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TC26000 - IODINE 0,02N=N/50=0,01M						
Information Sheet (meeting the information requirements on substances and mixtures pursuant to art. 32 of the Reg. (CE) 1907/2006 - REACH)						
SECTION 1. Identification	of the substance/mixture and of the company/und	ertaking				
1.1. Product identifier Code: TC26000 Product name IODINE 0,02N=N/50=0,01M						
1.2. Relevant identified uses of the Intended use	e substance or mixture and uses advised against Laboratory reagent					
1.3. Details of the supplier of the s Name Full address District and Country	afety data sheet TITOLCHIMICA SPA VIA S.PIETRO MARTIRE 1054 45030 PONTECCHIO POLESINE (RO) ITALIA					
	Tel. +39425492644					
	Fax +39425492909					
e-mail address of the competent pers						
responsible for the Safety Data Shee	t utecnico@titolchimica.it					
1.4. Emergency telephone number For urgent inquiries refer to	Poison control center (24/24h) available to the public Information Centre NI emergency phone 844 892 011					

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). Hazard classification and indication: --

2.2. Label elements	
Hazard pictograms:	
Signal words:	
Hazard statements:	
Precautionary statements:	
Product not intended for use	es provided for by Dir.

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%.

2004/42/CE.

SECTION 3. Composition/information on ingredients

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3.1. Substances

Information not relevant

3.2. Mixtures

The product does not contain substances classified as being hazardous to human health or the environment pursuant to the provisions Regulation (EU) 1272/2008 (CLP) (and subsequent amendments and supplements) in such quantities as to require the statement.

SECTION 4. First aid measures

4.1. Description of first aid measures

Not specifically necessary. Observance of good industrial hygiene is recommended.

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 not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT Choose the most appropriate extinguishing equipment for the specific case. 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 The product is neither flammable nor combustible.

5.3. Advice for firefighters

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

Use breathing equipment if fumes or powders are released into the air. 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

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

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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

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. 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:

TLV-ACGIH

ACGIH 2017

POTASSIUM IODIDE

POTASSIUM IODIDE					
Predicted no-effect concentrat	ion - PNEC				
Normal value in fresh water			0,007	mg/l	
Normal value for fresh water s	ediment		0,007	mg/kg/d	
Normal value for the food chai	n (secondary poison	ing)	0,3	mg/kg	
Health - Derived no-effect	t level - DNEL / D Effects on consumers	DMEL		Effects on workers	
Route of exposure	Acute local	Acute systemic	Chronic systemic	Chronic local	Chronic systemic
Oral		0,01 mg/kg bw/d	0,01 mg/kg bw/d		
Inhalation			0,035 mg/m3		0,07 mg/m3
Skin			1 mg/kg bw/d		1 mg/kg bw/d

IODINE

Туре	Country	TW A/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV-ACGIH			0,01		0,1		trd, irrt TRS
Predicted no-effect cor	centration - PNEC						
Normal value in fresh v	vater			0,01813		mg/l	
Normal value in marine	water			0,06001		mg/l	
Normal value for fresh	water sediment			3,99		mg/kg	
Normal value for marin	e water sediment			20,22		mg/kg	
Normal value of STP m	nicroorganisms			11		mg/l	
Normal value for the te	rrestrial compartment			5,95		mg/kg	

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Health - Derived no-effect level - DNEL / DMEL

	Effects on			Effects on			
	consumers			workers			
Route of exposure	Acute local	Acute systemic	Chronic	Chronic local			Chronic
			systemic				systemic
Inhalation				VND	1 mg/m3	VND	0,07 mg/m3
Skin				VND	0,01 mg/kg/d	VND	0,01 mg/kg/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.

8.2. Exposure controls

Comply with the safety measures usually applied when handling chemical substances.

HAND PROTECTION None required.

SKIN PROTECTION None required.

EYE PROTECTION None required.

RESPIRATORY PROTECTION None required, unless indicated otherwise in the chemical risk assessment.

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 Colour Odour Odour threshold pH Melting point / freezing point Initial boiling point Boiling range Flash point Evaporation rate Flammability (solid, gas) Lower inflammability limit Upper inflammability limit Upper explosive limit Upper explosive limit Upper explosive limit Vapour pressure Vapour density Relative density Solubility Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Explosive properties	liquid dark brown characteristic Not available Not available Not available Not available Not available Not available Not available Not applicable Not applicable Not applicable Not applicable Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available
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9.2. Other information		
VOC (Directive 2010/75/EC) : VOC (volatile carbon) :	0 0	
SECTION 10. Stability and	I reactivity	
I0.1. Reactivity		
There are no particular risks of reaction	with other substances in normal conditions of use.	
I0.2. Chemical stability		
The product is stable in normal condition	ns of use and storage.	
10.3. Possibility of hazardous reactio	ns	
No hazardous reactions are foreseeable	e in normal conditions of use and storage.	
0.4. Conditions to avoid		
None in particular. However the usual p	recautions used for chemical products should be respected.	
0.5. Incompatible materials		
nformation not available		
10.6. Hazardous decomposition prod	ucts	
nformation not available		
SECTION 11. Toxicologica	al information	
According to currently available data, practices.	this product has not yet produced health damages. Anyway, it must t	be handled according to good industrial
11.1. Information on toxicological effe	ects	
Metabolism, toxicokinetics, mechanism	of action and other information	
nformation not available		
nformation on likely routes of exposure		
nformation not available		
Delayed and immediate effects as well a	as chronic effects from short and long-term exposure	
nformation not available		
nteractive effects		
nformation not available		
ACUTE TOXICITY		
C50 (Inhalation) of the mixture: Not cla	ssified (no significant component)	

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LD50 (Oral) of the mixture: Not classifi LD50 (Dermal) of the mixture: Not clas		
SKIN CORROSION / IRRITATION		
Does not meet the classification criteria	a for this hazard class	
SERIOUS EYE DAMAGE / IRRITATIC	<u>N</u>	
Does not meet the classification criteria		
RESPIRATORY OR SKIN SENSITISA	TION	
Does not meet the classification criteria	a for this hazard class	
GERM CELL MUTAGENICITY		
Does not meet the classification criteria	a for this hazard class	
Does not meet the classification criteria	a for this hazard class	
REPRODUCTIVE TOXICITY		
Does not meet the classification criteria	a for this hazard class	
STOT - SINGLE EXPOSURE		
Does not meet the classification criteria	a for this hazard class	
STOT - REPEATED EXPOSURE		
Does not meet the classification criteria	a for this hazard class	
ASPIRATION HAZARD		
Does not meet the classification criteria	a for this hazard class	
SECTION 12. Ecological	information	
Use this product according to good contaminate soil or vegetation.	working practices. Avoid littering. Inform the competent authorities, s	hould the product reach waterways or
12.1. Toxicity		

Information not available

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

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Information not available

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. Neat product residues should be considered special non-hazardous waste. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. CONTAMINATED PACKAGING Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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: None

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Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006					
None					
Substances in Candidate List (Art. 59	REACH)				
On the basis of available data, the pro	duct does not contain any SVHC in percentage greater than 0,1%.				
Substances subject to authorisarion (A	Annex XIV REACH)				
None					
Substances subject to exportation rep	orting pursuant to (EC) Reg. 649/2012:				
None					
Substances subject to the Rotterdam	Convention:				
None					
Substances subject to the Stockholm	Convention:				
None					
Healthcare controls					
Information not available					
15.2. Chemical safety assessment					
No chemical safety assessment has b	een processed for the mixture and the substances it contains.				
SECTION 16. Other infor	mation				
- CAS NUMBER: Chemical Abstract S - CE50: Effective concentration (require					
	or dangerous goods ition				
 LC50: Lethal Concentration 50% LD50: Lethal dose 50% OEL: Occupational Exposure Level PBT: Persistent bioaccumulative and PEC: Predicted environmental Concel PEL: Predicted exposure level 	I toxic as REACH Regulation				

- 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).

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GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 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
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 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:

01/02/04/06/07/08/09/11/14/15.