

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FLUID SRA
Revision date : 18.04.2017
Print date : 26.05.2017

Version (Revision) : 2.0.0 (1.0.0)

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

1.1 Product identifier

FLUID SRA

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

Relevant identified uses

Preparation for building and construction: contrast agent for hygrometric retraction, for concrete and mortar.

Uses advised against

None

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

AZICHEM Srl

Street : Via G. Gentile16/A

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Telephone : +390376604185/604365

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Information contact : info@azichem.com

1.4 Emergency telephone number

Centro Antiveleni di Milano +39 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) (24h)

Centro Antiveleni di Pavia +39 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)

Centro Antiveleni di Bergamo +39 800 883300 (CAV Ospedali Riuniti - Bergamo)

Centro Antiveleni di Firenze +39 055 7947819 (CAV Ospedale Careggi - Firenze)

Centro Antiveleni di Roma +39 06 3054343 (CAV Policlinico Gemelli - Roma)

Centro Antiveleni di Roma +39 06 49978000 (CAV Policlinico Umberto I - Roma)

Centro Antiveleni di Napoli +39 081 7472870 (CAV Ospedale Cardarelli - Napoli)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

2.2 Label elements

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

Hazard pictograms



Exclamation mark (GHS07)

Signal word

Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FLUID SRA
Revision date : 18.04.2017
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Version (Revision) : 2.0.0 (1.0.0)

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

2-METHYLPENTANE-2,4-DIOL ; REACH registration No. : 01-2119539582-35 ; EC No. : 203-489-0; CAS No. : 107-41-5

Weight fraction : $\geq 50 - < 55$ %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319

Additional information

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

When in doubt or if symptoms are observed, get medical advice.

Following inhalation

Remove victim out of the danger area. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

In case of skin contact

Wash immediately with: Water Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician. In case of skin reactions, consult a physician.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Never give anything by mouth to an unconscious person or a person with cramps.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. Causes skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguishing powder alcohol resistant foam Carbon dioxide (CO₂) Water mist

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon dioxide (CO₂) Carbon monoxide

5.3 Advice for firefighters

Remove persons to safety.

Special protective equipment for firefighters

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FLUID SRA
Revision date : 18.04.2017
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Version (Revision) : 2.0.0 (1.0.0)

Do not inhale explosion and combustion gases. Use appropriate respiratory protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Clear spills immediately. Wear a self-contained breathing apparatus and chemical protective clothing.

For non-emergency personnel

Remove persons to safety.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

For cleaning up

The contaminated area should be cleaned up immediately with: Water Retain contaminated washing water and dispose it.

6.4 Reference to other sections

Reference to other sections Safe handling: see section 7 Personal protection equipment: see section 8

SECTION 7: Handling and storage



7.1 Precautions for safe handling

Protective measures

Specific requirements or handling rules

Do not breathe dust. Do not breathe gas/fumes/vapour/spray. See section 8.

Advices on general occupational hygiene

Normal precautions taken when handling chemicals should be observed.

7.2 Conditions for safe storage, including any incompatibilities

Only use containers specifically approved for the substance/product.

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place. Protect against UV-radiation/sunlight Humidity.

Hints on joint storage

Storage class : 10

Storage class (TRGS 510) : 10

Keep away from

Store at least 3 metres apart from: Chemicals/products that react together readily

Further information on storage conditions

Keep container tightly closed and in a well-ventilated place.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FLUID SRA
Revision date : 18.04.2017
Print date : 26.05.2017

Version (Revision) : 2.0.0 (1.0.0)

8.1 Control parameters

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type :	DNEL Consumer (local) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	49 mg/m ³
Limit value type :	DNEL Consumer (systemic) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	1 mg/kg
Limit value type :	DNEL Consumer (systemic) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	3,5 mg/m ³
Limit value type :	DNEL Consumer (systemic) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Oral
Exposure frequency :	Long-term (repeated)
Limit value :	1 mg/kg
Limit value type :	DNEL worker (local) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Inhalation
Exposure frequency :	Short-term (acute)
Limit value :	98 mg/m ³
Limit value type :	DNEL worker (local) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	49 mg/m ³
Limit value type :	DNEL worker (local) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	25 mg/m ³
Limit value type :	DNEL worker (systemic) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	2 mg/kg
Limit value type :	DNEL worker (systemic) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	14 mg/m ³

PNEC

Limit value type :	PNEC aquatic, freshwater (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Limit value :	0,42 mg/l
Limit value type :	PNEC aquatic, intermittent release (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Limit value :	4,29 mg/l
Limit value type :	PNEC aquatic, marine water (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Limit value :	0,04 mg/l
Limit value type :	PNEC sediment, freshwater (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Limit value :	1,79 mg/kg
Limit value type :	PNEC sediment, marine water (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Limit value :	0,17 mg/kg
Limit value type :	PNEC Soil (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Limit value :	0,11 mg/kg

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FLUID SRA
Revision date : 18.04.2017
Print date : 26.05.2017

Version (Revision) : 2.0.0 (1.0.0)

Limit value type : PNEC Secondary Poisoning (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Limit value : 100 mg/kg
Limit value type : PNEC sewage treatment plant (STP) (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Limit value : 20 mg/l

8.2 Exposure controls

Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Personal protection equipment



When using do not eat, drink, smoke, sniff.

Eye/face protection

Suitable eye protection

Eye glasses with side protection DIN EN 166

Skin protection

Hand protection

Tested protective gloves must be worn DIN EN 374

By short-term hand contact : Butyl caoutchouc (butyl rubber) Breakthrough time : > 480 min. > 0,7 mm

By long-term hand contact : NBR (Nitrile rubber) > 30 min. > 0,4 mm

Respiratory protection

Respiratory protection not required

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Safety relevant basis data

Appearance :		liquid
Colour :		colourless
Odour :		characteristic
Melting point/melting range :		No data available
Initial boiling point and boiling range : (1013 hPa)	>	230 °C
Decomposition temperature :		No data available
Flash point :	>	105 °C
Ignition temperature :		No data available
Lower explosion limit :		No data available
Upper explosion limit :		No data available
Explosive properties :		Not applicable.
Vapour pressure	(20 °C)	No data available
Density :	(20 °C)	0,94 - 1 g/cm ³
Solvent separation test :	(20 °C)	No data available
Water solubility :	(20 °C)	soluble
Fat solubility :	(20 °C)	Very soluble.
pH :	(20 °C / 20 g/l)	No data available
Log Pow	(20 °C)	not applicable
Viscosity :	(20 °C)	No data available
Odour threshold :		No data available
Relative vapour density :	(20 °C)	No data available
Evaporation rate :		No data available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FLUID SRA
Revision date : 18.04.2017
Print date : 26.05.2017

Version (Revision) : 2.0.0 (1.0.0)

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is stable.

10.2 Chemical stability

Stable under recommended storage and handling conditions. See section 7. No additional measures necessary.

10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled properly.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

None

10.6 Hazardous decomposition products

If burned can release: Carbon dioxide. Carbon monoxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter :	LD50 (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	3696 mg/kg
Parameter :	LD50 (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Oral
Species :	Mouse
Effective dose :	3860 mg/kg

Acute dermal toxicity

Parameter :	LD50 (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Exposure route :	Dermal
Effective dose :	> 2000 mg/kg

Irritant and corrosive effects

Primary irritation to the skin

Irritant.

Irritation to eyes

Causes serious eye irritation.

Irritation to respiratory tract

Not an irritant.

Sensitisation

In case of skin contact

not sensitising.

In case of inhalation

not sensitising.

Repeated dose toxicity (subacute, subchronic, chronic)

Chronic inhalation toxicity

None

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FLUID SRA
Revision date : 18.04.2017
Print date : 26.05.2017

Version (Revision) : 2.0.0 (1.0.0)

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The ingredients in this mixture do not meet the criteria for classification as CMR according to CLP.

SECTION 12: Ecological information

Do not allow uncontrolled discharge of product into the environment.

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter : LC50 (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Species : Fish
Effective dose : > 1000 mg/l
Exposure time : 96 h

Acute (short-term) algae toxicity

Parameter : IC50 (2-METHYLPENTANE-2,4-DIOL ; CAS No. : 107-41-5)
Species : Algae
Effective dose : > 429 mg/l
Exposure time : 72 h

12.2 Persistence and degradability

Readily biodegradable (according to OECD criteria).

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This product is none, or does not contain a substance called a PBT or vPvB

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

None

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Dispose according to legislation.

SECTION 14: Transport information

14.1 UN number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

Safety Data Sheet

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Version (Revision) : 2.0.0 (1.0.0)

14.6 Special precautions for user

None

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

EU legislation

Regulation (EC) 1907/2006/CE (REACH). Regulation (EC) No 1272/2008 (CLP). Regulation (EU) 2015/830 requirements for the compilation of safety data sheets. Commission Regulation (EC) No 790/2009/CE (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 286/2011 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 618/2012 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 487/2013 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 758/2013 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 944/2013 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 605/2014 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008). Commission Regulation (EU) No 1297/2015 (amending, for the purposes of its adaptation to technical and scientific progress (ATP), Regulation (EC) No 1272/2008).

Other regulations (EU)

Regulation (CE) 1907/2006: Substance of very high concern included in the SVHC Candidate List

None

National regulations

Italy: Legislative Decree 81/2008 (Consolidated Law on protection of health and safety at work), as amended and Directive 2009/161/UE - chemical risk assessment in accordance with Title IX

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

LEGENDA:

ADR:	Accord européen relative au transport international des marchandises dangereuses par route (accordo europeo relativo al trasporto internazionale delle merci pericolose su strada)
ASTM:	ASTM International, originariamente nota come American Society for Testing and Materials (ASTM)
EINECS:	European Inventory of Existing Commercial Chemical Substances (Registro Europeo delle Sostanze chimiche in Commercio)
EC(0/50/100):	Effective Concentration 0/50/100 (Concentrazione Effettiva Massima per 0/50/100% degli Individui)
LC(0/50/100):	Lethal Concentration 0/50/100 (Concentrazione Letale per 0/50/100% degli Individui)
IC50:	Inhibitor Concentration 50 (Concentrazione Inibente per il 50% degli Individui)
NOEL:	No Observed Effect Level (Dose massima senza effetti)
NOEC:	No Observed Effect Concentration (Concentrazione massima senza effetti)
LOEC:	Lowest Observed Effect Concentration (Concentrazione massima alla quale è possibile evidenziare un effetto)
DNEL:	Derived No Effect Level (Dose derivata di non effetto)

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according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : FLUID SRA
Revision date : 18.04.2017
Print date : 26.05.2017

Version (Revision) : 2.0.0 (1.0.0)

DMEL:	Derived Minimum Effect Level (Dose derivata di minimo effetto)
CLP:	Classification, Labelling and Packaging (Classificazione, Etichettatura e Imballaggio)
CSR:	Rapporto sulla Sicurezza Chimica (Chemical Safety Report)
LD(0/50/100):	Lethal Dose 0/50/100 (Dose Letale per 0/50/100% degli Individui)
IATA:	International Air Transport Association (Associazione Internazionale del Trasporto Aereo)
ICAO:	International Civil Aviation Organization (Organizzazione Internazionale dell'Aviazione Civile)
Codice IMDG:	International Maritime Dangerous Goods code (Codice sul Regolamento del Trasporto Marittimo)
PBT:	Persistent, bioaccumulative and toxic (sostanze persistenti bioaccumulabili e tossiche)
RID:	Règlement concernent le transport International ferroviaire des marchandises Dangereuses (Regolamento concernente il trasporto Internazionale ferroviario delle merci Pericolose)
STEL:	Short term exposure limit (limite di esposizione a breve termine)
TLV:	Threshold limit value (soglia di valore limite)
TWA:	Time Weighted Average (media ponderata nel tempo)
UE:	Unione Europea
vPvB:	Very persistent very bioaccumulative (sostanze molto persistenti e molto bioaccumulabili)
N.D.:	Non disponibile.
N.A.:	Non applicabile
VwVwS.:	Text of Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes (Verwaltungsvorschrift wassergefährdende Stoffe – VwVwS)
PNEC:	Predicted No Effect Concentration
PNOS:	Particulates not Otherwise Specified
BOD:	Biochemical Oxygen Demand
COD:	Chemical Oxygen Demand
BCF:	BioConcentration Factor
TRGS :	Technische Regeln für Gefahrstoffe -Technical Rules for Hazardous Substances, defined by The Federal Institute for Occupational Safety and Health, Germany
LCLo:	Lethal Concentration Low (La minima concentrazione letale)
ThOD:	Theoretical Oxygen Demand

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

calculated.

16.5 Relevant H- and EUH-phrases (Number and full text)

H315 Causes skin irritation.
H319 Causes serious eye irritation.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
