

## SAFETY DATA SHEET

Issued: 2015-10-08

In accordance with Regulation (EC) No 1272/2008

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**Section 1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier:**

Spirit 2 Liquid

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

Lubricant

**1.3 Details of the supplier of the safety data sheet****Distributor:**

STRIMA Sp. z o.o.  
Swadzim, ul. Poznańska 54  
62-080 Tarnowo Podgórne  
tel. 61 8950950  
fax 61 8950951  
mail@strima.com

**e-mail address of competent person responsible for the SDS** p.skowronski@strima.com

**1.4 Emergency telephone number**

112 (emergency number)

**Section 2. Hazards identification****2.1 Classification of the substance or mixture**

The mixture is classified by method of calculation taking into account the physicochemical properties and the actual concentrations.

Asp. Tox 1

H304

**2.2 Label elements**

GHS08

**Signal word:**

Danger

**Identification:**

Not applicable

**Hazard statement(s)**

H304 May be fatal if swallowed and enters airways.

**Precautionary statement(s)**

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents / container in accordance with the regulations of waste management in the region

**Supplemental Hazard information (EU)**

The manufacturer is not responsible for damage caused by improper use of the product.

The product is intended for professional user.

**2.3 Other hazards**

Does not meet PBT or vPvB criteria according to Annex XIII of REACH. May irritate eyes, skin and respiration tract due to prolonged exposition.

**Section 3. Composition/information on ingredients****3.1 Substances**

White mineral oil				
REACH No.	Lack of data			
EC No.	232-455-8			
Index No.	Not applicable			
CAS No.	8042-47-5			
Concentration %	100			
Classification in accordance with EC No. 1272/2008	Asp. Tox. 1	H304	GHS08	Dgr

Notice L – contains < 3 % DMSO extract, measured according to IP 346.

**3.2 Mixtures**

Not applicable

Hazard statements given in full in Section 16

**Section 4. Description of first aid measures****4.1 Description of first aid measures****Inhalation:**

If respiratory problems arise, move the victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical advice IMMEDIATELY.

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**Skin Contact:**

Start flushing while removing contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, repeat flushing and obtain medical attention.

**Eye Contact:**

Immediately flush eyes thoroughly for 5 minutes with running water. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention.

**Ingestion:**

DO NOT induce vomiting. Obtain medical attention IMMEDIATELY.

**Self-protection of the first aider**

No actions to be taken if may be risky to anyone unless suitable training was obtained. Always use personal protective equipment

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

**Eye contact:** No access to proper data.

**inhalation:** Headache, dizziness, drowsiness, nausea.

**Skin contact:** In the case of injection under the skin of the local tissue necrosis.

**Ingestion:** If swallowed obtain medical attention immediately.

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

Immediately consult with a medic in case of accident or if you feel unwell. Do not induce vomiting or not administer anything orally to an unconscious person. Show assisting medical staff label / packaging. For those providing assistance in the area of unknown concentrations of vapors / mist adequate respiratory protection should be equipped.

Information for medic: Symptomatic and supportive treatment. As a result of aspiration may cause chemical pneumonia.

**Section 5. Firefighting measures****5.1 Extinguishing media**

**Suitable extinguishing media:** CO<sub>2</sub>, powder and foam, sand, water spray.

**Unsuitable extinguishing media:** Tight water stream.

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

Do not breathe combustion products or explosion mixture. Fire generates a large amount of smoke. The exhaust gases contain aldehydes and other products of incomplete combustion

**5.3 Advice for firefighters**

Isolate materials that are not involved in the fire and protect personnel. The heat from a fire can cause a build-up of pressure inside the containers which may rupture. Cool containers with flooding quantities of water until well after the fire is out. Spilled material may cause floors and contact surfaces to become slippery. Use self-contained breathing apparatus and protective clothing.

**Section 6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

In all cases of leak or spill contact local administration, Police, Firefighters. Wear protective clothing. Notify applicable Remove from the danger area all persons not taking part in liquidation of consequences of the incident

**6.2 Environmental precautions**

Do not allow product from entering sewers, water and soil. Recover spilled material on non-combustible absorbents, such as sand or vermiculite, and place in covered containers for disposal. Inform appropriate health and safety services, life-saving and environmental protection authorities in case of uncontrolled leak.

**6.3 Methods and material for containment and cleaning up**

Inert, non-absorbent material, eg. soil, sand, vermiculite.

**6.4 Reference to other sections**

Information on appropriate personal protective equipment specified in Section 8. Information regarding waste disposal, see section 13. Information on precautionary measures is provided in Section 7

**Section 7. Handling and storage****7.1 Precautions for safe handling**

Do not use near fire or other sources of ignition. Use with adequate ventilation. Unused containers store tightly closed. Follow basic hygiene rules: do not eat, drink, or smoke during work. At the completion / discontinue of work wash your hands with water. Use personal protective equipment as listed in section 8 of SDS.

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

- Refer to handling and usage rules in Regulation of the Minister of Internal Affairs and Administration of 7 June 2010 on the fire protection of buildings, other facilities and sites (Dz.U. (Journal of Laws) 2010.109.719).
- Pay attention to the warnings on the label.
- Store only in certified, original, properly labelled, sealed containers.
- Keep away from any heat sources, open flames, sparks and other sources of ignition. Do not use tools that produce sparks.
- Keep out of direct sunlight.
- Do not smoke, don't use matches or lighters.
- Forbid access to unauthorized persons.
- Containers which are opened must be carefully resealed and keep upright to prevent leakage.
- Store on solid ground.
- Store in a dry, cool, well-ventilated area.
- Keep away from oxidizing agents, strong bases and acids.
- Do not empty into drains, surface water or groundwater (this includes disposal of empty containers).
- Recommended storage temperature below 40°C.

**7.3 Specific end use(s):**

Not applicable.

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**Section 8. Exposure controls/personal protection:****8.1 Control parameters**

Legal basis:

Regulation of the Minister of Labor and Social Policy of 6 June 2014 on maximum permissible concentration and intensity of agents harmful to health in the work environment (Dz.U. (Journal of Laws) 2014.0.817).

CAS	Chemical factor	Limits			
		(NDS)			
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
	Mineral oils	5	-	10	-

**DNEL**

Workers

DNEL – long-term exposure – system effects through skin 220 mg/kg bw/ 24h

DNEL – long-term exposure – system effects through inhalation 160 mg/m<sup>3</sup>

Consumers

DNEL – long-term exposure – system effects through skin 92 mg/kg bw/ 24h

DNEL – long-term exposure – system effects through skin 35 mg/m<sup>3</sup>

DNEL – long-term exposure – system effects through ingestion 40 mg/kg bw/ 24h

**PNEC**

Not applicable.

**8.1 Exposure controls:****Respiratory tract:**

Provide adequate ventilation, do not inhale the spray. In case of insufficient ventilation, wear gas mask with filter A2 P2 (EN 14387) type, absorber colour brown or blue or self-contained breathing apparatus.

**Skin and body:**

Protective clothing consisting of neck buttoned jackets and cuffs, lined pants. Oil-resistant safety shoes, anti-slip. Within the hazardous area both outer clothing and shoes should be able to discharge static electricity. In order to protect exposed skin it is recommended to use moisturizing creams, but they should not be used immediately after exposure.

**Hands:**

Wear protective gloves impermeable and resistant to the product (e.g., Neoprene, nitrile tested to EN374). It is recommended to change gloves regularly and replace them immediately if you notice any signs of wear or damage (tearing, puncture) or changes in appearance (colour, elasticity, shape).

**Eyes and face:**

In case of prolonged exposure or splashes of liquid hazard, wear safety sealed goggles according to EN 166. It is recommended to equip the workplace in a water shower for rinsing eyes.

**Thermal hazard:**

Overheated container deforms, may burst and move a considerable distance.

**Environmental exposure control:**

Store and use the container in a well-ventilated place. Additional local ventilation may be needed for some processes. The employer is obliged to read and apply in practice the provisions of the Acts on environmental protection, water law and the principles of collective water supply and sewage disposal and apply legal provisions contained in appropriate Regulations relating to these Acts. Legal provisions relating to waste disposal are specified in Section 15.

**Section 9. Physical and chemical properties:****9.1 Information on basic physical and chemical properties:**

Parameter	Value
Appearance	Transparent liquid
Colour	Colorless
Odour	Characteristic
Density (g/cm <sup>3</sup> , 15 °C)	0,842-0,855
pH	Lack of data
Melting point/ freezing point (°C)	Approx. -6
Boiling point (°C)	Lack of data
Flash point (°C)	>182
Auto-ignition temperature (°C)	> 400
Evaporation rate	Lack of data
Explosive limits: (upper/lower % v/v)	7,0/0,9
Vapour pressure (kPa, 20°C)	<0,013
Vapour density	>2
Solubility	Lack of data
Solubility in water	Insoluble
Partition coefficient n-octanol/ water	>3,5
Decomposition temperature	Lack of data
Kinematic viscosity (mm <sup>2</sup> /s, 40°C)	14,5-17,5
Explosive properties	Lack of data
Oxidizing properties	Lack of data

**9.2 Other information:**

Refractive index - 1,464-1,470

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**Section 10. Stability and reactivity:****10.1 Reactivity:**

For this product or its ingredients there is no specific test data related to reactivity.

**10.2 Chemical stability:**

The mixture is stable under normal ambient conditions, as well as under expected temperature and pressure during storage and handling.

**10.3 Possibility of hazardous reactions:**

The product creates no hazardous chemical reactions in normal conditions of use. Decomposition can occur under high temperature.

**10.4 Conditions to avoid:**

Accumulated static electricity. Sources of heat and hot surfaces. Store at temperatures below 50 ° C.

**10.5 Incompatible materials:**

Avoid contact with strong oxidizing agents and combustible materials.

**10.1 Hazardous decomposition products:**

None.

**Section 11. Toxicological information:**

There are no data available on the product itself. This product has been evaluated following the conventional method specified by the EU Directive and is appropriately classified in terms of toxicity. Details are given in Sections 2 and 3.

**Acute toxicity:**

Ingestion: LD50 >5000 mg/kg (rat).

Skin: LD50 >5000 mg/kg (rabbit).

Inhalation: LC50 >5000 L (max. vapour pressure).

**Skin corrosion/ irritation:**

Mild irritation in room temperature (rabbit)

**Serious eye damage/ irritation:**

Mild, short-term irritation (rabbit).

**Respiratory or skin sensitization:**

No specific data.

**Germ cell mutagenicity:**

No specific data.

**Carcinogenicity:**

No specific data.

**Reproductive toxicity:**

No specific data.

**Specific target organ toxicity - Single exposure:**

No specific data.

**Specific target organ toxicity- Repeated exposure**

No specific data.

**Aspiration hazard:**

No specific data.

**Section 12. Ecological information:**

For more information on possible environmental effects, see Section 2.1. (classification). No data for the final product, the evaluation was made based on the individual components.

**12.1 Toxicity:**

Acute toxicity (fish): LL0 100-10000 mg/l/96h

Acute toxicity (aquatic crustaceans): EL0 100 mg/l/48h (Daphnia magna)

Acute toxicity (algae): EL0 100 mg/l/72h (Pseudokirchneriella subcapitata)

Chronic toxicity (algae): NOELR 100 mg/l/72h (Pseudokirchneriella subcapitata)

Chronic toxicity (aquatic crustaceans): NOELR 10-1000 mg/l/21days (Daphnia magna)

Not harmful to aquatic organisms.

**12.2 Persistence and biodegradability:**

Biodegradable.

**12.3 Bioaccumulative potential:**

No specific data.

**12.4 Mobility in soil:**

Low solubility in water; can float on the water surface. The product can penetrate into the drains. Low ability to migrate in the soil.

**12.5 Results of PBT and vPvB assessment:**

Product does not meet the eligibility criteria for PBT or vPvB according to Annex XIII.

**12.6 Other adverse effects:**

No specific data.

**Section 13. Disposal considerations:****Recommendations regarding product:**

Waste code:

16 03 05\* Organic wastes containing dangerous substances.

15 01 10 - Packages containing residues of hazardous substances or contaminated with them.

CAUTION: Since waste code is assigned depending on the source of their origin, the end user should, taking into account the specific conditions of use of the product, define the resulting waste and assign the appropriate code, in accordance with applicable regulations.

Remove any residue of the product, because even a small amount of the mixture in the container may explode at temperatures above 50°C. Do not empty into drains. Prevent pollution of surface and ground water. Waste product should be recovered or utilized in authorized incineration plants or waste treatment / disposal facility in accordance with applicable regulations. Recovery / recycling / liquidation of packaging waste must be carried out according

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to the applicable regulations. Cooperate with companies with the appropriate permissions.

CAUTION: Only completely emptied and cleaned packaging may be recycled!

Legal basis:

Act of 14 December 2012 on waste (Dz.U. (Journal of Laws) 2013.0.21).

Regulation of the Minister of Economy and Labor of 4 August 2004 on the detailed procedure of waste oil management (Dz.U. (Journal of Laws) 04.192.1968)

Act of 13 June 2013 on packagings and packagings wastes (Dz.U. (Journal of Laws) 2013.0.888)

Regulation of the Minister of Environment of 29 December 2014 on the waste ((Dz.U. (Journal of Laws) 2013.0.21)

### Section 14. Transport information:

The product is not a subject to regulations on the transport of dangerous goods included in ADR (road), RID (rail), ADN (inland transport), IMDG (sea), ICAO / IATA (air).

	ADR	RID	ADN	IMDG	ICAO/IATA
<b>14.1 UN No. (ONZ No.)</b>	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2 UN proper shipping name:</b>	Not applicable	-	-	-	-
<b>14.3 Transport hazard class (es):</b>	Not applicable	-	-	-	-
	Not applicable	-	-	-	-
<b>14.4 Packing group:</b>	Not applicable	-	-	-	-
<b>14.5 Environmental hazards:</b>	Not applicable	-	-	-	-
<b>14.6 Special precautions for users:</b>	Not applicable	-	-	-	-
<b>14.7 Bulk transportation according to Annex II to MARPOL 73/78 and the IBC Code:</b>	Not applicable				

### Section 15. Regulatory information:

#### 15.1 Safety, health and environmental regulations:

- Regulation (EC) No. 1907/2006 (Annex II Guidelines for the preparation of Safety Data Sheets)
- Commission Regulation (EU) No. 453/2010 of 20 May 2010 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (OJ L 133 31.5.2010, CELEX 32010R0453)
- Regulation (EC) No. 1272/ 2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353 31.12.2008, CELEX 32008R1272)
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396 30.12.2006, CELEX 32006R1907)
- Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing some Directives (OJ L 312 22.11.2008, CELEX 32008L0098).
- Regulation (EC) No. 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer (OJ L 286 31 October 2009, CELEX 32009R1005).
- Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods (Text with EEA relevance) (OJ L 260 30.9.2008, CELEX 32008L0068)
- Act of 25 February 2011 on chemical substances and preparations (Dz.U. (Journal of Laws) 2011.63.322)
- Act of 19 August 2011 on transporting hazardous goods by road (Dz.U. (Journal of Laws) 2011.227.1367)
- Act of 20 June 1997 on road traffic law (Dz.U. (Journal of Laws) 1997.98.602 as amended).
- Act of 14 December 2012 on waste (Dz.U. (Journal of Laws) 2013.0.21)
- Act of 13 June 2013 on packagings and packagings wastes (Dz.U. (Journal of Laws) 2013.0.888)
- Regulation of the Minister of Construction of 14 July 2006 on duties of industrial waste suppliers and on conditions of waste-water dump into the sewage system. (Dz.U. (Journal of Laws) 2006.136.964).
- Regulation of the Minister of Labor and Social Policy of 6 June 2014 on maximum permissible concentration and intensity of agents harmful to health in the work environment (Dz.U. (Journal of Laws) 2014.0.817)
- Regulation of the Minister of Health of 10 August 2012 on the criteria and methods of classification of chemical substances and preparations (Dz.U. (Journal of Laws) 2012.0.1018)
- Regulation of the Minister of Health of 20 April 2012 on the criteria and methods of classification of chemical substances and preparations ((Dz.U. (Journal of Laws) 2012.0.445)
- Regulation of the Minister of Health of 22 May 2012 on the methods of marking of places, pipelines, containers and tanks for storing or containing dangerous substances or hazardous mixtures (Dz.U. (Journal of Laws) 2012.0.601)
- Regulation of the Minister of Health of 2 February 2011 on tests and measurements of agents harmful to health in the work environment (Dz.U. (Journal of Laws) 2011.33.166)
- Regulation of the Minister of Health of 30 December 2004 on occupational health and safety related to the presence of chemical agents at the workplace (Dz.U. (Journal of Laws) 2005.11.86)
- Regulation of the Minister of Economy and Labor of 4 August 2004 on the detailed procedure of waste oil management (Dz.U. (Journal of Laws) 2004.192.1968)
- Regulation of the Minister of Environment of 9 December 2014 on the waste (Dz.U. (Journal of Laws) 2014.0.1923)
- Regulation of the Minister of Environment of 18 November 2014. On the conditions to be met when dumping sewage into water or soil and on substances particularly harmful to the aquatic environment (Dz.U. (Journal of Laws) 2014.0.1800)
- Regulation of the Minister of Internal Affairs and Administration of 7 June 2010 on the fire protection of buildings, other facilities and sites (Dz.U. (Journal of Laws) 2010.109.719)

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**15.2 Chemical safety assessment:**

A chemical safety assessment has not been made.

**Section 16. Other information:**

The data contained herein refer to the product in commercial form.

Classification according to Regulation (EC) No. 1272/2008 was made by calculation.

**Hazard statements listed in Sections 2 and 3:**

H304 May be fatal if swallowed and enters airways.

**Hazard class and category codes:**

Asp. Tox. 1 Aspiration hazard Category 1

**Abbreviations and Acronyms:**

NDS	Occupational exposure limit
NDSch	Short term occupational exposure limit
NDSP	Threshold Limit Value - Ceiling
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
ADR	The European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
LD50	Lethal Dosage for 50% of a given test population
LC50	Lethal Concentration for 50% of a given test population
vPvB	very Persistent very Bioaccumulable (Substance)
PBT	Persistent Bioaccumulable Toxic (Substance)
WEL-TWA	Work Exposure Limit – Time Weighted Average
BGW	"Biologischer Grenzwert" (biological limit value, Germany )
STOT RE	Specific target organ toxicity – repeated exposure
STOT SE	Specific target organ toxicity – single exposure
UVCB	Substances of Unknown or Variable composition
ECX	Concentration where X% of growth stop is observed
LOEC	The lowest concentration when noticeable effect occurs
NOEL	The highest concentration with no effect observed.

*This information is compiled based on the current available data concerning the product and the experience and knowledge of the manufacturer. SDS does not constitute a qualitative description of the product or promise certain properties. Should be treated as aid to safety issues for storage, handling and transportation of the product. Does not relieve user from responsibility for the misuse of this information, and comply with all the applicable legal standards in this area. The employer is obliged to inform all employees who have contact in the workplace with the product, about the dangers and personal protection listed in this SDS. Product may not be used without written permission for any purpose other than specified in Section 1 of this SDS.*

*Safety Data Sheet was developed by **Pro-Perfekt, biuro@pro-perfekt.pl**.*

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