 3.3/2 Eye Irrit. 2 H319
 3.2/2 Skin Irrit. 2 H315
 3.1/4/Oral Acute Tox. 4 H302
 3.1/4/Dermal Acute Tox. 4 H312
 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:

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

5. FIRE-FIGHTING 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

Safety Data Sheet

Spirit 1 liquid

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

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.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Hydrocarbons, C3-4; Petroleum gas - CAS: 68476-40-4

TLV TWA: 1000 ppm

2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve - CAS: 111-76-2

OEL 8h: ppm 20 mg/m³ 98 ,Skin

OEL short: ppm 50 mg/m³ 246 ,Skin

TLV TWA: ppm 20 A3

TLV STEL: A3

DNEL Exposure Limit Values

N.A.

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 normal manipulation it is not necessary a particular protection.

Safety Data Sheet

Spirit 1 liquid

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:	pressurized container with base and liquefied gas
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
Lipid solubility:	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.

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.

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:
Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen - CAS: 64742-48-9

a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 5000 mg/m³ - Duration: 4h
Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Safety Data Sheet

Spirit 1 liquid

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg
IDROCARBURO PARAFFINICO - CAS: 124-18-5
LD50 Orale (Rat): >5000 mg/kg
LD50 skin (Rabit): >2000 mg/kg
LC50 Inhal (Rat): >1369 mg/l/8h
2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve - CAS: 111-76-2
LD50 (RABBIT) ORAL: 320 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.

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.

Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen - CAS: 64742-48-9

Test: EC50 - Species: Daphnia - Duration h: 48 - mg/l: 1000

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

Disposal should be in accordance with local, state or national legislation. 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.

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

ADR-Shipping Name: AEROSOLS, Flammable

Limited Quantity: max 1000ml Total gross mass of package not exceed 30 kg LQ2

IATA-Technical name: AEROSOLS, Flammable

IMDG-Technical name: AEROSOLS

14.3. Transport hazard class(es)

ADR-Class: 2, 5F

ADR-Label: <UN1950 AEROSOLS>

IATA-Class: 2.1

Safety Data Sheet

Spirit 1 liquid

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
IMDG-EMS:	F-D
IMDG-MFAG:	S-U
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

16. OTHER INFORMATION

Full text of phrases referred to in Section 3:

R10 Flammable.

R12 Extremely flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

H280 Contains gas under pressure; may explode if heated.

H220 Extremely flammable gas.

H304 May be fatal if swallowed and enters airways.

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

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.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

Safety Data Sheet

Spirit 1 liquid

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.