



SAFETY DATA SHEET

STEAMATE NA0880

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

1.1. Product identifier

Trade name or designation of the mixture STEAMATE NA0880

Version number 6.5

Revision date 01/12/2022

Supersedes date 02/10/2020

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

Identified uses Blend of neutralising amines

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

JV Process and Water Chemicals LLC

Street V. Kadirov 10, city Chirchik, Region Tashkent

Republic of Uzbekistan, 111702

tel : +99871 209 10 40

e-mail : info@pwch.uz

www.pwch.uz

1.4. Emergency telephone number

Multilingual emergency number (24/7)

Street V. Kadirov 10, city Chirchik,

Region Tashkent

Republic of Uzbekistan, 111702

+99871 209 10 40

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Acute toxicity, dermal	Category 4	H312 - Harmful in contact with skin.
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Skin corrosion/irritation	Category 1B	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Skin sensitisation	Category 1B	H317 - May cause an allergic skin reaction.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.
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2.2. Label elements



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Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 3-Aminopropyldimethylamine (DMAPA), Ethanolamine

Hazard pictograms



Signal word

Danger

Hazard statements

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTRE/doctor.

Storage

Not available.

Disposal

Not available.

Supplemental label information None.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical description	Neutralising amine				
Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Ethanolamine	30 - < 40	141-43-5 205-483-3	01-2119486455-28	603-030-00-8	#
Classification:	Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Corr. 1B;H314, Acute Tox. 4;H332, STOT SE 3;H335, Aquatic Chronic 3;H412				
3-Aminopropyldimethylamine (DMAPA)	10 - < 20	109-55-7 203-680-9	01-2119486842-27	612-061-00-6	
Classification:	Flam. Liq. 3;H226, Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Corr. 1B;H314, Skin Sens. 1B;H317, STOT SE 3;H335				
Diethanolamine	< 0,3	111-42-2 203-868-0	01-2119488930-28	603-071-00-1	
Classification:	Acute Tox. 4;H302, Skin Irrit. 2;H315, Eye Dam. 1;H318, Repr. 2;H361d, Repr. 2;H361f, STOT RE 2;H373				

The classification of the above substance(s) is given, including the hazard class, category code and hazard statements which are assigned in accordance with their physicochemical, health and environmental hazards. Please refer to section 16 where the full text of each relevant H-statement is listed.



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SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.
Skin contact	Take off immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Ingestion	Rinse mouth. Do not give anything to eat or drink. Do not induce vomiting. Call a physician or poison control centre immediately.

4.2. Most important symptoms and effects, both acute and delayed May cause allergic skin reaction.
Corrosive effects.
Upper respiratory tract irritation.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Dry chemical, CO ₂ , water spray or regular foam.
Unsuitable extinguishing media	Not available.

5.2. Special hazards arising from the substance or mixture Oxides of carbon and nitrogen evolved in fire.

5.3. Advice for firefighters

Special protective equipment for firefighters	Self contained breathing apparatus. (CEN : EN 137) Protective clothing (CEN : EN 469) Protective gloves (CEN : EN 659) Helmet (CEN : EN 443)
Special fire fighting procedures	Use standard firefighting procedures and consider the hazards of other involved materials. Prevent spillage and fire-fighting water from entering in public sewers or the immediate environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Wear protective clothing, gloves and safety goggles.
For emergency responders	Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Prevent from entering sewers or the immediate environment.
Accidental release of large quantities into the aquatic environment may harm aquatic organisms.

6.3. Methods and material for containment and cleaning up Absorb onto inert material and dispose of according to Hazardous Waste Regulations.
Place in waste disposal container.
Flush area with water.
Spread sand/grit.

6.4. Reference to other sections Please refer also to section no. 8 'Exposure controls' for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Avoid contact with skin and eyes.
Alkaline.
Do not mix with acidic material.



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7.2. Conditions for safe storage, including any incompatibilities	Store in cool, well ventilated area. Store away from oxidisers. Store containers closed when not in use.
7.3. Specific end use(s)	Only for professional and industrial users
Shelf life	720 days

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Italy. Occupational Exposure Limits

Components	Type	Value	Form
Diethanolamine (CAS 111-42-2)	TWA	1 mg/m ³	Inhalable fraction and vapor.
Ethanolamine (CAS 141-43-5)	STEL	7,6 mg/m ³	
	TWA	3 ppm 2,5 mg/m ³ 1 ppm	

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Ethanolamine (CAS 141-43-5)	STEL	7,6 mg/m ³
	TWA	3 ppm 2,5 mg/m ³ 1 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

Derived no effect levels (DNELs)

Workers

Components	Value	Assessment factor	Notes
3-Aminopropylidimethylamine (DMAPA) (CAS 109-55-7)			
Long-term, Local, Inhalation	1,2 mg/m ³	18	
Long-term, Systemic, Inhalation	1,2 mg/m ³	18	
Diethanolamine (CAS 111-42-2)			
Long-term, Local, Inhalation	0,5 mg/m ³	1	
Long-term, Systemic, Dermal	0,13 mg/kg	60	
Long-term, Systemic, Inhalation	0,75 mg/m ³		
Ethanolamine (CAS 141-43-5)			
Long-term, Local, Inhalation	3,3 mg/m ³	3	
Long-term, Systemic, Dermal	1 mg/kg	120	

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
3-Aminopropylidimethylamine (DMAPA) (CAS 109-55-7)			
Freshwater	72,8 µg/l		
Intermittent releases	340 µg/l		
Marine water	7,28 µg/l		
Sediment (freshwater)	735 µg/kg		
Sediment (marine water)	73,5 µg/kg		
Soil	104 µg/kg		
STP	69,5 mg/l		
Diethanolamine (CAS 111-42-2)			
Freshwater	0,02 mg/l	50	
Intermittent releases	0,095 mg/l	100	
Marine water	0,002 mg/l	500	



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Secondary poisoning	1,04 mg/kg	90	Oral
Sediment (freshwater)	0,092 mg/kg		
Sediment (marine water)	0,009 mg/kg		
Soil	1,63 mg/kg		
STP	100 mg/l	10	
Ethanolamine (CAS 141-43-5)			
Freshwater	0,085 mg/l	10	
Intermittent releases	0,025 mg/l	100	
Marine water	0,0085 mg/l	100	
Sediment (freshwater)	0,425 mg/kg		
Sediment (marine water)	0,0425 mg/kg		
Soil	0,035 mg/kg		
STP	100 mg/l	10	

Exposure guidelines

Italy OELs: Skin designation

Diethanolamine (CAS 111-42-2)	Danger of cutaneous absorption
Ethanolamine (CAS 141-43-5)	Danger of cutaneous absorption

8.2. Exposure controls

Appropriate engineering controls Adequate ventilation to maintain air contaminants below exposure limits.
 Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Splash proof chemical goggles.
 Face shield.
 CEN : EN 166

Skin protection

- Hand protection Gauntlet type neoprene gloves (Protection against unintentional short-term contact)
 Gauntlet type nitrile gloves (Protection against unintentional short-term contact)
 Gauntlet type rubber gloves (Protection against unintentional short-term contact)
 Coating thickness: 0.5 mm
 Penetration time: > 480 min
 CEN : EN 374-1/2/3/4; EN 420

- Other Chemical resistant apron.
 CEN : EN ISO 13688; EN ISO 6530; EN ISO 6529; EN 14605

Respiratory protection In case of insufficient ventilation, use a breathing mask with filter type: A2-P2
 CEN : EN 140; EN 14387

Thermal hazards Not available.

Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Colour Colourless to yellow

Physical state Liquid

Odour Slight

Odour threshold Not available.

pH (concentrated product) 12,7

pH in aqueous solution 11,7 (5% SOL.)

Melting point/freezing point < -34 °C

Initial boiling point and boiling range 104 °C

Flash point > 100 °C P-M(CC)

Evaporation rate < 1 (Ether = 1)

Flammability (solid, gas) Not applicable.



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Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.

Vapour pressure	18 mm Hg / 2,4 kPa
Vapour pressure temp.	21 °C
Vapour density	> 1 (Air = 1)
Relative density	1
Relative density temperature	21 °C

Solubility

Solubility (water)	100 %
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Partition coefficient (n-octanol/water)	Not available.
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Auto-ignition temperature	Not applicable.
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Decomposition temperature	Not available.
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Viscosity	14 cps
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Viscosity temperature	21 °C
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Explosive properties	Not available.
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Oxidising properties	Not available.
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9.2. Other information

Pour point	< -34 °C
Shelf life	720 days
VOC	60 % (Estimated)

SECTION 10: Stability and reactivity

10.1. Reactivity	Strong acids.
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10.2. Chemical stability	Material is stable under normal conditions.
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10.3. Possibility of hazardous reactions	Not applicable.
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10.4. Conditions to avoid	No special requirement.
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10.5. Incompatible materials	Avoid contact with strong acids and oxidisers.
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10.6. Hazardous decomposition products	Oxides of carbon and nitrogen evolved in fire.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product

STEAMATE NA0880 (Mixture)

Test Results

Acute Dermal LD50 Rabbit: 1300 mg/kg (Calculated according to GHS additivity formula)
 Acute Inhalation LC50 Rat: 3,22 mg/l 4 hour (Calculated according to GHS additivity formula)
 Acute Oral LD50 Rat: 1400 mg/kg (Calculated according to GHS additivity formula)

Components

3-Aminopropylidimethylamine (DMAPA) (109-55-7)

Test Results

Acute Inhalation LC50 Rat: > 4,3 mg/l 4 hour
 Acute Oral LD50 Rat: 410 mg/kg
 Acute Dermal LD50 Rabbit: 4000 mg/kg
 Acute Oral LD50 Rat: 1600 mg/kg
 Acute Dermal LD50 Rabbit: 1025 mg/kg

Diethanolamine (111-42-2)

Ethanolamine (141-43-5)



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Components	Test Results
	Acute Inhalation LC50 Rat: > 1,5 mg/l 4 hour Acute Oral LD50 Rat: 1720 mg/kg
Acute toxicity	Harmful if inhaled. Harmful if swallowed. Harmful in contact with skin.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Respiratory tract irritation.
Carcinogenicity	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Information on likely routes of exposure	
Ingestion	Causes digestive tract burns.
Inhalation	May cause irritation to the respiratory system. May cause drowsiness and dizziness.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Symptoms	Not available.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	None known.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity

Product	Species	Test Results	
STEAMATE NA0880 (CAS Mixture)			
Aquatic			
Crustacea	LC50	Daphnia magna	160 mg/l, Acute toxicity, 48 hour, (Estimated)
	NOEL	Daphnia magna	49 mg/l, Acute toxicity, 48 hour, (Estimated)
Fish	LC50	Fathead minnow	440 mg/l, Acute toxicity, 96 hour, (Estimated)
	NOEL	Fathead minnow	260 mg/l, Acute toxicity, 96 hour, (Estimated)

12.2. Persistence and degradability

- COD (mgO2/g) 768 (calculated data)
- BOD 5 (mgO2/g) 252 (calculated data)
- BOD 28 (mgO2/g) 252 (calculated data)
- Closed Bottle Test (% Degradation in 28 days) 30 (calculated data)



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- Zahn-Wellens Test (% Degradation in 28 days)	65 (calculated data)
- TOC (mg C/g)	266 (calculated data)
12.3. Bioaccumulative potential	Not available.
Partition coefficient n-octanol/water (log Kow)	
Diethanolamine	-1,43
Ethanolamine	-1,31
Bioconcentration factor (BCF)	
Diethanolamine	3
Ethanolamine	3
12.4. Mobility in soil	Not available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contaminated packaging	According to Hazardous Waste Regulations. EWC (European Waste Code) recommendation : 15 01 10 15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified. 15 01 Packaging (including separately collected municipal packaging waste). 15 01 10 Packaging containing residues of or contaminated by dangerous substances. Depending on the origin and state of the waste, other EWC numbers may be applicable too.
Disposal methods/information	According to Hazardous Waste Regulations. EWC (European Waste Code) recommendation : 16 03 05 16 Wastes not otherwise specified in the list. 16 03 Off-specification batches and unused products. 16 03 05 Organic wastes containing dangerous substances. Depending on the origin and state of the waste, other EWC numbers may be applicable too.

SECTION 14: Transport information

ADR	
14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (Ethanolamine, 3-Aminopropyldimethylamine (DMAPA, Mixture)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
Tunnel restriction code	(E)
14.4. Packing group	II
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.
RID	
14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (Ethanolamine, 3-Aminopropyldimethylamine (DMAPA, Mixture)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	II
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.



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ADN

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (Ethanolamine, 3-Aminopropyldimethylamine (DMAPA, Mixture)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	II
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.

IATA

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (Ethanolamine, 3-Aminopropyldimethylamine (DMAPA, Mixture)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	II
14.5. Environmental hazards	No.
ERG Code	Not available.
14.6. Special precautions for user	Not available.

IMDG

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (Ethanolamine, 3-Aminopropyldimethylamine (DMAPA, Mixture)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	II
14.5. Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
14.6. Special precautions for user	Not available.
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	This substance/mixture is not intended to be transported in bulk.

ADN; ADR; IATA; IMDG; RID



SECTION 15: Regulatory information

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

EU regulations



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Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

3-Aminopropyl dimethylamine (DMAPA) (CAS 109-55-7)

National regulations Not available.

15.2. Chemical safety assessment Not available.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16: Other information

List of abbreviations

COD: Chemical Oxygen Demand
EC-No: European Commission Number
IATA: International Air Transport Association
CAS: Chemical Abstract Service.
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CEN: European Committee for Standardization (Comité Européen de Normalisation).
TWA: Time Weighted Average.
STEL: Short-term Exposure Limit.
LD50: Lethal Dose 50%.
LC50: Lethal Concentration 50%.
EC50: Effective Concentration 50%.
NOEL: No observed effect level.



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BOD: Biochemical oxygen demand.
TOC: Total Organic Carbon.
ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route).
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures).
IMDG Code: International Maritime Dangerous Goods Code.
RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).
Safety data sheets of raw materials.

References

Information on evaluation method leading to the classification of mixture

The physical, health and environmental hazards of this mixture are assessed by applying the classification criteria for each hazard class or differentiation in Parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008 (CLP).

Full text of any H-statements not written out in full under Sections 2 to 15

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H361d Suspected of damaging the unborn child.
H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure by ingestion.
H412 Harmful to aquatic life with long lasting effects.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.

Training information

Provide training on safe handling while considering the type of application and exposure scenarios.

Based on EC Directive / Regulations

(EC) No 1907/2006 (REACH)
(EC) No 1272/2008
(EU) 2015/830
(EU) No 1357/2014

This information is based on our current knowledge and is intended to describe the product for the purpose of safety requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Further information

Correction in Section: 3,8,12