

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product form : Mixture  
Trade name : TUBALL MATRIX 207

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

**1.2.1. Relevant identified uses**

Use of the substance/mixture : The plasticizer is to be used for thermoset compounds to add electrical conductivity

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet ►**

Europe:	USA:	Asia:	China:	India:
OCSiAI Europe S.a.r.l. L-3364, Leudelange, 1, rue de la Poudrerie, Grand Duchy of Luxembourg	OCSiAI LLC 500 S Front St., Suite 860, Columbus, OH 43215, USA	OCSiAI Asia Pacific Co., Ltd. Office 208, Pilot Plant Bldg., Incheon Technopark 12 Gaetbeol-ro, Yeonsu-gu, Incheon, 406-840 Republic of Korea	OCSiAI Hong Kong Limited No. 1102, 11/F, Lippo Sun Plaza, 28 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong	OCSiAI PRIVATE LIMITED A504 Universal BusinessPark, Ansa Industrial Estate, Chandivali, Andheri (E) Mumbai 400072
T +352 27 99 03 73 09.00-17.00 GMT+2 europe@ocsial.com	T +1 415 906 5271 09.00-17.00 GMT-4 usa@ocsial.com	T +82 32 260 0407 09.00-17.00 GMT+9 asiapacific@ocsial.com	T +852 3575 3943 09:00-17:00; GMT+8 china@ocsial.com	T +91 22 4120 8615 09:00-17:00; GMT+5.5 india@ocsial.com

**1.4. Emergency telephone number ►**

Europe:	USA:	Asia:	China:	India:
+352 27 99 03 73 09.00-17.00; GMT+2	+1 415 906 5271 09.00-17.00; GMT-4	+82 32 260 0407 09.00-17.00; GMT+9	+852 3575 3943 09:00-17:00; GMT+8	+91 22 4120 8615 09:00-17:00; GMT+5.5

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Skin corrosion/irritation, Category 2 H315  
Serious eye damage/eye irritation, Category 2 H319  
Skin sensitisation, Category 1 H317  
Full text of H statements : see section 16

**Adverse physicochemical, human health and environmental effects**

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

**2.2. Label elements ►**

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning  
Hazardous ingredients : Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
Hazard statements (CLP) : H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
Precautionary statements (CLP) : P261 - Avoid breathing dust, mist, vapours.  
P264 - Wash hands thoroughly after handling.  
P280 - Wear protective gloves, eye protection, protective clothing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.

# TUBALL MATRIX 207

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	(CAS-No.) 68609-97-2 (EC-No.) 271-846-8 (REACH-No.) 01-2119485289-22	90	Skin Irrit. 2, H315 Skin Sens. 1, H317
Single wall carbon nanotubes*	(CAS-No.) Not available (EC-No.) 943-098-9 (REACH-No.) 01-2120130006-75-0000	10	Eye Irrit. 2, H319

\* Single wall carbon nanotubes TUBALL™

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures ►

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical attention.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Get medical attention.

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

Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media ►

Suitable extinguishing media	: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ).
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture ►

Hazardous decomposition products in case of fire	: Carbon dioxide. Carbon monoxide.
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### 5.3. Advice for firefighters ►

Protection during firefighting	: Full face mask. Positive pressure self-contained breathing apparatus (SCBA).
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment	: Wear suitable protective clothing.
Emergency procedures	: Ensure adequate ventilation. Evacuate area.

#### 6.1.2. For emergency responders ►

Protective equipment	: Wear suitable protective clothing, gloves and eye/face protection. In case of fire: Positive pressure self-contained breathing apparatus (SCBA).
Emergency procedures	: Provide adequate ventilation. Evacuate area. Avoid inhalation of vapours.

# TUBALL MATRIX 207

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 6.2. Environmental precautions ►

Do not allow to enter into surface water or drains. Collect contaminated extinguishing water separately and must not enter the sewage system.

### 6.3. Methods and material for containment and cleaning up ►

For containment : Clean spills promptly. Ventilate affected area. Stop leak if safe to do so.  
Methods for cleaning up : Clear up rapidly by scoop or vacuum. Collect in closed container and remove to a safe place for disposal by burning.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin, eyes and clothing. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection. Avoid breathing dust, fume. To prevent thermal burns avoid contact with hot product.  
Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities ►

Storage conditions : Store in dry, well-ventilated area. Store at ambient temperature. Protect from sunlight. Protect from moisture.  
Incompatible products : Oxidizing agent.  
Maximum storage period : 3 years  
Storage temperature : 5 – 40 °C  
Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition.  
Information on mixed storage : Store away from water (including sewage plant).  
Special rules on packaging : Keep only in original container. Keep container tightly closed.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters ►

<b>Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.</b>	
<b>DNEL/DMEL (Workers)</b>	
Long-term - systemic effects, dermal	1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3.6 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.87 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.106 mg/l
PNEC aqua (marine water)	0.011 mg/l
PNEC aqua (intermittent, freshwater)	0.072 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	307.16 mg/kg dwt
PNEC sediment (marine water)	30.72 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	10 mg/l

# TUBALL MATRIX 207

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 8.2. Exposure controls ►

#### Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

#### Hand protection:

Chemically resistant protective gloves. EN 374. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Butyl rubber	6 (> 480 minutes)			EN 374
Reusable gloves	Nitrile rubber (NBR)	10 - 480 minutes			EN 374
Reusable gloves	Solvent-resistant gloves (Butyl rubber)				EN 374
Reusable gloves	Neoprene rubber (HNBR)				EN 374

#### Eye protection:

Chemical goggles or safety glasses. EN 166. Emergency eye wash fountain with clean water

#### Skin and body protection:

Protective clothing (with elasticated cuffs and closed neck). EN 14605

#### Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Selection of respiratory protection must be based on the result of the risk assessment

#### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties ►

Physical state	: Solid
Appearance	: Flakes. Pasty.
Colour	: Black.
Odour	: Slight.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: > 200 °C (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 142 °C (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)
Auto-ignition temperature	: No data available
Decomposition temperature	: > 200 °C (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

# TUBALL MATRIX 207

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid ►

Keep away from open flames, hot surfaces and sources of ignition. Direct sunlight. Moisture.

### 10.5. Incompatible materials ►

Oxidizing agent.

### 10.6. Hazardous decomposition products ►

Carbon dioxide. Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects ►

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	
LD50 oral rat	> 26.8 g/kg
LD50 dermal rabbit	> 4000 mg/kg
LC50 inhalation rat (mg/l)	> 0.15 mg/l - 7 Hours

Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitisation : May cause an allergic skin reaction.  
Germ cell mutagenicity : Not available (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.: Not classified)  
Carcinogenicity : Not available  
Reproductive toxicity : Not available (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.: Not classified)  
STOT-single exposure : Not available  
STOT-repeated exposure : Not available

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	
LOAEL (dermal, rat/rabbit, 90 days)	10 mg/kg bodyweight/day
NOAEL (dermal, rat/rabbit, 90 days)	1 mg/kg bodyweight/day

Aspiration hazard : Not available

## SECTION 12: Ecological information

### 12.1. Toxicity ►

Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	
LC50 fish - 96h	> 100 mg/l <i>Oncorhynchus mykiss</i> (Rainbow trout) - OECD 203
EC50 crustacea - 48h	7.2 mg/l <i>Daphnia magna</i> (Water flea) - OECD 202
EC50 algae - 72h	843.75 mg/l <i>Selenastrum capricornutum</i> - OECD 201

# TUBALL MATRIX 207

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 12.2. Persistence and degradability ►

#### Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Persistence and degradability	Readily biodegradable.
Biodegradation	87 % - 28 days - OECD 301F

### 12.3. Bioaccumulative potential ►

#### Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Partition coefficient n-octanol/water (Log Pow)	> 3.77 (20 °C) - OECD 107
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### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment ►

#### Component

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Single wall carbon nanotubes	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Dispose of this material and its container at hazardous or special waste collection point.
Waste treatment methods	: Disposal through controlled incineration or authorised waste dump.
Sewage disposal recommendations	: Prevent entry to sewers and public waters.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

# TUBALL MATRIX 207

## Safety Data Sheet

according to Regulation (EU) 2015/830

### Inland waterway transport

Not regulated

### Rail transport

Not regulated

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations ►

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
Reference code	Applicable on	Entry title or description
3(b)	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations ►

##### Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)  
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. is listed

SZW-lijst van mutagene stoffen : Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

##### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment ►

For the following substances of this mixture a chemical safety assessment has been carried out

Single wall carbon nanotubes

## SECTION 16: Other information

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number

# TUBALL MATRIX 207

## Safety Data Sheet

according to Regulation (EU) 2015/830

CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

### Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Revision : All recent revision(s) are noted by a bold triangle pointed to right '►'.  
Disclaimer : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

SDS EU (REACH Annex II) OCSiAI

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