



Safety data sheet

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

1.1. Product identifier

Code: 15/011
Product name: PAI-KOR A/402

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

Description: Resin in solution
Intended use: Organic phosphating system:
Pre-treatment of metal surfaces before painting.

1.3. Details of the supplier of the safety data sheet

Name: CHEMTEC S.r.l
Full address: Via Alberto da Giussano 36/O
District and Country: 20011 CORBETTA (MI)
ITALIA
tel. +39 02 92867461
fax +39 02 87366254

e-mail address of the competent person responsible for the Safety Data Sheet: labo@chemtec.it
Product distribution by: CHEMTEC S.r.l

1.4. Emergency telephone number

For urgent inquiries refer to: +39 02 92867461 in 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.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols: Xi
R phrases: 10-36/38-66-67

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

2.2. Label elements.

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

Hazard pictograms:

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Signal words: Danger

Hazard statements:

H226 Flammable liquid and vapour.
H318 Causes serious eye damage.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P264 Wash the hands thoroughly after handling.
P280 Wear protective gloves / eye protection / face protection.
P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER or the doctor if you feel unwell.
P370+P378 In case of fire: use chemical powder, CO₂, foam to extinguish.

Contains: ISOBUTYL ALCOHOL
 PROPAN-2-OL
 N-BUTYL ACETATE
 PHOSPHORIC ACID

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.	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
N-BUTYL ACETATE			
CAS. 123-86-4 EC. 204-658-1 INDEX. 607-025-00-1 Reg. no. 01-2119485493-29	40 - 50	R10, R66, R67	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
PROPAN-2-OL			
CAS. 67-63-0 EC. 200-661-7 INDEX. 603-117-00-0 Reg. no. 01-2119457558-25	30 - 40	F R11, Xi R36, R67, Note P	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, Note P
3-BUTOXY-2-PROPANOL			
CAS. 5131-66-8 EC. 225-878-4 INDEX. 603-052-00-8	10 - 20	Xi R36/38	Flam. Liq. 3 H226, Eye Irrit. 2 H319, Skin Irrit. 2 H315

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Reg. no. 01-211945527-28-0001/2

ISOBUTYL ALCOHOL

CAS. 78-83-1

2 - 5

R10, Xi R37/38, Xi R41, R67

Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336

EC. 201-148-0

INDEX. 603-108-00-1

PHOSPHORIC ACID

CAS. 7664-38-2

0,1 - 0,3

C R34, Note B

Met. Corr. 1 H290, Skin Corr. 1B H314, Note B

EC. 231-633-2

INDEX. 015-011-00-6

Reg. no. 01-2119485924-24-0021

Note: Upper limit is not included into the range.
The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Follow doctor's indications

SECTION 5. Firefighting measures.**5.1. Extinguishing media.****SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. 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. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

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.**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. 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.**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. 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. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Organic phosphating system: Pre-treatment of metal surfaces before painting.

SECTION 8. Exposure controls/personal protection.**8.1. Control parameters.**

Regulatory References:

AUS	Österreich	Grenzwertverordnung 2011 - GKV 2011
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 2012. / Grenzwerte am Arbeitsplatz
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GRB	United Kingdom	EH40/2005 Workplace exposure limits
IRL	Éire	Code of Practice Chemical Agent Regulations 2011
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

N-BUTYL ACETATE**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m ³	ppm	mg/m ³	ppm
MAK	AUS	480	100	480	100

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VLEP	BEL	723	150	964	200
VEL	CHE	480	100	960	200
MAK	CHE	480	100	960	200
MAK	DEU	480	100	960	200
VLA	ESP	724	150	965	200
VLEP	FRA	710	150	940	200
WEL	GRB	724	150	966	200
OEL	IRL	710	150	950	200
TLV-ACGIH		713	150	950	200

Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,18	mg/l
Normal value in marine water	0,018	mg/l
Normal value for fresh water sediment	0,981	mg/kg
Normal value for marine water sediment	981	mg/kg
Normal value for water, intermittent release	0,36	mg/l
Normal value of STP microorganisms	35,6	mg/l
Normal value for the terrestrial compartment	0,0903	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
Inhalation.	859,7 mg/m3	859,7 mg/m3	102,34 mg/m3	102,34 mg/m3	960 mg/m3	960 mg/m3	480 mg/m3	480 mg/m3

PROPAN-2-OL**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	500	200	2000	800
VLEP	BEL	500	200	1000	400
AGW	DEU	500	200	1000	400
MAK	DEU	500	200	1000	400
VLA	ESP	500	200	1000	400
VLEP	FRA			980	400
WEL	GRB	999	400	1250	500
OEL	IRL		200		400
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	552	mg/kg
Normal value for water, intermittent release	140,9	mg/l
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.			VND	26 mg/kg/d				
Inhalation.			VND	89 mg/m3			VND	500 mg/m3
Skin.			VND	319 mg/kg/d			VND	888 mg/kg/d

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Predicted no-effect concentration - PNEC.

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Normal value in fresh water	0,525	mg/l
Normal value in marine water	0,0525	mg/l
Normal value for fresh water sediment	2,36	mg/kg
Normal value for marine water sediment	0,236	mg/kg
Normal value for water, intermittent release	5,25	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,16	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.			Effects on workers			Chronic local	Chronic systemic
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic		
Oral.			VND		Chronic systemic 8,75 mg/kg			
Inhalation.			VND		33,8 mg/m3		VND	270,5 mg/m3
Skin.			VND		16 mg/kg		VND	44 mg/kg

ISOBUTYL ALCOHOL**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	150	50	600	200
VLEP	BEL	154	50		
AGW	DEU	310	100	310	100
MAK	DEU	310	100	310	100
VLA	ESP	154	50		
VLEP	FRA	150	50		
WEL	GRB	154	50	231	75
OEL	IRL	150	50	225	75
TLV-ACGIH		152	50		

Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,4	mg/l
Normal value in marine water	0,04	mg/l
Normal value for fresh water sediment	1,52	mg/kg
Normal value for marine water sediment	0,152	mg/kg
Normal value for water, intermittent release	11	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,0699	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.			Effects on workers			Chronic local	Chronic systemic
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic		
Oral.			25 mg/kg/d		Chronic systemic VND			
Inhalation.			55 mg/m3		VND		310 mg/m3	VND

PHOSPHORIC ACID**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	1		2	
VLEP	BEL	1		2	
VEL	CHE	1		2	
MAK	CHE	1		2	
AGW	DEU	2		4	INHAL.
MAK	DEU	2		4	INHAL.
VLA	ESP	1		2	
VLEP	FRA	1	0,2	2	0,5

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WEL	GRB	1	2
OEL	IRL	1	2
TLV	ITA	1	2
OEL	EU	1	2
TLV-ACGIH		1	3

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
Inhalation.			0,73 mg/m3	VND	VND	2 mg/m3	1 mg/m3	VND

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.

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.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II 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.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

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.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS.

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

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

Appearance	Liquid slightly viscous
Colour	Colorless / yellowish
Odour	Characteristic of solvent
Odour threshold.	Not available.
pH.	2,5 - 4,0
Melting point / freezing point.	Not available.
Initial boiling point.	96 °C.
Boiling range.	Not available.
Flash point.	24 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not applicable
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not applicable.

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Upper explosive limit.	Not applicable.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	0,840 - 0,860 Kg/l
Solubility	In water: limited
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	50 - 65 seconds in C.F.2
Explosive properties	Not applicable
Oxidising properties	Not available.
9.2. Other information.	
VOC (Directive 1999/13/EC) :	92,75 %
VOC (volatile carbon) :	57,07 %

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

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

10.2. Chemical stability.

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

10.3. Possibility of hazardous reactions.

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid.

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information.**11.1. Information on toxicological effects.**

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.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin.

Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

PHOSPHORIC ACID

LD50 (Oral).	1530 mg/kg Rat
LD50 (Dermal).	2740 mg/kg Rabbit
LC50 (Inhalation).	> 0,85 mg/l/1h Rat

ISOBUTYL ALCOHOL

LD50 (Oral).	2460 mg/kg Rat
LD50 (Dermal).	2460 mg/kg Rabbit
LC50 (Inhalation).	24,24 mg/l/4h Rat

3-BUTOXY-2-PROPANOL

LD50 (Oral).	3300 mg/kg Rat
LD50 (Dermal).	> 2000 mg/kg Rat
LC50 (Inhalation).	> 3,4 mg/l Rat

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PROPAN-2-OL
LD50 (Oral). 4710 mg/kg Rat
LD50 (Dermal). 12800 mg/kg Rat
LC50 (Inhalation). 46 mg/l/4h Rat

N-BUTYL ACETATE
LD50 (Oral). 10760 mg/kg Rat
LD50 (Dermal). > 14000 mg/kg Rabbit
LC50 (Inhalation). 21,1 mg/l/4h Rat

SECTION 12. Ecological information.

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity.

PHOSPHORIC ACID

LC50 - for Fish. 75,1 mg/l/96h *Oryzias latipes*
EC50 - for Crustacea. > 100 mg/l/48h *Daphnia magna*
EC50 - for Algae / Aquatic Plants. > 100 mg/l/72h *Desmodesmus subspicatus*

ISOBUTYL ALCOHOL

LC50 - for Fish. 1120 mg/l/96h *Oncorhynchus mykiss*
EC50 - for Crustacea. 1070 mg/l/48h *Daphnia magna*

3-BUTOXY-2-PROPANOL

LC50 - for Fish. > 100 mg/l/96h *Pimephales promelas*
EC50 - for Crustacea. > 1000 mg/l/48h *Daphnia magna*

PROPAN-2-OL

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

N-BUTYL ACETATE

LC50 - for Fish. 18 mg/l/96h *Pimephalea promelas*
EC50 - for Crustacea. 44 mg/l/48h *Daphnia magna*
EC50 - for Algae / Aquatic Plants. 648 mg/l/72h *Desmodesmus subspicatus*

12.2. Persistence and degradability.

PHOSPHORIC ACID

Solubility in water. > 850000 mg/l
Biodegradability: Information not available.

ISOBUTYL ALCOHOL

Solubility in water. mg/l 1000 - 10000
Rapidly biodegradable.

3-BUTOXY-2-PROPANOL

Solubility in water. 52000 mg/l

Rapidly biodegradable.

PROPAN-2-OL

Solubility in water. Soluble

Rapidly biodegradable.

N-BUTYL ACETATE

Solubility in water. mg/l 1000 - 10000

Rapidly biodegradable.

12.3. Bioaccumulative potential.

3-BUTOXY-2-PROPANOL: no appreciable bioaccumulation potential (log Ko/w 1-3).

ISOBUTYL ALCOHOL

Partition coefficient: n-octanol/water. 1

3-BUTOXY-2-PROPANOL

Partition coefficient: n-octanol/water. 1,2

PROPAN-2-OL

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

N-BUTYL ACETATEPartition coefficient: n-octanol/water. 2,3
BCF. 15,3**12.4. Mobility in soil.****ISOBUTYL ALCOHOL**

Partition coefficient: soil/water. 0,31

N-BUTYL ACETATE

Partition coefficient: soil/water. < 3

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: UN: 1866

14.2. UN proper shipping name.ADR / RID: RESIN SOLUTION
IMDG: RESIN SOLUTION
IATA: RESIN SOLUTION**14.3. Transport hazard class(es).**ADR / RID: Class: 3 Label: 3
IMDG: Class: 3 Label: 3
IATA: Class: 3 Label: 3**14.4. Packing group.**

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards.ADR / RID: NO
IMDG: NO
IATA: NO**14.6. Special precautions for user.**

ADR / RID:	Nr. Kemler: 30	Limited Quantity 5 L	Tunnel restriction code (D/E)
	Special Provision: 640E		
IMDG:	EMS: F-E, #S-E	Limited Quantity 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special Instructions:	A3	

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

SECTION 15. Regulatory information.

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

Seveso category. 6

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

Product.
Point. 3 - 40

Substances in Candidate List (Art. 59 REACH).
None.

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.

15.2. Chemical safety assessment.

A chemical safety assessment has been performed for the following contained substances.
PHOSPHORIC ACID

SECTION 16. Other information.

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

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H373	May cause damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.

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H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R10	FLAMMABLE.
R11	HIGHLY FLAMMABLE.
R34	CAUSES BURNS.
R36	IRRITATING TO EYES.
R36/38	IRRITATING TO EYES AND SKIN.
R37/38	IRRITATING TO RESPIRATORY SYSTEM AND SKIN.
R41	RISK OF SERIOUS DAMAGE TO EYES.
R66	REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.
R68	POSSIBLE RISK OF IRREVERSIBLE EFFECTS.

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
- 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. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EU) 1907/2006 (REACH) of the European Parliament
4. Regulation (EU) 1272/2008 (CLP) of the European Parliament
5. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EU) 453/2010 of the European Parliament
7. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
9. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament

- 10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

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:

02 / 03 / 08 / 09 / 11 / 12 / 15 / 16.