

## Safety data sheet

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Code: **U051200004**  
Product name: **GRIP A350**

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

Intended use: **Anti-slip for straps.**  
Uses advised against: **Different uses than those intended.**

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

Name: **CENTRO DISTRIBUZIONE UTENSILI SCPA**  
Full address: **Via delle Gerole, 19**  
District and Country: **20867 CAPONAGO (MB) ITALY**  
tel. **+39 02 95746081**  
fax. **+ 39 02 95745182**

e-mail address of the competent person

responsible for the Safety Data Sheet

Product distribution by:

**info@cdu.net**  
**Centro Distribuzione Utensili Scpa**

#### 1.4. Emergency telephone number

For urgent inquiries refer to

**+39 02 95746081 during office hours 8.30-12.30 - 13.30-17.30**

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Aerosol, category 1	H222	Extremely flammable aerosol.
	H229	Pressurised container: may burst if heated.
Specific target organ toxicity - repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: **DANGER**

Hazard statements:

**H222** Extremely flammable aerosol.

<b>H229</b>	Pressurised container: may burst if heated.
<b>H372</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H319</b>	Causes serious eye irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

## Precautionary statements:

<b>P102</b>	Keep out of reach of children.
<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P211</b>	Do not spray on an open flame or other ignition source.
<b>P251</b>	Do not pierce or burn, even after use.
<b>P260</b>	Do not breathe dust / fume / gas / mist / vapours / spray.
<b>P410+P412</b>	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
<b>P501</b>	Dispose of contents / container to in accordance with local and national regulations.

<b>Contains:</b>	HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%) ROSIN HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS PROPAN-2-OL
------------------	---

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

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

Information not relevant.

**3.2. Mixtures**

Contains:

Identification	x= Conc. %	Classification 1272/2008 (CLP)
<b>HYDROCARBONS, C3-4</b>		
CAS 68476-40-4	25,4 ≤ x ≤ 28,4	Flam. Gas 1 H220, Press. Gas H280, Note K U
EC 270-681-9		
INDEX 649-199-00-1		
<b>HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)</b>		
CAS -	15,62 ≤ x ≤ 18,62	Flam. Liq. 3 H226, STOT RE 1 H372, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411
EC 919-446-0		
INDEX -		
Reg. no. 01-2119458049-33		
<b>HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, &lt; 2% AROMATICS</b>		
CAS -	15,9 ≤ x ≤ 17,9	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066, Note H P
EC 919-857-5		
INDEX -		
Reg. no. 01-2119463258-33		
<b>ROSIN</b>		
CAS 8050-09-7	8,74 ≤ x ≤ 10,74	Skin Sens. 1 H317, Note P
EC 232-475-7		
INDEX 650-015-00-7		
Reg. no. 01-2119480418-32		
<b>PROPAN-2-OL</b>		
CAS 67-63-0	5,88 ≤ x ≤ 7,88	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC 200-661-7		



## GRIP A350

INDEX 603-117-00-0

Reg. no. 01-2119457558-25

**ETHYL ACETATE**

CAS 141-78-6

EC 205-500-4

INDEX 607-022-00-5

Reg. no. 01-2119475103-46

3,02 ≤ x ≤ 5,02 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

The full wording of hazard (H) phrases is given in section 16 of the sheet.

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants max: 28,40 %

**SECTION 4. First aid measures****4.1. Description of first aid measures**

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information for the doctor: symptomatically treatment.

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

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

**5.3. Advice for firefighters**

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

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

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

**6.2. Environmental precautions**

Do not disperse in the environment.

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

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

Storage class TRGS 510 (Germany): 2B

### 7.3. Specific end use(s)

Anti-slip for straps.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

BEL	Belgique	AR du 11/3/2002. La liste est mise à jour pour 2010
CHE	Suisse / Schweiz	Valeurs limites d'exposition aux postes de travail 2014. / Grenzwerte am Arbeitsplatz
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FIN	Suomi	HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja terveystieteiden tutkimuskeskus julkaisu 2012:5
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
NLD	Nederland	Databank of the social and Economic Council of Netherlands (SER) Values, AF 2011:18
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
EU	OEL EU	Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2016

### HYDROCARBONS, C3-4

Threshold Limit Value Type	Country	TWA/8h		STEL/15min		SKIN
		mg/m3	ppm	mg/m3	ppm	
VLEP	BEL		1000			SKIN
MAK	CHE	1900	800	7200	3200	
AGW	DEU	2400	1000	9600	4000	
MAK	DEU	2400	1000	9600	4000	
TLV	DNK	1200	500			
VLA	ESP		800			
HTP	FIN	1900	800	2400	1000	
VLEP	FRA	1900	800			
WEL	GBR	1450	600	1810	750	
OEL	NLD	1430				
NDS	POL	1900		3000		



## GRIP A350

TLV-ACGIH

1000

(Alcani, C1.C4)

## HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	26 mg/kg/d				
Inhalation			VND	71 mg/m3			VND	330 mg/kg/d
Skin			VND	26 mg/kg/d			VND	44 mg/kg/d

## HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, &lt; 2% AROMATICS

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	125 mg/kg/d				
Inhalation				185 mg/kg/d				
Skin			VND	125 mg/kg/d			VND	208 mg/kg/d

## ROSIN

## Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
WEL	GBR	0,05		0,15	

## Predicted no-effect concentration - PNEC

Normal value in fresh water

Normal value in marine water

Normal value for fresh water sediment

0,02 mg/kg

Normal value for marine water sediment

Normal value of STP microorganisms

1000 mg/l

Normal value for the terrestrial compartment

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	15 mg/kg/d				
Inhalation			VND	52 mg/m3			VND	176 mg/m3
Skin			VND	15 mg/kg/d			VND	25 mg/kg/d

## PROPAN-2-OL

## Threshold Limit Value

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
VLEP	BEL	500	200	1000	400
MAK	CHE	500	200	1000	400
AGW	DEU	500	200	1000	400
MAK	DEU	500	200	1000	400
TLV	DNK	490	200		
VLA	ESP	500	200	1000	400

**GRIP A350**

VLEP	FRA			980	400
WEL	GBR	999	400	1250	500
OEL	NLD	650			
NDS	POL	900		1200	
TLV-ACGIH		492	200	983	400

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	140,9	mg/l
Normal value in marine water	140,9	mg/l
Normal value for fresh water sediment	552	mg/kg
Normal value for marine water sediment	553	mg/kg
Normal value of STP microorganisms	2251	mg/l
Normal value for the terrestrial compartment	28	mg/kg

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers		Effects on workers					
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				26 mg/kg/d				
Inhalation				89 mg/m3				500 mg/m3
Skin		319 mg/kg/d						888 mg/kg/d

**ETHYL ACETATE**
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
VLEP	BEL	1461	400		
MAK	CHE	1400	400	2800	800
AGW	DEU	1500	400	3000	800
MAK	DEU	1500	400	3000	800
TLV	DNK	540	150		
VLA	ESP	1460	400		
HTP	FIN	1100	300	1800	500
VLEP	FRA	1400	400		
WEL	GBR		200		400
OEL	NLD	550		1100	
NDS	POL	200		600	
OEL	EU	734	200	1468	400
TLV-ACGIH		1441	400		

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,02	mg/l
Normal value for fresh water sediment	1,15	mg/kg/d
Normal value for marine water sediment	0,115	mg/kg/d
Normal value for water, intermittent release	1,65	mg/l
Normal value of STP microorganisms	650	mg/l
Normal value for the food chain (secondary poisoning)	200	mg/kg
Normal value for the terrestrial compartment	0,148	mg/kg/d

**Health - Derived no-effect level - DNEL / DMEL**



## GRIP A350

Route of exposure	Effects on consumers Acute local	Acute systemic	Chronic local	Chronic systemic 4,5 mg/kg bw/d	Effects on workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral								
Inhalation	734 mg/m3	734 mg/m3	367 mg/m3	367 mg/m3	1468 mg/m3	1468 mg/m3	734 mg/m3	734 mg/m3
Skin				37 mg/kg bw/d			VND	63 mg/kg bw/d

## Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.

TLV of solvent mixture: 661 mg/m3

## 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

### HAND PROTECTION

None required.

### SKIN PROTECTION

Wear category III professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	aerosol
Colour	ochre
Odour	solvent
Odour threshold	Not available
pH	Not applicable
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	< 0 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,74 kg/l
Solubility	in water: insoluble; in acetone: partially soluble
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available



## GRIP A350

Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available
<b>9.2. Other information</b>	
VOC (Directive 2010/75/EC) :	77,80 % - 578,73 g/litre
Propellant flammability	extremely flammable
Limit of propellant flammability	1,8-9,5%

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

There are no particular risks of reaction with other substances in normal conditions of use.

## ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

## HYDROCARBONS, C3-4

May form flammable mixtures with: strong oxidising agents. Forms explosive mixtures with: strong oxidising agents, nitrates.

## ETHYL ACETATE

Risk of explosion on contact with: alkaline metals, hydrides, oleum. May react violently with: fluorine, strong oxidising agents, chlorosulphuric acid, potassium tert-butoxide. Forms explosive mixtures with: air.

**10.4. Conditions to avoid**

Avoid overheating.

## HYDROCARBONS, C3-4

Keep away from: strong oxidising agents. Avoid exposure to: sources of heat, naked flames, overheated surfaces, electrostatic discharges.

## HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

Avoid exposure to: heat, naked flames, ignition sources.

## HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, &lt; 2% AROMATICS

Avoid exposure to: heat, naked flames.

## ROSIN

Avoid exposure to: heat.

## PROPAN-2-OL

Avoid exposure to: heat, naked flames, ignition sources.

## ETHYL ACETATE

Avoid exposure to: light, sources of heat, naked flames.

**10.5. Incompatible materials**

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

## HYDROCARBONS, C3-4

Avoid contact with: strong oxidising agents.

## HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

Avoid contact with: strong oxidising agents.

## HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, &lt; 2% AROMATICS

Incompatible with: strong acids, strong oxidising agents.

## PROPAN-2-OL

Incompatible with: amides, aldehydes, organic halides.

## ETHYL ACETATE

Incompatible with: acids, bases, strong oxidants, aluminium, nitrates, chlorosulphuric acid. Incompatible materials: plastic materials.

**10.6. Hazardous decomposition products**

HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

In decomposition develops: carbon oxides.

HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

When heated to decomposition releases: carbon oxides, toxic fumes.

PROPAN-2-OL

In decomposition develops: carbon oxides.

ETHYL ACETATE

May develop: carbon oxides.

**SECTION 11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

**11.1. Information on toxicological effects**Metabolism, toxicokinetics, mechanism of action and other information

Information not available.

Information on likely routes of exposure

Information not available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available.

Interactive effects

Information not available.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:

Not classified (no significant component)

LD50 (Dermal) of the mixture:

Not classified (no significant component)

## ROSIN

LD50 (Oral)

2800 mg/kg Rat

LD50 (Dermal)

> 2000 mg/kg Rat

## PROPAN-2-OL

LD50 (Oral)

4700 mg/kg Rat

LD50 (Dermal)

12800 mg/kg Rat

LC50 (Inhalation)

46 mg/l/4h Rat

## ETHYL ACETATE

LD50 (Oral)

4934 mg/kg bw Rat (OECD - 401)

LD50 (Dermal)

> 20000 mg/kg bw Rabbit

LC50 (Inhalation)

> 22,5 mg/l/6h Rat

## HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, &lt; 2% AROMATICS

LD50 (Oral)

5000 mg/kg Rat (OECD - 401)

LD50 (Dermal)

5000 mg/kg Rat (OECD - 402)

## HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

LD50 (Oral)

> 15000 mg/kg Rat (OECD - 401)

LD50 (Dermal)

> 3400 mg/kg Rabbit (OECD - 402)

LC50 (Inhalation)

131 mg/l Rat (OECD - 403)

## HYDROCARBONS, C3-4

LC50 (Inhalation)

648 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation.

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class.

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness.

STOT - REPEATED EXPOSURE

Causes damage to organs.

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class.

**SECTION 12. Ecological information**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity**

## ROSIN

LC50 - for Fish	60,3 mg/l/96h Brachydanio rerio
EC50 - for Crustacea	911 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 1000 mg/l/72h Selenastrum capricornutum

## PROPAN-2-OL

LC50 - for Fish	9640 mg/l/96h Pimephales promelas
EC50 - for Crustacea	2285 mg/l/48h Daphnia magna

## ETHYL ACETATE

LC50 - for Fish	230 mg/l/96h Pimephales promelas
EC50 - for Crustacea	165 mg/l/48h Daphnia magna
Chronic NOEC for Crustacea	2,4 mg/l Daphnia pulex

## HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, &lt; 2% AROMATICS

LC50 - for Fish	> 1000 mg/l/96h Onchorhynchus mykiss (OECD - 203)
EC50 - for Crustacea	> 1000 mg/l/48h Daphnia magna (OECD - 202)
EC50 - for Algae / Aquatic Plants	> 1000 mg/l/72h Scenedesmus subspicatus (OECD - 202)

## HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

LC50 - for Fish	10 mg/l/96h
EC50 - for Crustacea	10 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	4,6 mg/l/72h Algae

## HYDROCARBONS, C3-4

LC50 - for Fish	24,11 mg/l/96h (QSAR calculation - butane - ECOSAR Program v1.00)
EC50 - for Crustacea	16,33 mg/l/48h Daphnia (isobutane, calculated with ECOSAR Program v1.00. EPI Suite™ v4.00)

**12.2. Persistence and degradability**

## ROSIN

Solubility in water	900 mg/l
NOT rapidly degradable.	

## PROPAN-2-OL

Solubility in water	Soluble
Rapidly degradable.	

## ETHYL ACETATE

Solubility in water	> 10000 mg/l
Rapidly degradable.	

## HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, &lt; 2% AROMATICS

Solubility in water	Insoluble
Rapidly degradable.	

## HYDROCARBONS, C9-C12, N-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)

Solubility in water	Insoluble
NOT rapidly degradable.	

## HYDROCARBONS, C3-4

Solubility in water	24,4 - 60,4 mg/l
Rapidly degradable	

**12.3. Bioaccumulative potential**

## ROSIN

Partition coefficient: n-octanol/water	3
BCF	56,23

## PROPAN-2-OL

Partition coefficient: n-octanol/water	0,05
--	------

## ETHYL ACETATE

Partition coefficient: n-octanol/water	0,68
BCF	30

## HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, &lt; 2% AROMATICS

Partition coefficient: n-octanol/water	5
--	---

**HYDROCARBONS, C3-4**

Partition coefficient: n-octanol/water 2,03058 Log Kow (QSAR, KOWWIN, Butane)

**12.4. Mobility in soil****ROSIN**

Partition coefficient: soil/water 3,7289

**HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS**

Partition coefficient: soil/water 1,78

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

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects**

Information not available.

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information****14.1. UN number**

ADR / RID, IMDG, IATA: 1950

**14.2. UN proper shipping name**

ADR / RID: AEROSOLS

IMDG: AEROSOLS

IATA: AEROSOLS, FLAMMABLE

**14.3. Transport hazard class(es)**

ADR / RID: Class: 2 Label: 2.1

IMDG: Class: 2 Label: 2.1

IATA: Class: 2 Label: 2.1

**14.4. Packing group**

ADR / RID, IMDG, IATA: -

**14.5. Environmental hazards**

ADR / RID: NO  
IMDG: NO  
IATA: NO

**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (D)
	Special Provision: -		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 100 Kg	Packaging instructions: 130
	Pass.:	Maximum quantity: 25 Kg	Packaging instructions: 130
	Special Instructions:	A802	

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Information not relevant.

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

Seveso Category - Directive 2012/18/EC: P3a

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product  
Point 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (VwVwS 2005)

WGK 3: Severe hazard to waters

**15.2. Chemical safety assessment**

No chemical safety assessment for the mixture was carried out.

**SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Gas 1</b>	Flammable gas, category 1
<b>Aerosol 1</b>	Aerosol, category 1
<b>Aerosol 3</b>	Aerosol, category 3
<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Press. Gas</b>	Pressurised gas
<b>STOT RE 1</b>	Specific target organ toxicity - repeated exposure, category 1
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H220</b>	Extremely flammable gas.
<b>H222</b>	Extremely flammable aerosol.
<b>H229</b>	Pressurised container: may burst if heated.
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H280</b>	Contains gas under pressure; may burst if heated.
<b>H372</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H319</b>	Causes serious eye irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration



## GRIP A350

- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

## GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

## Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

## Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 14 / 15 / 16.