



CDR S.r.l.
Via degli Artigiani, 6
50020 Ginestra F.na (FI)

MATERIAL SAFETY DATA SHEET
**IODINE VALUE TEST KIT
ON PALMOIL**

Revision: 00

In accordance with EC Directive 1907/06 and Regulation (EU) 453/2010

Date of compilation: 22/03/11

1. Identification of the substance/mixture and of the company/enterprise

1.1 Product identifier: **IODINE VALUE TEST KIT ON PALMOIL**

1.2 Relevant identified uses of the substance or mixture:
Reagent for food analysis

1.3 Details of the supplier of the safety data sheet:

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Via degli Artigiani, 6
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Italy
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1.4 Emergency phone number:
+39 055-871431

e-mail TC: cdr@cdr-mediated.it

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Directive 67/548/EEC - Directive 1999/45/EC: :
F, R11; Xn; R20/21/22; Xi, R41

Nature of special risks attributed:

R11 - Highly flammable.

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R41 - Risk of serious damage to eyes.

The product easy inflames if subordinate to an ignition source. (flash point < 55° C)

2.2. Label elements:

Warning symbols:

F - Highly flammable

Xn - Harmful



Hazard sentences (R):

R11 - Highly flammable.

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R41 - Risk of serious damage to eyes.

Product: **IODINE VALUE TEST KIT ON PALMOIL**

Caution recommendations (S):

S7 - Keep container tightly closed.

S16 - Keep away from sources of ignition — No smoking.

S25 - Avoid contact with eyes.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S29 - Do not empty into drains.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S60 - This material and its container must be disposed of as hazardous waste.

Contains:

p-anisidinium chloride

2.3 Other hazards:

none information

3. Composition/Information on ingredients

Chemical composition:

Name	Concentration (C)	Classification		
		Directive 67/ 548/CEE	Regulation CE/1272/2008	
propan-1-ol	75 <= C < 80		R67	H336
Cas No 71-23-8		F	R11	H225
CE No 200-746-9		Xi	R41	H318
INDEX No 603-003-00-0				
ethanol	16 <= C < 22	F	R11	H225
Cas No 64-17-5				
CE No 200-578-6				
INDEX No 603-002-00-5				
p-anisidinium chloride	0 <= C < 1	T+	R26/27/28	H300
Cas No 20265-97-8			R33	H310
CE No 243-657-0				H330
				H373

The complete text of -R- phrases is specified in section 16.

4. First-aid measures

4.1 Description of first aid measures

Inhalation

Remove to fresh air. If breathing is irregular seek medical advice.

Skin contact

Remove contaminated clothing. Wash immediately with plenty of water and soap. In case of irritation seek medical attention. Wash contaminated clothing before using them.

Eyes contact

Product: **IODINE VALUE TEST KIT ON PALMOIL**

Irrigate copiously with clean, fresh water for at least 15 minutes, keeping opened eyes. Seek medical attention.

Ingestion

Obtain medical attention. Don't induce vomiting. Never give anything by mouth to an unconscious person.

Other

Change contaminated clothing.

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

not available

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

not available

5. Fire-fighting measures

5.1 Extinguishing media

Advised extinguishing agents:

CO₂, nebulized water, foam, chemical powder for flammable liquids.

Unappropriate extinction methods:

Jets of water. Water may not be effective to extinguish the fire, nevertheless it should be used to cool the containers exposed to flames and prevent fires and explosions. For leakage and spillage that have not caught fire, nebulized water may be used to disperse the flammable vapours and protect the people involved in stopping the leakage.

5.2. Special hazards arising from the substance or mixture

The product under fire condition may develop irritant/toxic gas (NO_x, HCl)

5.3. Advice for firefighters

wear equipment complete with helmet and face shield and protection of the neck, selfbreathing apparatus at pressure or demand, insulative jacket and trousers, with bands around the arms, legs and waist. Water used in fire-fighting has to be disposed following Local regulation.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. In case of formation of vapours use suitable protective devices. Supply a good air circulation. Move away any unauthorised person.

6.2. Environmental precautions

Collect the product in suitable container for disposal. Notify authorities if product enters sewer or public waters.

6.3. Methods and material for containment and cleaning up

Cover the spillage with inert absorbent material. Collect as far as possible the resulting mass and discard the remainder by spraying water.

6.4 Reference to other sections

Product: **IODINE VALUE TEST KIT ON PALMOIL**

Refer to paragraphs 8 and 13 for more information.

7. Handling and storage

7.1. Precautions for safe handling

Supply good air circulation in working area. Vapours may ignite with explosion, it is therefore necessary to avoid accumulation keeping the windows and doors open, ensuring crossventilation.

7.2. Conditions for safe storage, including any incompatibilities

Store the packaging closed in a fresh and ventilated area, far from sources of ignition. Store at temperatures between -20° C.

7.3. Specific end use(s)

For particular uses of the product, is necessary to refer to the specific information or contact the technical service of the Company.

8. Exposure controls/personal protection

8.1. Control parameters

Propan-1-ol

TLV: 200 ppm as TWA 400 ppm STEL as A3 (confirmed animal carcinogen with unknown relevance to humans); Proposed amendments (ACGIH 2005).

ethanol

TLV-ACGH:1880mg/m³(as TWA)

8.2 Exposure controls

Avoid all unnecessary exposure, handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals and at the end of the work shift.

8.3 Individual protection

The DPI's choice must be done on the basis of the test's results obtained according to the rule EN 374

Hand protection:	: protective gloves
Eye protection	: protective goggles
Skin protection	: suitable protective clothing
Respiratory protection	: mask with filter in case of nebulized product

9. Physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	colourless liquid	
Odour	characteristic	
Odour threshold	not available	
pH	acid	
Melting point/freezing point	not available	
Initial boiling point and boiling range	not available	
Flash point	< 55°C	
Evaporation rate	not available	

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Flammability (solid, gas)	not pertinent
Upper/lower flammability or explosive limits	not available
Vapour pressure	not available
Vapour density	not available
Relative density	not available
Solubility	soluble in alcohol
Water solubility	soluble
Partition coefficient: n-octanol/water	not available
Auto-ignition temperature	not available
Decomposition temperature	not available
Viscosity	not available
Explosive properties	not explosive
Oxidising properties	not oxidising

9.2. Other information

VOC (Directive 1999/13/CE): 98%

10. Stability and reactivity

10.1. Reactivity

In contact with strong oxidants exothermal reaction may occur.

ETHANOL: It reacts slowly with calcium hypochlorite, silver oxide and ammonia, causing fire and explosion. It reacts violently with strong oxidants such as nitric acid, silver nitrate, mercury nitrate or magnesium perchlorate, causing fire and explosion.

propan-1-olo: it reacts with strong oxidants, causing fire and explosion. The vapour mixes well with air, it may form explosive mixtures. It attacks plastic and rubber.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

ETHANOL: It reacts violently with strong oxidants such as nitric acid, silver nitrate, mercury nitrate or magnesium perchlorate, causing fire and explosion.

p-anisidinium chloride

possibility of hazardous reactions with: strong acids, halides, anidrydes, strong oxidants

10.4. Conditions to avoid

none information

10.5. Incompatible materials

none information

10.6. Hazardous decomposition products

Due to thermal decomposition or in the event of a fire vapours may be produced potentially dangerous to health.

11. Toxicological information

11.1. Information on toxicological effects

Acute effects:

Product: **IODINE VALUE TEST KIT ON PALMOIL**

The product is harmful following acute exposure to it and causes serious health hazards if inhaled, ingested or brought into contact with skin.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

Propan-1-ol

ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its vapor and ingestion.

INHALATION RISK: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20 ° C, but on spraying or dispersing, much faster.

Effects of short-term and Substance 'irritates the eyes The substance may cause effects on the central nervous system. Exposure to high concentrations can lead to unconsciousness.

REPEATED OR LONG TERM EFFECTS OF EXPOSURE: The liquid defats skin.

ACUTE HAZARDS / SYMPTOMS

INHALATION Loss of coordination of movements. Confusion. Vertigo. Drowsiness.

Headache. Nausea. Weakness.

SKIN Dry skin.

Bloodshot eyes. Pain. Blurred vision.

INGESTION Abdominal pain. Sore throat. Vomiting. (See Inhalation).

NOTE The use of alcoholic beverages enhances the harmful effect.

ethanol

ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its vapor and ingestion.

INHALATION RISK: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20 ° C.

SHORT TERM EFFECTS OF EXPOSURE: The substance 'irritating to eyes. Inhalation of high concentration of vapor may cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system

REPEATED OR LONG TERM EFFECTS OF EXPOSURE: The liquid degreases the skin.

The substance may have effects on the high central nervous system, respiratory tract, causing irritation, headaches, tiredness and lack of concentration. See Notes.

ACUTE HAZARDS / SYMPTOMS

INHALATION Cough. Headache. Fatigue. Drowsiness.

SKIN Dry skin.

Bloodshot eyes. Pain. Burn.

INGESTION Cough. Headache. Confusion. Vertigo. Unconsciousness.

NOTES Ethanol consumption during pregnancy can have adverse effects on the unborn child. Chronic ingestion of ethanol may cause liver cirrhosis.

p-anisidinium chloride

after skin contact it may form methemoglobin with headache, cardiac diseases, lowering blood pressure. Main symptom: cyanosis.

Corrosive/irritation power:

Eyes: serious ocular lesions

Skin: very irritant

12. Ecological information

12.1. Toxicity:

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

ETHANOL

LC50: > 8140 mg/l/48h (Leuciscus idus)

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12.2. Persistence and degradability:

ETHANOL

COD: 2000 mg / g

Biodegradability: 94%

12.3. Bioaccumulative potential:

ETHANOL

log Pow <-0.32

propan-1-olo:

logPow:0,25

12.4. Mobility in soil: not available

12.5. Results of PBT and vPvB assessment: not available

12.6. Other adverse effects: not available

This product doesn't contain AOX

13. Disposal considerations

Operate following the current Local or National Laws.

The non reclaimed containers have to be disposed as the product.

Consider the possibility of burning the product in a suitable incinerator.

14. Transport information

These goods must be packed in their original packings or in packings made of materials resistant to their content and not reacting dangerously with it. This good, being shipped under the provision for limited quantity, is packed and labelled in accordance with ADR Regulation –chapter 3.4- IMDG Code –chapter 3.4- IATA regulation – chapter 5.0.3- (i.e. 0.5 l for inner packaging max. and 1 l for outer packaging max.) and no other provision has to be respected.

RID/ADR:

UN number: 1987

Class: 3

Classification: F1

Packing group: II

Tunnel restriction code: (D/E)

Transport by sea (IMDG Code):

UN number: 1987

Class: 3

Packaging group: II

EmS: F-A, S-B

Marine pollutant no

Transport by air (ICAO-IATA):

Class: 3

Packaging group: II

Shipping name: Alcohols, n.o.s. (Contains: propan-1-ol, ethanol)

Labelling: n.3

Product: **IODINE VALUE TEST KIT ON PALMOIL**

15. Regulatory information

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

Regulation	Cas	Substance
428/2009 ex CE 1334/2000 Ann.1	-	-
273/04 Tab.1 Cat.1	-	-
273/04 Tab.1 Cat.2	-	-
273/04 Tab.1 Cat.3	-	-
1907/2006 Ann. XIV (Substances SVHC)	-	-
552/2009 (amending Reg. CE 1907/2006 as regards Ann. XVII)	-	-
238/05 (Seveso ter) Ann.1 part 1	-	-
238/05 (Seveso ter) Ann.1 part 2	-	Mixture classified HIGHLY FLAMMABLE

15.2. Chemical safety assessment

none

16. Further information

Description of the sentences of risk set out in paragraph 3

H225 = Highly flammable liquid and vapour.

H318 = Causes serious eye damage.

H336 = May cause drowsiness or dizziness.

H300 = Fatal if swallowed.

H310 = Fatal in contact with skin.

H330 = Fatal if inhaled.

H373 = May cause damage to organs through prolonged or repeated exposure .

Description of the safety advice (R) exposed to point 3:

R11 = Highly flammable.

R26/27/28 = Very toxic by inhalation, in contact with skin, if swallowed.

R33 = Danger of cumulative effects.

R41 = Risk of serious damage to eyes.

R67 = Vapours may cause drowsiness and dizziness.

Classification based on data of all components of the mixture

GENERAL BIBLIOGRAPHY:

1. Directive 1999/45/EC as amended

2. Directive 67/548/EEC and its amendments and adjustments (technical adjustment XXIX)

3. Regulation (EC) 1907/2006 of the European Parliament (REACH)

4. Regulation (EC) 1272/2008 of the European Parliament (CLP)

5. Regulation (EC) 790 / 2009

6.Regulation (EU) 453/2010

Product: **IODINE VALUE TEST KIT ON PALMOIL**

7. The Merck Index. Ed 10
8. Handling Chemical Safety
9. NIOSH - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique
11. Patty - Industrial Hygiene and Toxicology
12. NI Sax - Dangerous Properties of Industrial Materials-7, 1989 Edition

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.