

SECTION 1: Identification of the hazardous chemical or mixture and of the supplier or manufacturer

1.1. GHS product identifier

Product form : Mixture
Trade name : TUBALL MATRIX 203

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Industrial use as additive in polymers, resins and/or coatings

1.4. Supplier's details

Supplier

USA:
OCSiAl LLC
950 Taylor Station
Road
Suite W
Gahanna, OH 43230
T +1 415 906 5271
09.00-17.00 GMT-4
usa@ocsial.com

1.5. Emergency phone number

Americas : +1 202 464 2554 (English)
Americas : +1 215 207 0061 (English, Spanish, Portuguese)
Mexico : +52 55 5004 8763 (English, Spanish)
Brazil : +55 11 3197 5891 (Portuguese, English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS MX classification

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Germ cell mutagenicity, Category 2	H341	Suspected of causing genetic defects.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.
Specific target organ toxicity – Repeated exposure, Category 1	H372	Causes damage to organs (Skin, blood, kidneys, lungs) through prolonged or repeated exposure.

Full text of H-statements: see section 16

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According to the NOM-018-STPS-2015

2.2. Label elements

GHS MX labelling

Hazard pictograms (GHS MX)



Signal word (GHS MX)

: Danger

Hazard statements (GHS MX)

: H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H341 - Suspected of causing genetic defects.
H372 - Causes damage to organs (Skin, blood, kidneys, lungs) through prolonged or repeated exposure.

Precautionary statements (GHS MX)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust, fume, gas, mist, spray, vapours.
P261 - Avoid breathing dust, fume, gas, mist, spray, vapours.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTER or doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification
Adverse physicochemical, human health and
environmental effects

: None under normal conditions.
Suspected of causing genetic defects, May cause an allergic skin reaction, Causes serious eye
irritation, Toxic to aquatic life with long lasting effects, Causes damage to organs through
prolonged or repeated exposure, May cause respiratory irritation, Causes skin irritation.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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According to the NOM-018-STPS-2015

3.2. Mixtures

Name	Product identifier	%	GHS MX classification
2,3-epoxypropyl neodecanoate	CAS-No.: 26761-45-5	70	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Muta. 2, H341 STOT SE 3, H335 STOT RE 1, H372
Polymer*	CAS-No.: Trade Secret	10 – 14	Not classified
Single wall carbon nanotubes**	CAS-No.: 7440-44-0 (Representative only)	10	Eye Irrit. 2, H319
Alkylolammonium salt	CAS-No.: 398475-96-2	6 – 10	Eye Irrit. 2A, H319 Skin Sens. 1, H317

*Chemical name, CAS number and/or exact concentration have been withheld as confidential business information

Comments : ** Single wall carbon nanotubes TUBALL™

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
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 contaminated clothing before reuse. Wash with plenty of soap and water. Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/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. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Get medical attention.

4.2. Most important symptoms/effects, acute and delayed

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

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Powder, Alcohol-resistant foam, Water spray, Carbon dioxide (CO2).
Unsuitable extinguishing media	: None known.

5.2. Specific hazards arising from the chemical

Fire hazard	: Flammable vapours can accumulate in head space of closed systems. Residue may be flammable and explosive.
Explosion hazard	: May form flammable/explosive vapour-air mixture.
Hazardous decomposition products in case of fire	: Carbon dioxide. Carbon monoxide.

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5.3. Special protective actions for fire-fighters

- Protection during firefighting : Full face mask. Positive pressure self-contained breathing apparatus (SCBA). Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Measures to be taken in case of accidental spillage or accidental leakage

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing.
Emergency procedures : Ventilate spillage area. Ensure adequate ventilation. Evacuate area. Do not breathe dust, fume, gas, mist, spray, vapours. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye/face protection. In case of fire: Positive pressure self-contained breathing apparatus (SCBA). For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Provide adequate ventilation. Evacuate area. Avoid inhalation of vapours.

6.2. Environmental precautions

Avoid release to the environment. 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 : Mechanically recover the product. Clear up rapidly by scoop or vacuum. Collect in closed container and remove to a safe place for disposal by burning. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

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. To prevent thermal burns avoid contact with hot product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, gas, mist, spray, vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in dry, well-ventilated area. Store at ambient temperature. Keep container tightly closed. Protect from sunlight. Store locked up. Store in a well-ventilated place. Keep cool.
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 container tightly closed.

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According to the NOM-018-STPS-2015

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation. Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment : Gloves. Safety glasses. Protective clothing.
Hand protection : Chemically resistant protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves, Reusable gloves	Nitrile rubber (NBR)		≥ 0.18		

Eye protection : Chemical goggles or safety glasses
Skin and body protection : Protective clothing (with elasticated cuffs and closed neck)
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. 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 : < -60 °C (2,3-epoxypropyl neodecanoate)
Freezing point : Not applicable
Boiling point : 278 °C (2,3-epoxypropyl neodecanoate)
Flash point : 126 °C (2,3-epoxypropyl neodecanoate)
Flammability (solid, gas) : Non flammable.
Auto-ignition temperature : 397 (2,3-epoxypropyl neodecanoate)
Decomposition temperature : No data available
Vapour pressure : No data available
Relative vapour density at 20°C : No data available
Relative density : No data available
Solubility : Slightly soluble in water. Soluble in organic solvents.
Partition coefficient n-octanol/water (Log Pow) : No data available
Partition coefficient n-octanol/water (Log Kow) : No data available
Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available
Explosive properties : Product is not explosive.
Oxidising properties : Non oxidizing.

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Explosive limits : Not applicable

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.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

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

2,3-epoxypropyl neodecanoate

LD50 oral rat	> 9700 mg/kg
LD50 dermal rat	3800 mg/kg

Alkylolammonium salt

LD50 oral rat	> 5000 mg/kg
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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 : Suspected of causing genetic defects.
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Single wall carbon nanotubes

NOAEL (animal/female, F0/P)	no adverse effects seen at highest dose tested > 1000 mg/kg bw/day - OECD 422
NOAEL (animal, F1)	> 1000 mg/kg bw/day - for adverse effects on prenatal development (conceptus to birth) - OECD 422

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Single wall carbon nanotubes

NOAEL (animal, F1)	> 1000 mg/kg bw/day - for adverse effects on postnatal development (pup) - OECD 422
STOT-single exposure	: May cause respiratory irritation.

2,3-epoxypropyl neodecanoate

STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Causes damage to organs (Skin, blood, kidneys, lungs) through prolonged or repeated exposure.

2,3-epoxypropyl neodecanoate

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Single wall carbon nanotubes

NOAEL (oral, rat, 90 days)	no adverse effects seen at highest dose tested > 1000 mg/kg bodyweight/day - OECD 422
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

2,3-epoxypropyl neodecanoate

LC50 fish - 96h	≈ 5 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 crustacea - 48h	≈ 4.8 mg/l Test organisms (species): Daphnia magna

Alkylolammonium salt

LC50 fish - 96h	8 mg/l Oncorhynchus mykiss (Rainbow trout) - OECD 203
ErC50 algae - 72h	> 1 mg/l Pseudokirchneriella subcapitata - OECD 201

12.2. Persistence and degradability

Alkylolammonium salt

Persistence and degradability	Not readily biodegradable.
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12.3. Bioaccumulative potential

2,3-epoxypropyl neodecanoate

Partition coefficient n-octanol/water (Log Pow)	4.4 @ 20 °C
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12.4. Mobility in soil

Not available.

12.5. Other adverse effects

Ozone	: Not classified
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Regional legislation (waste)	: Dispose of this material and its container at hazardous or special waste collection point.
Additional information	: Clean up even minor leaks or spills if possible without unnecessary risk.
Sewage disposal recommendations	: Prevent entry to sewers and public waters.
Waste treatment methods	: Disposal through controlled incineration or authorised waste dump. Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with NOM / UN RTDG / IMDG / IATA

NOM	UN RTDG	IMDG	IATA
14.1. UN number			
3077	3077	3077	3077
14.2. Proper Shipping Name			
SUBSTANCIA SOLIDA POTENCIALMENTE PELIGROSA PARA EL MEDIO AMBIENTE, N.E.P.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Environmentally hazardous substance, solid, n.o.s.
14.3. Transport hazard class(es)			
9	9	9	9
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

NOM

Special provisions (NOM/SCT)	: 274, 331, 335
Limited quantities (NOM/SCT)	: 5 kg
Exempted quantities (NOM/SCT)	: E1
Packing instruction (NOM/SCT)	: P002, IBC08, LP02
Special packing provisions (NOM/SCT)	: PP12, B3
Portable tank and bulk container instructions (NOM/SCT)	: T1, BK2

UN RTDG

Special provisions (UN RTDG)	: 274, 331, 335, 375
Limited quantities (UN RTDG)	: 5 kg

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According to the NOM-018-STPS-2015

Excepted quantities (UN RTDG)	: E1
Packing instruction (UN RTDG)	: P002, IBC08, LP02
Special packing provisions (UN RTDG)	: PP12, B3
Portable tank and bulk container special instructions (UN RTDG)	: T1, BK2, BK3
Portable tank and bulk container special provisions (UN RTDG)	: TP33

IMDG

Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP02, P002
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: BK1, BK2, BK3, T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197
ERG code (IATA)	: 9L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

National regulations

2,3-epoxypropyl neodecanoate:

Listed in the INSQ (National Inventory of Chemical Substances)

15.2. International regulations

2,3-epoxypropyl neodecanoate:

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on the Canadian DSL (Domestic Substances List)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Single wall carbon nanotubes:

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

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Alkylolammonium salt:

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: Other information including those related to the preparation and updating of safety data sheets

Issue date : 17/05/2023

Full text of H-statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H372	Causes damage to organs through prolonged or repeated exposure.

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
CAS-No.	Chemical Abstract Service number
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
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
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

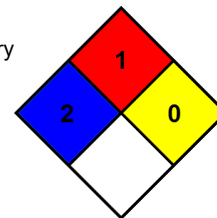
NFPA (National Fire Protection Association)

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- NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.
- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



- Hazard Rating
- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
- Personal protection : B - Safety glasses, Gloves
s - Full suit
- 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.

Safety Data Sheet (SDS), Mexico

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.