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Safety data sheet

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

1.1. Product identifier

Code: PNT2568

Product name Paint Marker Ink 2568

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

Intended use Inks for valve marker pens.

1.3. Details of the supplier of the safety data sheet

REINOL s.p.a. Name Full address S.da del Francese 21 District and Country 10071 Borgaro T.se

(TO)

Italia

Tel. +39 011 4701510 +39 011 4703910 Fax

e-mail address of the competent person

massi@reinol.it responsible for the Safety Data Sheet

1.4. Emergency telephone number

For urgent inquiries refer to +39 011 4701511

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

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: Flammable liquid, category 3

H226 H336 Flammable liquid and vapour. Specific target organ toxicity - single exposure, category 3 May cause drowsiness or dizziness.

2.2. Label elements.

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

Hazard pictograms:



Signal words: Warning

Hazard statements:

Flammable liquid and vapour. H336 EUH066 May cause drowsiness or dizziness.

Repeated exposure may cause skin dryness or cracking.

Precautionary statements: P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P233

Keep container tightly closed. Wear protective gloves / eye protection / face protection. P280

IF INHALED: remove person to fresh air and keep comfortable for breathing Call a POISON CENTER / doctor / . . . / if you feel unwell. P304+P340 P312

N-BUTYL ACETATE Contains:

1-METHOXY-2-PROPANOL METHYL ETHYL KETONE

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SECTION 2. Hazards identification. .../>>

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. Classification 1272/2008 (CLP). Conc. %. METHYL ETHYL KETONE

78-93-3 CAS. 29 EC. 201-159-0 INDEX. 606-002-00-3

01-2119457290-43 Reg. no.

N-BUTYL ACETATE 123-86-4 204-658-1 CAS. EC.

INDEX. 607-025-00-1 Reg. no. 01-2119485493-29

2-METHOXY-1-METHYLETHYL ACETATE

CAS. 203-603-9 EC. INDEX.

607-195-00-7 1-METHOXY-2-PROPANOL

CAS. 107-98-2 EC. 203-539-1 INDEX. 603-064-00-3 01-2119457435-35 Reg. no.

Flam, Lig. 3 H226

Flam. Lig. 3 H226, STOT SE 3 H336

Flam. Liq. 3 H226, STOT SE 3 H336, EUH066

Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

Note: Upper limit is not included into the range.

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

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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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.

Information not available

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).

@ EPY 9.1 - SDS 1003

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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).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

AUS	Österreich	Grenzwerteverordnung 2011 - GKV 2011
BEL	Belgique	AR du 11/3/2002. La liste est mise à jour pour 2010
BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА
		ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г
CHE	Suisse / Schweiz	Valeurs limites d'exposition aux postes de travail 2012. / Grenzwerte am Arbeitsplatz
CZE	Česká Republika	Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
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
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 20. júna 2007
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

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SECTION 8. Exposure controls/personal protection. .../>>

				N-BUTYL	_ ACETATE
Threshold Limit Va	lue.				
Type	Country	TWA/8h		STEL/15n	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	480	100	480	100
VLEP	BEL	723	150	964	200
TLV	BGR	710		950	
VEL	CHE	480	100	960	200
MAK	CHE	480	100	960	200
TLV	CZE	950		1200	
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
OEL	NLD	150			
NPHV	SVK	480	100	960	
TLV-ACGIH		713	150	950	200

				1-METHOXY	-2-PROF	ANOL
Threshold Limit Va	lue.					
Туре	Country	TWA/8h mg/m3	ppm	STEL/15n mg/m3	nin ppm	
MAK	AUS	187	50	187	50	SKIN.
VLEP	BEL	375	100	568	150	SKIN.
TLV	BGR	375		568		SKIN.
TLV	CZE	270		550		SKIN.
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	
VLA	ESP	375	100	568	150	SKIN.
VLEP	FRA	188	50	375	10	SKIN.
WEL	GRB	375	100	560	150	SKIN.
OEL	IRL	375	100	568	150	
TLV	ITA	375	100	568	150	SKIN.
OEL	NLD	375		563		SKIN.
NPHV	SVK	375	100	568		SKIN.
OEL	EU	375	100	568	150	SKIN.
TLV-ACGIH		184	50	368	100	

				METHYL E	THYL KETO	NE
Threshold Limit Va	lue.					
Туре	Country	TWA/8h mg/m3	ppm	STEL/15 mg/m3	imin ppm	
MAK	AUS	295	100	590	200	SKIN.
VLEP	BEL	600	200	900	300	
TLV	BGR	590		885		
VEL	CHE	590	200	590	200	SKIN.
MAK	CHE	590	200	590	200	SKIN.
TLV	CZE	600		900		
AGW	DEU	600	200	600	200	SKIN.
MAK	DEU	600	200	600	200	SKIN.
VLA	ESP	600	200	900	300	
VLEP	FRA	600	200	900	300	SKIN.
WEL	GRB	600	200	899	300	SKIN.
OEL	IRL	600	200	900	300	SKIN.
TLV	ITA	600	200	900	300	
NPHV	SVK	600	200	900		
OEL	EU	600	200	900	300	
TLV-ACGIH		590	200	885	300	

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SECTION 8. Exposure controls/personal protection. .../>>

			2-M	ETHOXY-1-MET	HYLETH	YL ACETATE
Threshold Limit Va	lue.					
Туре	Country	TWA/8h mg/m3	ppm	STEL/15r mg/m3	nin ppm	
MAK	AUS	275	50	550	100	SKIN.
VLEP	BEL	275	50	550	100	SKIN.
TLV	BGR	275		550		SKIN.
TLV	CZE	270		550		SKIN.
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN.
VLEP	FRA	275	50	550	100	SKIN.
WEL	GRB	274	50	548	100	
OEL	IRL	275	50	550	100	SKIN.
TLV	ITA	275	50	550	100	SKIN.
OEL	NLD	550				
NPHV	SVK	275	50	550		SKIN.
OEL	EU	275	50	550	100	SKIN.

				XYLENE (MIXTU	RE OF	ISOMERS)
Threshold Limit Va	alue.					
Туре	Country	TWA/8h		STEL/15n		
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	221	50	442	100	SKIN.
VLEP	BEL	221	50	442	100	SKIN.
TLV	BGR	221		442		SKIN.
TLV	CZE	200		400		SKIN.
AGW	DEU	440	100	880	200	SKIN.
MAK	DEU	440	100	880	200	SKIN.
VLA	ESP	221	50	442	100	SKIN.
VLEP	FRA	221	50	442	100	SKIN.
WEL	GRB	220	50	441	100	
OEL	IRL	221	50	442	100	SKIN.
TLV	ITA	221	50	442	100	SKIN.
OEL	NLD	210		442		SKIN.
NPHV	SVK	221	50	442		SKIN.
OEL	EU	221	50	442	100	SKIN.
TLV-ACGIH		434	100	651	150	

Legend:

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

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.

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 I 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 airtight protective 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.

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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 Colour as showed in a as showed in color folder Odour characteristic of solvent Odour threshold. Not available Not available. Melting point / freezing point.
Initial boiling point. Not available. 75 Not available. °C. Boiling range. Flash point. Evaporation Rate Not available. Flammability of solids and gases flammable gas Lower inflammability limit. Not available. Upper inflammability limit. Not available Lower explosive limit. Not available. Upper explosive limit. Not available. Not available. Vapour pressure. Vapour density Not available Relative density 1.280 - 1.340 Solubility immiscible with water Partition coefficient: n-octanol/water Not available.

Not available Auto-ignition temperature Decomposition temperature Not available Not available. Viscosity Explosive properties Not available. Oxidising properties Not available.

9.2. Other information. VOC (Directive 1999/13/EC):

51,20 % - 640,00 a/litre VOC (volatile carbon) : a/litre.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

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

1-METHOXY-2-PROPANOL ACETATE: stable but with the air it may slowly develop peroxides that explode with an increase in temperature.

1-METHOXY-2-PROPANOL: absorbs and disolves in water and in organic solvents, dissolves various plastic materials; it is stable but with air it may slowly form explosive peroxides.

Ka/I

BUTANONE: reacts with light metals like aluminium, and with strong oxidising agents; attacks various types of plastic. Decomposes under the effect of heat.

N-BUTYL ACETATE: decomposes readily with water, especially when warm.

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.

XYLENE (MIXTURE OF ISOMERS): stable, but may develop violent reactions in the presence of strong oxidising agents such as sulphuric and nitric acids and perchlorates. May form explosive mixtures with the air.

1-METHOXY-2-PROPANOL ACETATE: may react violently with oxidising agents and strong acids and alkaline metals.

1-METHOXY-2-PROPANOL: can react dangerously with strong oxidising agents and strong acids.

BUTANONE: may generate peroxides on contact with air, light or oxidising agents. Risk of explosion on contact with: hydrogen peroxide and sulphuric acid. It may react dangerously with: oxidising agents, trichloromethane, alkalis. Forms explosive mixtures with the air.

N-BUTYL ACETATE: risk of explosion on contact with: strong oxidising agents. Can react dangerously with alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with the air.

10.4. Conditions to avoid.

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

1-METHOXY-2-PROPANOL ACETATE: store in an inert atmosphere, sheletered from moisture because it hydrolises easily.

1-METHOXY-2-PROPANOL: avoid exposure to the air.

BUTANONE: avoid exposure to sources of heat.

N-BUTYL ACETATE: avoid exposure to moisture, sources of heat and naked flames.

10.5. Incompatible materials.

1-METHOXY-2-PROPANOL ACETATE: oxidising agents, strong acids and alkaline metals.

1-METHOXY-2-PROPANOL: oxidising agents, strong acids and alkaline metals.

BUTANONE: strong oxidising agents, inorganic acids, ammonia, copper and chloroform.

N-BUTYL ACETATE: water, nitrates, strong oxidising agents, acids and alkalis and potassium tert-butoxide.

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SECTION 10. Stability and reactivity. .../>>

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 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.

This product may have a degreasing action on the skin, producing dryness and chapped skin after repeated exposure.

XYLENE (MIXTURE OF ISOMERS): has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

1-METHOXY-2-PROPANOL ACETATE: the main way of entry is the skin, whereas the respiratory way is less important owing to the low vapour tension of the product. Concentrations above 100 ppm cause eye irritation, nose and oropharynx. At 1000 ppm disturbance in the equilibrium and severe eye irritation is observed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and ocular irritation on direct contact. No chronic effects have been reported in man.

1-METHOXY-2-PROPANOL: the main way of entry is the skin, whereas the respiratory way is less important owing to the low vapour tension of the product. Concentrations above 100 ppm cause eye irritation, nose and oropharynx. At 1000 ppm disturbance in the equilibrium and severe eye irritation is observed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and ocular irritation on direct contact. No chronic effects have been reported in man.

N-BUTYL ACETATE:in humans the substance's vapours cause irritation to the eues and nose. In the event of repeated exposure, there is skin irritation, dermatosis (with driness and flaking of the skin) and keratitis.

XYLENE (MIXTURE OF ISOMERS)

 LD50 (Oral).
 3523 mg/kg Rat

 LD50 (Dermal).
 4350 mg/kg Rabbit

 LC50 (Inhalation).
 26 mg/l/4h Rat

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral). 8530 mg/kg Rat LD50 (Dermal). > 5000 mg/kg Rat

1-METHOXY-2-PROPANOL

 LD50 (Oral).
 5300 mg/kg Rat

 LD50 (Dermal).
 13000 mg/kg Rabbit

 LC50 (Inhalation).
 54,6 mg/l/4h Rat

METHYL ETHYL KETONE

 LD50 (Oral).
 2737 mg/kg Rat

 LD50 (Dermal).
 6480 mg/kg Rabbit

 LC50 (Inhalation).
 23,5 mg/l/8h Rat

N-BUTYL ACETATE

 LD50 (Oral).
 > 6400 mg/kg Rat

 LD50 (Dermal).
 > 5000 mg/kg Rabbit

 LC50 (Inhalation).
 21,1 mg/l/4h Rat

SECTION 12. Ecological information.

12.1. Toxicity.

Information not available.

12.2. Persistence and degradability.

XYLENE (MIXTURE OF ISOMERS)

Solubility in water. mg/l 100 - 1000

Biodegradability: Information not available.

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water. > 10000 mg/l

Rapidly biodegradable.

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SECTION 12. Ecological information. .../>>

1-METHOXY-2-PROPANOL

Solubility in water. mg/l 1000 - 10000

Rapidly biodegradable.

METHYL ETHYL KETONE

Solubility in water. > 10000 mg/l

Rapidly biodegradable.

N-BUTYL ACETATE

Solubility in water. mg/l 1000 - 10000

12.3. Bioaccumulative potential.

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water. 3,12 BCF. 25,9

2-METHOXY-1-METHYLETHYL ACETATE

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

1-METHOXY-2-PROPANOL

Partition coefficient: n-octanol/water. < 1

METHYL ETHYL KETONE

Partition coefficient: n-octanol/water. 0,3

N-BUTYL ACETATE

Partition coefficient: n-octanol/water. 2,3 BCF. 15,3

12.4. Mobility in soil.

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water. 2,73

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: 1263

14.2. UN proper shipping name.

ADR / RID: PAINT OF PAINT RELATED MATERIAL IMDG: PAINT OF PAINT RELATED MATERIAL IATA: PAINT OF PAINT RELATED MATERIAL

ΕN

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SECTION 14. Transport information. .../>>

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:

14.5. Environmental hazards.

NO ADR / RID: IMDG: NO IATA: NO

14.6. Special precautions for user.

ADR / RID: HIN - Kemler: 30 Limited Quantities 5 L Tunnel restriction code (D/E)

Special Provision: 640E EMS: F-E, <u>S-E</u> IMDG:

Limited Quantities 5 I IATA: Maximum quantity: 220 L Cargo: Packaging instructions: 366 Pass.: Maximum quantity: 60 L Packaging instructions: 355

Special Instructions: A3, A72, A192

14.7. Transport in bulk according to Annex II of MARPOL73/78 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. 6

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

Point.

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (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.

No chemical safety assessment has been processed for the mixture and the substances it contains.

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SECTION 16. Other information.

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

Flam. Liq. 2 Flammable liquid, category 2 Flammable liquid, category 3 Acute toxicity, category 4 Flam. Liq. 3 Acute Tox. 4 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. H312 Harmful in contact with skin. H332 Harmful if inhaled. H319 Causes serious eye irritation H315 Causes skin irritation. May cause drowsiness or dizziness.

EUH066 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
- 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

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- 4. Regulation (EU) 453/2010 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
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- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. 10th Edition
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SECTION 16. Other information. .../>>

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 / 10 / 11 / 12 / 14 / 16