Safety data sheet Rev. JUNE 2015
Rev. 7

OSMO-DF-260
Material Safety Data Sheet

1 IDENTIFICATION OF THE PRODUCT AND THE COMPANY

1.1 IDENTIFICATION OF THE PRODUCT

Chemical name:	Aqueous solution of polycarboxylic acids and phosphonic acid derivative
Commercial name:	OSMO-DF-260
Product code:	100512,100513,100514,100515,100516,100517,100518,100519, 100520,100521,100522,100523,100524,100950,101273,101422

1.2 RELEVANT IDENTIFIED USED OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

identified uses:	Antiscalant
uses advised against:	Industrial Use Only

1.3 INFORMATION PROVIDER OF SAFETY DATA SHEET

Company identification:

OSMO SISTEMI S.r.l.
Via Toniolo, 8/b
61032 Fano (PU)
Tel. 0721/855023

1.4 Emergency telephone number

+44 (0) 1235 239 670

2 IDENTIFICATION OF DANGERS

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

The preparation is classified as hazardous pursuant to the provisions of Directives 67/548 / EEC relating to dangerous substances and Directive 1999/45 / EC relating to dangerous preparations and its following amendments and adjustments. The preparation requires a safety data sheet according to Regulation (EC) n.1272 / 2008 concerning the classification of substances and mixtures, labeling and packaging, called CLP.
Further information on the risks to health and / or environmental hazards can be found in sections. 11 and 12 of this sheet.

Classification (CE 1272/2008)

Physical and Chemical Hazards	Met. Corr. 1 – H290
Health	Eye dam. 1 – H318
Environment	Non Classificato

2.2 LABEL ELEMENTS

Label In Accordance With (CE) N. 1272/2008

Warning Danger

Indications of danger

H290: May be corrosive to metals
H318: It causes serious eye damage

Safety advice

P234:	Keep only in the original container
P280:	Wear protective gloves / protective clothing / eye protection / face
P305+P351+P338	In case of contact with eyes: Rinse thoroughly for several minutes. Remove contact lenses if easy to do. Continue rinsing.
P310:	Immediately call a poison control center or doctor
P390:	Absorb spillage to prevent material damage
P406:	Store in corrosive resistant container / with a resistant inner liner

2.3 OTHER HAZARDS

3 COMPOSITION/INFORMATION ON THE COMPONENTS

3.2 Mixtures

PHOSPHONIC ACID DERIVATIVE	1-5%
N° CAS:	N° CE:
Classification (CE 1272/2008) Eye dam. 1 – H318	Classification (67/548/CEE) Xi;R41

POLYCARBOXYLIC ACID	10-30%
N° CAS:	N° CE:
Classification (CE 1272/2008) Met. Corr. 1 – H290 Skin Irrit. 2 – H315 Eye Irrit. 2 – H 319	Classification (67/548/CEE) Xi;R36/38

POLYCARBOXYLIC ACID	10-30%
N° CAS:	N° CE:

Classification (CE 1272/2008) Met. Corr. 1 – H290 Eye Irrit. 2 – H319 Aquatic Chronic 3 – H412	Classification (67/548/CEE) Xi;R36 R52/53

The full text of all the hazard (R and H-phrases) are listed in Section 16.

Composition comments
**The composition unit of measures is wt/wt
Aqueous solution containing polycarboxylic acids a phosphonic acid derivative.

4 FIRST AID MEASURES:

4.1 DESCRIPTION OF FIRST AID MEASURES

INHALATION
Take the subject very well ventilated area, put it sat. If the trouble continues, contact a doctor.
INGESTION
Do not induce vomiting. If the person vomits keep your head to keep out the vomit in the stomach. Rinse mouth. If the trouble continues, contact a doctor.
SKIN
Remove contaminated clothing immediately. Rinse immediately with water.
EYES
Wash with running water for 15 minutes. Remove contact lenses. Contact a doctor if symptoms continue even after washing the eyes.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

INHALATION
No specific symptoms. Irritation of the upper respiratory tract.
INGESTION
No specific symptoms. May cause stomach pain or vomiting.
SKIN
No specific symptoms. Prolonged skin contact may cause redness and irritation.
EYES
May cause blurred vision and serious eye damage.

4.3 INDICATION OF NEED 'FOR IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT

Treat symptomatically.

5 FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

FIGHTING VEHICLES
Dry chemicals, sand, dolomite, foam, anhydrite carbon dioxide (CO2), water spray.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

UNUSUAL FIRE AND EXPLOSION
Not shown are fire hazards or unusual explosion.
SPECIFIC RISKS
Fire creates: Toxic gases / vapors / fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides. Phosphorus. Sulfur.

5.3 ADVICE FOR FIREFIGHTERS

SPECIAL FIRE FIGHTING PROCEDURES
Move container from fire area if this can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Use of suitable containment means.
PROTECTIVE EQUIPMENT FOR FIRE FIGHTING
Immediately move out of the danger zone. In case of fire, wear a self-contained breathing apparatus and full protective clothing.

6 MEASURES IN CASE OF ACCIDENTAL RELEASE

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND PROCEDURES IN CASE OF EMERGENCY

Follow the instructions for safe handling described in this safety data sheet. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2 ENVIRONMENTAL PRECAUTIONS

To disperse. To prevent spills, place the container with the damaged part at the top.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Prevent entry into wastewater. Absorb in vermiculite, dry sand or earth and place into containers. Collect and reclaim or dispose in sealed containers at licensed landfills. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.

6.4 REFERENCE TO OTHER SECTIONS

For waste disposal, see section 13.

7 HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid spills and contact with eyes and skin. Observe the rules for proper handling of chemicals.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES '

Store in tightly closed original container in a cool, dry place. Store at temperatures below 50 ° C.
IF FROZEN: When completely thawed, vigorously shake the container to ensure that the product is homogeneous. Keep away from: alkanes, reducing agents, oxidizing material. DO NOT use: Carbon steel containers.
Storage Class

Corrosive storage.

7.3 END USE SPECIAL

The identified uses for this product are detailed in Section 1.2.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION:

8.1 CONTROL PARAMETERS

Comments on ingredients
No exposure limits specified for / the ingredient / s.

8.2 CONTROLS

Protection devices

Operating conditions
Install an eyewash station.
Technical measures
Provide adequate general and local exhaust ventilation.
Respiratory protection
No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit (OEL) recommended.
Hand Protection
The choice of a suitable glove depends on the working conditions and if the product is present alone or in combination with other substances Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC. Be careful that the liquid may penetrate the gloves. Microsoft recommends that you often change gloves.
Eye protection
Use approved safety goggles.
Wear a face shield in case of splashes.

Other Protection
Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures
No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.
Skin protection
Wear apron or protective clothing in case of contact.

9 PROPERTIES 'CHEMICAL AND PHYSICAL

9.1 INFORMATION ON THE PROPERTY 'BASIC PHYSICAL AND CHEMICAL

STATUS:	Liquid
COLOUR:	Clear / Yellow
ODOUR:	Light. Acid
SOLUBILITY:	Miscible with water

BOILING POINT (°C):	100 – 102 @ 760 mmHg
FUSION POINT (°C):	< ~ -5
DENSITY:	1.14 – 1.160 @ 20°C
VAPOR PRESSURE:	Non disponibile
EVAPORATION INDEX:	Non disponibile
PH:	< 2
VISCOSITY:	9 – 15 cSt @ 25°C
TEMP. DECOMPOSITION:	Not available
LOWER THRESHOLD SMELL:	Not available
UPPER THRESHOLD SMELL:	Not available
FLASH POINT:	Not applicable
TEMP. OF AUTOFLAMMABILITY:	Not applicable
LIMIT INF. FLASH:	Not applicable
LIMIT SUP. FLASH:	Not applicable
COEFFICIENT:	log Pow < 0
PROPERTY 'OXIDANTS:	It does not meet the criteria for oxidising.

9.2 OTHER INFORMATION

Not available

10 STABILITY AND REACTIVITY:

10.1 REACTIVITY

It reacts with alkanes generating heat

10.2 STABILITY CHEMISTRY

Stable at normal temperatures and if used according to recommendations of use

10.3 POSSIBILITY 'OF HAZARDOUS REACTIONS

Hazardous polymerization
Not polymerize

10.4 CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time.

10.5 INCOMPATIBLE MATERIALS

Materials to avoid
Alkanes strong. Strong oxidising substances. Strong reducing agents. chemically active metals.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Toxic gases / vapors / fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides. Phosphorus. Sulfur.

11 TOXICOLOGICAL INFORMATION:

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity
Acute toxicity (Oral LD 50)
2400 mg / kg Rat

Ingestion
If swallowed, can cause discomfort. May cause stomach pain or vomiting
Inhalation
May cause respiratory irritation
Skin Contact
Non-irritating. Not a skin sensitizer
Eye Contact
Risk of serious eye damage.
Health Warnings
No specific health warnings

12 ECOLOGICAL INFORMATION:

Ecotoxicity
The component of the product are not classified as dangerous for the environment. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1 TOXICITY

Acute toxicity – Fishes
CL50 96 ore > 1000 mg/l Scophthalmus maximus (juvenile Turbot)
Acute Toxicity - Aquatic Invertebrates
CE50 48 ore > 1000 mg/l Daphnia magna
Acute Toxicity - Aquatic plants
Cl50 72 ore > 100 mg/l Acqua marina - alghe

12.2 PERSISTENCE AND DEGRADABILITY

Degradability
The product is hardly biodegradable

12.3 BIOACCUMULATION

Potential for bioaccumulation
The product does not contain any substances expected to be bioaccumulating
Partition coefficient
Log Pow < 0

12.4 MOBILITY LAND

Mobility
The product is miscible with water. It may spread in the aquatic environment

12.5 EVALUATION RESULTS PBT E vPvB

Not classified as PBT / vPvB by current EU criteria.

12.6 OTHER ADVERSE EFFECTS

Not available

13 DISPOSAL CONSIDERATIONS

General informations
When handling waste, it is necessary to consider the safety precautions sets of applicable to the handling of the product.

13.1 METHODS FOR WASTE TREATMENT

Absorb in vermiculite or dry sand and dispose of in an approved landfill.
Liquid material should be incinerated. Absorbed material with sand or earth should be disposed of as solid waste in accordance with local regulations. Even the packaging must be carefully disposed of.

14 TRANSPORT INFORMATION:

The goods must be transported by vehicles authorized to the carriage of dangerous goods according to the prescriptions in force Agreement A.D.R. and the national provisions applicable.
The goods must be in their original, packaging, however, in packagings made
materials resistant to their content and not likely to generate dangerous reactions.
People loading and unloading dangerous goods must be trained
the risks from these substances and on all actions that must be taken in case there are situations of emergency.

14.1 NUMBER ONU

N° UN (ADR/RID/ADN)	3265
N° UN (IMDG)	3265
N° UN (ICAO)	3265

14.2 SHIPPING NAME 'ONU

The proper shipping name:
CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Contains polycarboxylic acids and a phosphonic acid)

14.3 CLASSES OF RISK RELATED TO THE CARRIAGE

Classes ADR/RID/ADN	8
Classes ADR/RID/ADN	Classes 8: corrosive substances
Classes IMDG	8
Classes/Divisions ICAO	8

For the shipping label

14.4 PACKING

Packing ADR/RID/ADN	III
Packing IMDG	III
Packing ICAO	III

14.5 ENVIRONMENTAL HAZARDS

Dangerous substance for the environment / pollution Marino
No

14.6 SPECIAL PRECAUTIONS FOR USERS

Segregation Group IMDG	1.Acidi
EMS	F-A, S-B
Code Hazchem	2X
N° Hazard (ADR)	80 corrosive or slightly corrosive
restriction of tunnels code	(E)

14.7 TRANSPORT OF BULK ACCORDING TO ANNEX II of MARPOL 73/78 AND THE IBC CODE

Code ADR C3

15 REGULATORY INFORMATION:

15.1 RULES AND LEGISLATION ON HEALTH, SAFETY AND ENVIRONMENTAL SPECIFICATIONS FOR THE SUBSTANCE OR MIXTURE

EU legislation
Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45 / EC and repealing Regulation (EEC) No. 793/93 and Regulation (EC) No. 1488/94 and Directive 76/769 / EEC and Commission Directives 91/155 / EEC, 93/105 / EC and 2000/21 / EC, as amended.
Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548 / EEC and 1999/45 / EC and brings change to Regulation (EC) No. 1907/2006, as amended.

15.2 CHEMICAL SAFETY ASSESSMENT

Polymeric materials are exempt under Article II of REACH (EC No 1907/2006). Currently Chemical Safety Assessments or Exposure Scenarios are not required.

16 ALTRE INFORMAZIONI:

Pictograms:

General informations
OSMO-DF-260 is certified by NSF International for use as an antiscalant for reverse osmosis systems. The maximum approved dosage level is 5 mg / l in the feed water.
At the corrosive class 8 for transport on the basis of its effect on steel sweet and / or aluminum.
For advice on chemical emergencies, spillages, fires or first aid in connection with this product, please contact the emergency number specified below:EU/English Speakers: +44 (0) 1235 239 670 (NCEC)
Arabic Speakers +44 (0) 1235 239 671
Asia/Pacific Countries +65 3158 1074
Within Mainland China +86 532 8322 9090 (NRCC)
To/From China +86 10 5100 3039 (NCEC)

Comments on the review

Conversion to CLP (CE 1272/2008)
Issued by S.G.
Revision Date 6 marzo 2015
Revision 7
SdS N° 10309

Full text of risk phrases

R36/38	Irritating to eyes and skin
R36	to eyes Irritating
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R41	Risk of serious eye damage

Warning signs for extended

H290	May be corrosive to metals
H315	It causes skin irritation
H318	It causes serious eye damage
H319	It causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

17 ALTRE INFORMAZIONI:

The information contained in this 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.
It should not be construed 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 the laws and regulations on hygiene and safety.
Do not assume responsibility for improper use