

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ADDINOL TSM 401 Spray

Revision date: 16.06.2021

Product code: 717298

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

ADDINOL TSM 401 Spray

UFI: TUN7-DQA9-7N60-TURV

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

Aerosol - Parting agent.

1.3. Details of the supplier of the safety data sheet**Manufacturer**

Company name:	ADDINOL Lube Oil GmbH	
	Gebäude 4609	
Street:	Am Haupttor	
Place:	D-06237 Leuna	
Telephone:	+49 (0) 3461 845-0	Telefax: +49 (0) 3461 845-555
e-mail:	info@addinol.de	
Contact person:	Application Technology	
Internet:	www.addinol.de	
Responsible Department:	ADDINOL Application Technology	

Supplier

Company name:	GEM OILS LIMITED	
Place:	IRL-H12 E4W2 Regaskin Co. Cavan	
Telephone:	+353 49 4378116	Telefax: +353 49 4368329
e-mail:	sales@gemoils.ie	
Contact person:	GEM OILS LIMITED	Telephone: +353 49 4378116
e-mail:	sales@gemoils.ie	
Internet:	https://gemoils.ie/	

1.4. Emergency telephone number:

Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Aerosol: Aerosol 1

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes serious eye irritation.

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements**Regulation (EC) No. 1272/2008**

Signal word: Danger

Pictograms:



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Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.

Precautionary statements

P102	Keep out of reach of children.
P211	Do not spray on an open flame or other ignition source.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling of certain mixtures

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.
88 % by mass of the contents are flammable.

Additional advice on labelling

The product is classified and labelled according to EC directives or corresponding national laws.

2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
115-10-6	dimethyl ether			50 - < 60 %
	204-065-8	603-019-00-8		
	Flam. Gas 1; H220			
64-17-5	Ethanol			30 - < 40 %
	200-578-6			
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
115-10-6	204-065-8	dimethyl ether	50 - < 60 %
	inhalation: LC50 = 164000 ppm (gases)		
64-17-5	200-578-6	Ethanol	30 - < 40 %
	dermal: LD50 = > 10000 mg/kg; oral: LD50 = > 5000 mg/kg		

Further Information

DMSO-Extrakt < 3 %, IP 346.

Classification system: The classification corresponds to the current EC lists and is completed by information

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from specialist literature and company information.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from the danger area and lay down. Position and transport victim on their side. In case of respiratory distress, bring into semi-upright, seated position. Self-protection of the first aider. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

After inhalation

Move victim to fresh air. Put victim at rest and keep warm. Seek medical attention if problems persist. In case of breathing difficulties administer oxygen.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.

Rinse mouth thoroughly with water. Call a physician immediately.

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

following inhalation: drowsiness. Headache. Nausea.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Extinguishing powder. alcohol resistant foam. Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO₂). Carbon monoxide Nitrogen oxides (NO_x). carbon black.

Flammable. Vapours may form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Wear chemical resistant suit.

Additional information

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray/stream to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Provide adequate ventilation. The vapours are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars. Avoid contact with skin, eye and clothing. Keep away from sources of ignition - No smoking.

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6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Refer to the provisions listed in Sections 8, 12 and 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Use only in well-ventilated areas. Take precautionary measures against static discharges. Do not spray on naked flames or any incandescent material. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Heating causes rise in pressure with risk of bursting.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Keep container tightly closed in a cool place. Keep away from sources of ignition - No smoking.

Please note: TRG 300, aerosol directive (75/324/EEC).

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agents. Material, rich in oxygen, oxidizing.

Further information on storage conditions

Recommended storage temperature: 5 - 30°C. Do not store at temperatures over: 50°C.

7.3. Specific end use(s)

Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
115-10-6	Dimethyl ether	1000	1920		TWA (8 h)	
64-17-5	Ethanol	1000	-		STEL (15 min)	

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
115-10-6	dimethyl ether			
Worker DNEL, long-term		inhalation	systemic	1894 mg/m ³
Consumer DNEL, long-term		inhalation	systemic	471 mg/m ³

PNEC values

CAS No	Substance	Value
115-10-6	dimethyl ether	
Freshwater		0,155 mg/l
Freshwater (intermittent releases)		1,549 mg/l
Marine water		0,016 mg/l
Freshwater sediment		0,681 mg/kg
Marine sediment		0,069 mg/kg
Micro-organisms in sewage treatment plants (STP)		160 mg/l
Soil		0,045 mg/kg
64-17-5	Ethanol	
Freshwater		0,96 mg/l
Marine water		0,79 mg/l
Freshwater sediment		3,60 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/kg
Soil		0,63 mg/kg

Additional advice on limit values

source:

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Wash hands before breaks and after work. Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

Eye/face protection

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): EN ISO 374

Duration of wearing with permanent contact: 480 min

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.7 mm.

Wearing time with occasional contact (splashes): 30 min

Suitable material: NBR (Nitrile rubber).

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Thickness of glove material: 0.4 mm

Protect skin by using skin protective cream.

Skin protection

Wear suitable protective clothing. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Cosaint riospráide le scagaire i gcoinne gás orgánach agus gaile cineál A - fiuchphointe > 65 ° C: A1: <1000 ppm; A2: <5000 ppm; A3: <10,000 ppm.

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

Physical state: gaseous
 Colour: grey
 Odour: like: Alcohol

Test method

pH-Value: not applicable

Changes in the physical state

Melting point: No data available

Boiling point or initial boiling point and boiling range: < -20 °C

Pour point: not applicable

Flash point: < -20 °C DIN EN ISO 2592

Flammability

Solid/liquid: No data available

Gas: No data available

Explosive properties

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Lower explosion limits: 2,5 vol. %

Upper explosion limits: 15 vol. %

Auto-ignition temperature: >300 °C

Self-ignition temperature

Solid: No data available

Gas: No data available

Decomposition temperature: No data available

Oxidizing properties

Not oxidising.

Vapour pressure: No data available

Density (at 20 °C): 0,780 g/cm³ DIN 51757

Water solubility: partially miscible

Solubility in other solvents

No data available

Partition coefficient n-octanol/water: No data available

Relative vapour density: No data available

Evaporation rate: No data available

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9.2. Other information

No data available

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

Extremely flammable aerosol. Pressurised container: May burst if heated.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Ignition hazard.

Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children. Take precautionary measures against static discharges. See protective measures under point 7 and 8.

10.5. Incompatible materials

Oxidizing agents. Material, rich in oxygen, oxidizing.

10.6. Hazardous decomposition productsIn case of fire may be liberated: Carbon dioxide (CO₂). Carbon monoxide Nitrogen oxides (NO_x). carbon black.

Combustible. Vapours may form explosive mixtures with air.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

Mixture not tested.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
115-10-6	dimethyl ether				
	inhalation (4 h) gas	LC50 ppm	164000	Rat	Study report (1979) Ten male rats were administered the test
64-17-5	Ethanol				
	oral	LD50 mg/kg	> 5000	Rat	
	dermal	LD50 mg/kg	> 10000	Rabbit	

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

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STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards**Endocrine disrupting properties**

not applicable

Further information

If handled with proper care and at intended use, the product does not cause any harmful effects acc. to our experiences and available information.

SECTION 12: Ecological information**12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
115-10-6	dimethyl ether					
	Acute fish toxicity	LC50 mg/l	> 4100	96 h	Poecilia reticulata	Study report (1988) other: NEN 6504 Water - Determination of
	Acute algae toxicity	ErC50 mg/l	154,917	96 h	green algae	Other company data (2009) other: Data generated using ECOSAR v1.00
	Acute crustacea toxicity	EC50 mg/l	> 4400	48 h	Daphnia magna	Study report (1988) other: NEN6501: Water -Determination of
64-17-5	Ethanol					
	Acute fish toxicity	LC50 mg/l	> 8000	96 h	Oncorhynchus mykiss (Rainbow trout)	

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not allow to enter into surface water or drains.

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
115-10-6	dimethyl ether	0,07
64-17-5	Ethanol	-0,32

12.4. Mobility in soil

Product is easily volatile. Product is difficult to dissolve in water.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties

not applicable

12.7. Other adverse effects

No data available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Must not be disposed of with domestic refuse. Do not allow to enter into surface water or drains.

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Excepted quantity: E0
 Transport category: 2
 Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
 Hazard label: 2.1

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Special Provisions:	63, 190, 277, 327, 344, 381, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, flammable
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1



Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: flammable gases.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

2010/75/EU (VOC):	84,156% (656,417 g/l)
2004/42/EC (VOC):	84,156% (656,417 g/l)
Information according to 2012/18/EU (SEVESO III):	P3a FLAMMABLE AEROSOLS

Additional information

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC , 2008/47/EC Aerosolrichtlinie (75/324/EWG)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

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SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 1,3,4,7,8,11,12,16.

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	
Eye Irrit. 2; H319	Bridging principle "Aerosols"

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.

Further Information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)