



according to Regulation (EC) No 1907/2006

**354 Elektronik - Spray 07354025X**

Print date: 22.06.2016

Product code: 07354025X

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

354 Elektronik - Spray 07354025X

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

lubricant

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

Company name:	TUNAP Deutschland Vertriebs GmbH & Co. Betriebs KG	
Street:	Bürgermeister-Seidl-Str. 2	
Place:	D-82515 Wolfratshausen	
Telephone:	+49 (0) 8171/1600 - 0	Telefax: +49 (0) 8171/1600 - 40
e-mail:	sdb@tunap.com	
Internet:	www.tunap.com	

**1.4. Emergency telephone number:** +49 (0) 30 30 686 790 (Giftnotruf Berlin)

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

Indications of danger: F+ - Extremely flammable, Xn - Harmful

R phrases:

Extremely flammable.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

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

Repeated exposure may cause skin dryness or cracking.

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard categories:

Aerosol: Aerosol 1

Respiratory or skin sensitisation: Skin Sens. 1A

Specific target organ toxicity - repeated exposure: STOT RE 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

May cause an allergic skin reaction.

Causes damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

**2.2. Label elements****Hazard components for labelling**

Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclics, aromates (2-25 %)

Dihydro-3-(tetrapropenyl)furan-2,5-dione

Signal word: Danger

Pictograms: GHS02-GHS07-GHS08





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**Hazard statements**

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H317	May cause an allergic skin reaction.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary statements**

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.
P260	Do not breathe Aerosol.
P280	Wear eye/face protection..
P271	Use only outdoors or in a well-ventilated area.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314	Get medical advice/attention if you feel unwell.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P251	Do not pierce or burn, even after use.

**Special labelling of certain mixtures**

EUH066	Repeated exposure may cause skin dryness or cracking.
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**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**



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**Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
919-164-8	Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclics, aromates (2-25 %)	25 - < 50 %
64742-82-1	Xn - Harmful R48/20-52-53-65-66	
	STOT RE 1, Asp. Tox. 1, Aquatic Chronic 3; H372 H304 H412 EUH066	
01-2119473977-17		
265-156-6	Baseoil - unspecified, Distillates (petroleum), hydrotreated light naphthenic	25 - < 50 %
64742-53-6	Xn - Harmful R65	
	Asp. Tox. 1; H304	
01-2119480375-34		
200-857-2	isobutane	25 - < 50 %
75-28-5	F+ - Extremely flammable R12	
601-004-00-0	Flam. Gas 1, Liquefied gas; H220 H280	
01-2119485395-27		
200-827-9	propane	3 - < 5 %
74-98-6	F+ - Extremely flammable R12	
601-003-00-5	Flam. Gas 1, Liquefied gas; H220 H280	
01-2119486944-21		
203-448-7	butane	1 - < 3 %
106-97-8	F+ - Extremely flammable R12	
601-004-00-0	Flam. Gas 1, Liquefied gas; H220 H280	
01-2119474691-32		
247-781-6	Dihydro-3-(tetrapropenyl)furan-2,5-dione	0.1 - < 1 %
26544-38-7	Xi - Irritant R36-43-53	
	Eye Irrit. 2, Skin Sens. 1A, Aquatic Chronic 4; H319 H317 H413	

Full text of R, H and EUH phrases: see section 16.

**Labelling for contents according to Regulation (EC) No 648/2004**

&gt;= 30 % aliphatic hydrocarbons.

**SECTION 4: First aid measures****4.1. Description of first aid measures****After inhalation**

Provide fresh air. Medical treatment necessary.

**After contact with skin**After contact with skin, wash immediately with plenty of water and soap. If skin irritation or rash occurs:  
Get medical advice/attention.**After contact with eyes**

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary.



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

No information available.

**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 (CO<sub>2</sub>), Foam, Extinguishing powder.**Unsuitable extinguishing media**

Full water jet

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

Flammable. Vapours can form explosive mixtures with air.

**5.3. Advice for firefighters**

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

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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

Do not pierce or burn, even after use. Do not breathe gas/fumes/vapour/spray.

**Advice on protection against fire and explosion**

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Keep away from sources of ignition. - No smoking. Vapours can form explosive mixtures with air.

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

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.



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**Advice on storage compatibility**

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

**Further information on storage conditions**

Protect from frost. Protect against direct sunlight.

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

No information available.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

**Additional advice on limit values**

- a no restriction
- b End of exposure or shift
- c in long-term exposure: after several shifts
- d prior to next shift

STEL (EC) : Short Term Exposure Limit

TWA (EC): time-weighted average

U: Urea

B: Blood

**8.2. Exposure controls****Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

**Protective and hygiene measures**

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

**Eye/face protection**

Wear eye/face protection.

**Hand protection**

Protect skin by using skin protective cream.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min

Thickness of the glove material 0,45 mm

DIN EN 374

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

Use only in well-ventilated areas.

In case of inadequate ventilation wear respiratory protection. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..

Filtering device with filter or ventilator filtering device of type: AX



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

Physical state: Aerosol  
 Colour: light yellow  
 Odour: characteristic

**Test method**

pH-Value (at 20 °C): not determined

**Changes in the physical state**

Melting point: not determined  
 Initial boiling point and boiling range: -40 °C  
 Sublimation point: No information available.  
 Softening point: No information available.  
 Flash point: -80 °C

**Flammability**

Solid: not applicable  
 Gas: not applicable

Lower explosion limits: 1 vol. %

Upper explosion limits: 11 vol. %

Ignition temperature: No information available.

**Auto-ignition temperature**

Solid: not applicable  
 Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties**

Not oxidizing.

Vapour pressure: not determined

Vapour pressure: No information available.

Density (at 20 °C): 0,825 g/cm<sup>3</sup> DIN 51757

Bulk density: No information available.

Water solubility: insoluble

**Solubility in other solvents**

not determined

Partition coefficient: not determined

Viscosity / dynamic: No information available.

Viscosity / kinematic: No information available.

Flow time: No information available.

Vapour density: not determined

Evaporation rate: not determined

Solvent separation test: No information available.

Solvent content: No information available.

**9.2. Other information**

Solid content: not determined



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Density Data apply to the technically active substance.  
pressure - bar (20°C)

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Flammable, Ignition hazard.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No known hazardous decomposition products.

**Further information**

Do not mix with other chemicals.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Toxicokinetics, metabolism and distribution**

No information available.

**Acute toxicity**

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



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**Acute toxicity**

CAS No	Chemical name				
	Exposure route	Method	Dose	Species	Source
64742-82-1	Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclics, aromates (2-25 %)				
	oral	LD50 mg/kg	>15000	Rat	
	dermal	LD50 mg/kg	>3400	Rabbit	
	inhalative (4 h) aerosol	LC50	13,1 mg/l	Rat	
64742-53-6	Baseoil - unspecified, Distillates (petroleum), hydrotreated light naphthenic				
	oral	LD50 mg/kg	>5000	Rat	
	dermal	LD50 mg/kg	>3000	Rabbit	
106-97-8	butane				
	inhalative (4 h) gas	LC50	658 ppm	Rat	GESTIS
26544-38-7	Dihydro-3-(tetrapropenyl)furan-2,5-dione				
	oral	LD50	2900 mg/kg	Rat	
	dermal	LD50 mg/kg	6250-7500	Rat	
	inhalative (4 h) vapour	LC50	1220 mg/l	Rat	
	inhalative (4 h) aerosol	LC50	5,3 mg/l	Rat	

**Irritation and corrosivity**

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

**Sensitising effects**

May cause an allergic skin reaction. (Dihydro-3-(tetrapropenyl)furan-2,5-dione)

**STOT-single exposure**

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

**Severe effects after repeated or prolonged exposure**

Repeated exposure may cause skin dryness or cracking.

Causes damage to organs through prolonged or repeated exposure. (Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclics, aromates (2-25 %))

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

**Aspiration hazard**

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

**Specific effects in experiment on an animal**

No information available.

**Additional information on tests**

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

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





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

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
26544-38-7	Dihydro-3-(tetrapropenyl)furan-2,5-dione					
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	110 mg/l	96 h	Selenastrum capricornutum	

**12.2. Persistence and degradability**

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64742-82-1	Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclics, aromates (2-25 %)			
	OECD Guideline 301 F	77,05%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
64742-82-1	Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclics, aromates (2-25 %)	4,2
75-28-5	isobutane	2,8
74-98-6	propane	2,36
106-97-8	butane	2,89
26544-38-7	Dihydro-3-(tetrapropenyl)furan-2,5-dione	>=4,39

**12.4. Mobility in soil**

The product has not been tested.

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

The product has not been tested.

**12.6. Other adverse effects**

No information available.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from 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  
Classified as hazardous waste.

**Waste disposal number of used product**

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



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**Waste disposal number of contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances  
Classified as hazardous waste.

**Contaminated packaging**

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

**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  
 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

**Marine transport (IMDG)**

**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, see SP63  
 Marine pollutant: No  
 Special Provisions: 63, 190, 277, 327, 344, 959  
 Limited quantity: See SP277  
 EmS: F-D, S-U

**Air transport (ICAO)**

**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



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Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
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. Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

1999/13/EC (VOC): EU/CH 72,60

**Additional information**To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC , 2008/47/EC  
Regulation (EC) No. 648/2004 (Detergents regulation)**National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 1 - slightly water contaminating

**Additional information**

94/69/EC (21st ATP). The benzene content of the product is less than 0.1%. It applies the annotation P. Classification and labeling as carcinogenic is not necessary.

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 2,4,8,14.

**Abbreviations and acronyms**ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road )

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

**Relevant R phrases (number and full text)**

- |    |                      |
|----|----------------------|
| 12 | Extremely flammable. |
| 36 | Irritating to eyes.  |



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43	May cause sensitisation by skin contact.
48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
52	Harmful to aquatic organisms.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
53	May cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.

**Relevant H and EUH statements (number and full text)**

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H372	Causes damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

**Further Information**

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