

SAFETY DATA SHEET

Issuing date 06-Jun-2015

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code 002145
Product name 002145

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

Recommended use Additive
Uses advised against No information available

Details of the supplier of the safety data sheet

Company

Markem-Imaje S.A.S.
9, rue Gaspard Monge - BP 110
26501 Bourg-lès-Valence cedex
France

e-mail: sds@markem-imaje.com
Tel: (33) 4 75 75 55 00
Fax: (33) 4 75 82 98 10

MARKEM-IMAJE GMBH
Schockenriedstr. 8 C
70565 Stuttgart
Phone: +49 711 78403-0
Fax: +49 711 78403-35

Emergency Telephone Numbers:
Markem-Imaje S.A.S.: (33) 4 75 75 55 00
INRS* (Orfila): (33) 1 45 42 59 59

Emergency telephone number

Markem-Imaje S.A.S.: (33) 4 75 75 55 00
INRS (Orfila): (33) 1 45 42 59 59

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4 - (H302)
Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity - single exposure	Category 3 - (H336)
Flammable liquids	Category 2 - (H225)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
For the full text of the R-phrases mentioned in this Section, see Section 16

Section 2: HAZARDS IDENTIFICATION

Symbol(s)

Xi - Irritant
F - Highly flammable

R-code(s)

F;R11 - Xi;R41 - R67

Label elements**Product identifier**

200-746-9

**Signal word**

Danger

hazard statements

H302 - Harmful if swallowed
H318 - Causes serious eye damage
H336 - May cause drowsiness or dizziness
H225 - Highly flammable liquid and vapour

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapours/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/ .? /equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

EYES

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTRE or doctor/physician

FIRE

In case of fire: Use CO₂, dry chemical, or foam for extinction

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTRE or doctor/physician if you feel unwell

INGESTION

IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Other hazards

May be harmful in contact with skin

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the preparation

Substance.

Chemical Name	EC-No	CAS-No	Weight %	Classification	GHS Classification
n-Propyl alcohol	200-746-9	71-23-8	90 - 100	F; R11 Xi; R41 R67	Eye Dam. 1 (H318) STOT SE 3 (H336) Flam. Liq. 2 (H225)

For the full text of the R-phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

Description of first aid measures

General advice

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.

Inhalation

Move to fresh air. If symptoms persist, call a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapours.

Skin contact

Wash off immediately with plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Immediately flush with plenty of water. Keep eye wide open while rinsing.

Ingestion

Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

Protection of first-aiders

Remove all sources of ignition. Use personal protective equipment.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

water. foam. dry chemical. Carbon dioxide (CO₂). water spray. alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

high volume water jet

Special hazards arising from the substance or mixture

flammable Keep product and empty container away from heat and sources of ignition Risk of ignition

Advice for fire-fighters**Protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective suit.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures**Personal precautions**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Beware of vapours accumulating to form explosive concentrations.

Methods and material for containment and cleaning up**Methods for containment**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labelled containers. Soak up with inert absorbent material. Take precautionary measures against static discharges.

Section 7: HANDLING AND STORAGE

Precautions for safe handling**Handling**

Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

Hygiene measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

Conditions for safe storage, including any incompatibilities**Storage**

Keep tightly closed in a dry and cool place. Keep in properly labelled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat and sources of ignition. Keep away from heat. Protect from light.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical Name	EU	The United Kingdom	France	Spain	Germany
n-Propyl alcohol 71-23-8		TWA: 200 ppm TWA: 500 mg/m ³ STEL: 250 ppm STEL: 625 mg/m ³ Sk*	TWA: 200 ppm TWA: 500 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 400 ppm STEL: 1000 mg/m ³ vía dérmica*	-

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
n-Propyl alcohol 71-23-8	-	TWA: 200 ppm STEL: 400 ppm	-	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 250 ppm STEL: 620 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ H*

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
n-Propyl alcohol 71-23-8	TWA: 200 ppm TWA: 500 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ H*	STEL: 600 mg/m ³ TWA: 200 mg/m ³	TWA: 100 ppm TWA: 245 mg/m ³ STEL: 150 ppm STEL: 306.25 mg/m ³ H*	TWA: 100 ppm STEL: 300 ppm Sk*

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

Exposure controls

Engineering measures Ensure adequate ventilation. Use explosion-proof equipment.

Personal protective equipment

Eye/face protection

tightly fitting safety goggles. face-shield.

Hand protection

Wear protective gloves. impervious butyl rubber gloves.

Skin and body protection

antistatic boots. Wear fire/flame resistant/retardant clothing. impervious gloves. long sleeved clothing. Chemical resistant apron. apron.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls Do not allow material to contaminate ground water system.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Colour	colourless clear
Odour	Alcohol		
Odour Threshold	No information available		
Property	Values	pH	No information available
Melting/freezing point	<-125°C / <-193°F	Boiling point/range	>95°C / >203°F
Flash point	>15°C / >59°F		
Flammability Limits in Air			
lower flammability limit	2.1	Solubility in other solvents	No information available
upper flammability limit	13.5	Decomposition temperature	No information available
Autoignition temperature	>350°C / >662°F	Dynamic viscosity	No information available
Kinematic viscosity	No information available		
Oxidizing properties	No information available		

OTHER INFORMATION

Vapour pressure	2.7 kPa (25 °C)
Relative vapour density	>1
Density	0.805 (20 °C)
Water solubility	partly soluble

Section 9: PHYSICAL AND CHEMICAL PROPERTIESPartition coefficient: n-octanol/water $\log P(o/w) = 0.25$ **Section 10: STABILITY AND REACTIVITY****Reactivity**

no data available

Chemical stability

Stable.

Explosion Data

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge yes.

Possibility of hazardous reactions**Hazardous polymerisation**

no.

Hazardous reactions

strong oxidizing agents.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Incompatible with oxidizing agents. Incompatible with strong acids and bases.

Hazardous decomposition products

none.

Section 11: TOXICOLOGICAL INFORMATION

The following values are calculated based on chapter 3.1 of the GHS document

1,870.00mg/kg

4,049.00mg/kg

Acute Toxicity***Inhalation***

May cause irritation of respiratory tract. May be harmful by inhalation . May be harmful by inhalation . May cause irritation of respiratory tract. May be harmful if inhaled.

Skin contact

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Eye contact

Irritating to eyes. May cause irreversible eye damage.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May be harmful if swallowed. Ingestion may cause irritation to mucous membranes. May be harmful if swallowed.

Section 11: TOXICOLOGICAL INFORMATION

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
n-Propyl alcohol	= 1870 mg/kg (Rat)	= 4049 mg/kg (Rabbit)	> 13548 ppm (Rat) 4 h

Chronic toxicity

Inhalation of vapours in high concentration may cause irritation of respiratory system. Concentration above the admissible concentration at the workplace may cause dizziness, headache and inebriation. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Avoid repeated exposure.

Section 12: ECOLOGICAL INFORMATION

Biodegradation

Some ingredients of this material have some potential to biodegrade, but most ingredients have a limited potential to biodegrade or have not been tested.

Chemical Name	CAS-No	log Pow	Toxicity to Algae	Toxicity to microorganisms	German Water Class (VwVwS) Annex 2
n-Propyl alcohol	71-23-8	0.34			176

Chemical Name	CAS-No	Daphnia Magna (Water Flea)	Toxicity to fish
n-Propyl alcohol	71-23-8	3339 - 3977: 48 h Daphnia magna mg/L EC50 Static 3642: 48 h Daphnia magna mg/L EC50	4480: 96 h Pimephales promelas mg/L LC50 flow-through

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues/Unused Products

Dispose of in accordance with local regulations

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN-No	UN1274
14.2. Proper shipping name	n-propanol
14.3. Hazard Class	3
14.4. Packing group	II
14.5. Marine pollutant	none.
EmS	F-E, S-D

ADR

14.1. UN-No	UN1274
14.2.	
Proper shipping name	n-propanol
14.3. Hazard Class	3
14.4. Packing group	II
Classification Code	F1

Section 14: TRANSPORT INFORMATION**IATA**

14.1. UN-No	UN1274
14.2. Proper shipping name	n-propanol
14.3. Hazard Class	3
14.4. Packing group	II

Section 15: REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture**

In accordance with Regulation (EC) No. 1272/2008

International Inventories

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Chemical Safety Assessment**Section 16: OTHER INFORMATION****Key or legend to abbreviations and acronyms****Full text of R-phrases referred to under sections 2 and 3**

R11 - Highly flammable
R41 - Risk of serious damage to eyes
R67 - Vapours may cause drowsiness and dizziness

Issuing date 06-Jun-2015

Reason for revision All

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet