



P&WC

Version: 8.3
Effective date: 21/02/2020
Previous Date: 30/03/2018

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

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

1.1. Product identifier

Trade name or designation of the mixture PETROFLO 20Y600 (PetroKare PK 10 AF)

Version number 8.3

Revision date 21/02/2020

Supersedes date 30/03/2018

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

Identified uses Water based polymerisation inhibitor

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

JV Process and Water Chemicals LLC

Address: Street V. Kadirov 10, Chirchik city,
Tashkent Region, Republic of Uzbekistan, 111727

Tel: +99871 209 10 40

Email address: info@pwch.uz

www.pwch.uz

1.4. Emergency telephone number

Multilingual emergency number (24/7)

Street V. Kadirov 10, Chirchik city,
Tashkent Region,
Republic of Uzbekistan, 111727

Tel: +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

Physical hazards

Corrosive to metals Category 1 H290 - May be corrosive to metals.

Health hazards

Acute toxicity, oral Category 4 H302 - Harmful if swallowed.

Acute toxicity, dermal Category 4 H312 - Harmful in contact with skin.

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.

Carcinogenicity Category 2 H351 - Suspected of causing cancer.



P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

Specific target organ toxicity - repeated exposure (oral)

Category 2 (blood, spleen)

H373 - May cause damage to organs (blood, spleen) through prolonged or repeated exposure by ingestion.

Environmental hazards

Hazardous to the aquatic environment, acute aquatic hazard Category 1

H400 - Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term aquatic hazard Category 3

H412 - Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Contains: hydroxylamine sulfate (2:1)

Hazard pictograms



Signal word Warning

Hazard statements

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs (blood, spleen) through prolonged or repeated exposure by ingestion.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.

Response

P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of 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

P406 Store in a corrosion resistant container with a resistant inner liner.

Disposal

Not available.

Supplemental label information None.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical description Aqueous solution of amines

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
hydroxylamine sulfate (2:1)	30 - < 40	10039-54-0 233-118-8	01-2119485971-25	612-123-00-2	

Classification: Met. Corr. 1;H290, Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319, Carc. 2;H351, STOT RE 2;H373, Aquatic Acute 1;H400, Aquatic Chronic 3;H412



P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

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.

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 soap and plenty of water. Get medical attention immediately.
Eye contact	Immediately flush eye(s) with plenty of water. Get medical attention if irritation persists after washing.
Ingestion	Rinse mouth. Do not induce vomiting. Do not give anything to eat or drink. Call a physician or poison control centre immediately.

4.2. Most important symptoms and effects, both acute and delayed Irritant effects.
Sensitisation.

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 sulphur 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.
Do not empty into drains, dispose of this material and its container to hazardous or special waste collection point.

6.3. Methods and material for containment and cleaning up Absorb onto inert material and dispose of according to Hazardous Waste Regulations.
Remove small spills with plenty of water.

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 Acidic.
Do not mix with alkaline material.



P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

7.2. Conditions for safe storage, including any incompatibilities Do not store at elevated temperatures.
Preferably stored between 5-40°C
Store containers closed when not in use.
Protect from freezing.
Store in corrosive resistant container with a resistant inner liner.

7.3. Specific end use(s) Only for professional and industrial users
Shelf life 270 days

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits No exposure limits noted for ingredient(s).
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
hydroxylamine sulfate (2:1) (CAS 10039-54-0)			
Long-term, Systemic, Inhalation	0,008 mg/m3	62.5	Carcinogenicity
Short-term, Systemic, Inhalation	0,032 mg/m3		

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
hydroxylamine sulfate (2:1) (CAS 10039-54-0)			
Freshwater	0,031 mg/l	10	
Intermittent releases	0,0072 mg/l		
Marine water	0,003 mg/l	500	
Sediment (freshwater)	0,112 mg/kg		
Sediment (marine water)	0,011 mg/kg		
Soil	0,004 mg/kg		
STP	0,07 mg/l	10	

8.2. Exposure controls

Appropriate engineering controls Ensure good ventilation.

Individual protection measures, such as personal protective equipment

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

Skin protection

- Hand protection PVC gloves (Protection against unintentional short-term contact) Coating thickness: 0.8 mm
Rubber gloves (Protection against unintentional short-term contact) Coating thickness: 0.5 mm
Butyl gloves (Protection against unintentional short-term contact) Coating thickness: 0.7 mm
Nitrile gloves (Protection against unintentional short-term contact) Coating thickness: 0.4 mm
Penetration time: > 480 min
CEN : EN 374-1/2/3/4; EN 420

- Other Protective clothing.
CEN : EN ISO 13688; EN ISO 6529; EN 14605

Respiratory protection In case of insufficient ventilation, use a breathing mask with filter type: P2
CEN : EN 140; EN 143; EN 149

Thermal hazards Not available.

Environmental exposure controls Prevent from entering in public sewers or the immediate environment.
Do not empty into drains, dispose of this material and its container to hazardous or special waste collection point.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties



P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

Appearance

Colour	Colourless
Physical state	Liquid
Odour	Amine
Odour threshold	Not available.
pH (concentrated product)	2,8
pH in aqueous solution	3,7 (5% SOL.)
Melting point/freezing point	-6 °C
Initial boiling point and boiling range	Not available.
Flash point	> 100 °C
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

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

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

Solubility

Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
Viscosity	5 cps
Viscosity temperature	21 °C
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information

Pour point	-3 °C
Shelf life	270 days
VOC	0 % (Estimated)

SECTION 10: Stability and reactivity

10.1. Reactivity	Strong oxidising agents. Alkalies.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	Not applicable.
10.4. Conditions to avoid	Keep away from heat. Temperatures above > 80 °C
10.5. Incompatible materials	Avoid contact with strong oxidisers. Avoid contact with mild steel. Nitrates.
10.6. Hazardous decomposition products	Oxides of sulphur and nitrogen evolved in fire.



P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product	Test Results
PETROFLO 20Y600 (PetroKare PK 10 AF) (Mixture)	Acute Dermal LD50 Rabbit: > 1500 mg/kg (Calculated according to GHS additivity formula) Acute Inhalation LC50 Rat: > 5 mg/l 4 hours (Calculated according to GHS additivity formula) Acute Oral LD50 Rat: 1660 mg/kg (Calculated according to GHS additivity formula)
Components	Test Results
hydroxylamine sulfate (2:1) (10039-54-0)	Acute Dermal LD50 Rabbit: 1500 - 2000 mg/kg Acute Oral LD50 Rat: 642 mg/kg

Acute toxicity	Harmful in contact with skin. Harmful if swallowed.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Specific target organ toxicity - repeated exposure	May cause damage to organs (blood, spleen) through prolonged or repeated exposure by ingestion.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Carcinogenicity	Suspected of causing cancer.
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	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Inhalation	Prolonged or excessive inhalation may cause respiratory tract irritation.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
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	
PETROFLO 20Y600 (PetroKare PK 10 AF) (CAS Mixture)			
Aquatic			
Crustacea	LC50	Daphnia magna	1,7 mg/l, Static Renewal Bioassay, 48 hour
	NOEL	Daphnia magna	1,4 mg/l, Static Renewal Bioassay, 48 hour
Fish	LC50	Rainbow trout	8,5 mg/l, Static Renewal Bioassay, 96 hour



P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

Product	Species	Test Results
	NOEL Rainbow trout	3,1 mg/l, Static Renewal Bioassay, 96 hour

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

Not available.

Partition coefficient

Not available.

n-octanol/water (log Kow)

Bioconcentration factor (BCF)

Not available.

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 03

16 Wastes not otherwise specified in the list.

16 03 Off-specification batches and unused products.

16 03 03 Inorganic 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

UN3264

14.2. UN proper shipping name

Corrosive liquid, acidic, inorganic, n.o.s. (Hydroxylamine sulphate, Mixture)

14.3. Transport hazard class(es)

Class

8

Subsidiary risk

-

Tunnel restriction code (E)

(E)

14.4. Packing group

III

14.5. Environmental hazards

Yes

14.6. Special precautions for user

Not available.

RID

14.1. UN number

UN3264

14.2. UN proper shipping name

Corrosive liquid, acidic, inorganic, n.o.s. (Hydroxylamine sulphate, Mixture)

14.3. Transport hazard class(es)

Class

8

Subsidiary risk

-

14.4. Packing group

III

14.5. Environmental hazards

Yes

14.6. Special precautions for user

Not available.



P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

ADN

14.1. UN number	UN3264
14.2. UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Hydroxylamine sulphate, Mixture)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Not available.

IATA

14.1. UN number	UN3264
14.2. UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Hydroxylamine sulphate, Mixture)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	Yes
ERG Code	Not available.
14.6. Special precautions for user	Not available.

IMDG

14.1. UN number	UN3264
14.2. UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Hydroxylamine sulphate, Mixture)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	Yes
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





P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

Marine pollutant



SECTION 15: Regulatory information

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

EU regulations

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.

hydroxylamine sulfate (2:1) (CAS 10039-54-0)

Other EU regulations

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

hydroxylamine sulfate (2:1) (CAS 10039-54-0)

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).



P&WC

SAFETY DATA SHEET

PETROFLO 20Y600 (PetroKare PK 10 AF)

Version: 8.3
Effective date: 21/02/2020
Previous Date: 30/03/2018

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.
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).

References

Information on evaluation method leading to the classification of mixture

Safety data sheets of raw materials.

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

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure by ingestion.
H400 Very toxic to aquatic life.
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

Further information

Correction in Section: 2,8,11