Safety Data Sheet
acc. to OSHA HCS

Printing date 10/13/2015 Reviewed on 10/13/2015

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1: Identification

· **Product identifier**

· ***Trade name:*** **Iron Reagent 1**

· *Article number:* 77360A / 79360A / FEFE-0850R1 / FEFE-5XXX
· *Synonyms* EON 100 IRON R1 / EON 300 IRON R1 / IRON ENVOY R1 / IRON FERENE R1
· ***Relevant identified uses of the substance or mixture and uses advised against***
· *Application of the substance / the mixture*
Reagent for IN VITRO diagnostic
Product included in kit(s) :
- Kit composed of two reagents : 77360 / 79360 / 55360 / FEFE-0230

· **Details of the supplier of the safety data sheet**
· ***Manufacturer/Supplier:***
ELITech Clinical Systems SAS
Zone Industrielle
61500 Sées • France
Tel : +33 (0)2 33 81 21 00
Fax : +33 (0)2 33 28 77 51
www.elitechgroup.com
MSDS.ECS-SAS@elitechgroup.com

· ***Information department:*** Product safety department
· ***Emergency telephone number:*** Contact your distributor or poison control center in your country.

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2: Hazard(s) identification

· **Classification of the substance or mixture**
· ***Classification according to Regulation (EC) No 1272/2008***


GHS05

Eye Dam. 1 H318 Causes serious eye damage.


GHS07

Skin Irrit. 2 H315 Causes skin irritation.

· **Label elements**
· ***Labelling according to Regulation (EC) No 1272/2008*** The product is classified and labeled according to the CLP regulation.
· *Hazard pictograms*


GHS05

· *Signal word* Danger

· *Hazard-determining components of labeling:*
isotridecanol, ethoxylated
dodecan-1-ol, ethoxylated
· *Hazard statements*
Causes skin irritation.
Causes serious eye damage.
· *Precautionary statements*
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

3: Composition/information on ingredients

· **Chemical characterization: Mixtures**
· ***Description:***
Mixture of substances.
Aqueous solution.

· ***Dangerous components:***

· *CAS NO.*	*Description*	*%*	
60-32-2	aminocaproic acid	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	<10%
69011-36-5	isotridecanol, ethoxylated	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-5%
64-19-7	acetic acid	Flam. Liq. 3, H226; Skin Corr. 1A, H314	1-5%

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9002-92-0	dodecan-1-ol, ethoxylated	Eye Dam. 1, H318; Acute Tox. 4, H302	1-5%
62-56-6	thiourea	Carc. 2, H351; Repr. 2, H361d; Aquatic Chronic 2, H411; Acute Tox. 4, H302	< 1%

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4: First-aid measures

· **Description of first aid measures**
· ***General information:***
Take off contaminated clothing and wash it before reuse.
Show this safety data sheet to the doctor in attendance.
· ***After inhalation:***
Supply fresh air.
Move out of dangerous area.
If required, provide artificial respiration.
If symptoms appear, seek medical advice.
· ***After skin contact:***
Take off contaminated clothing and wash before reuse.
Immediately wash with water and soap and rinse thoroughly.
If symptoms appear, seek medical advice.
· ***After eye contact:***
Protect unharmed eye.
Remove contact lenses, if present and easy to do.
Rinse opened eye for several minutes under running water.
Immediately call a POISON CENTER/doctor.
· ***After swallowing:***
Never give anything by mouth to an unconscious person.
Do not induce vomiting.
Rinse out mouth and then drink plenty of water.
Seek advice from a doctor or a poison control center.
· ***Information for doctor:***
· *Most important symptoms and effects, both acute and delayed*
Causes serious eye damage.
Skin irritation
If swallowed:
May cause gastrointestinal upset, vomiting, diarrhea.
Nausea
· *Indication of any immediate medical attention and special treatment needed* Treat symptomatically.

5: Fire-fighting measures

· **Extinguishing media**
· ***Suitable extinguishing agents:***
Use fire fighting measures that suit the environment.
CO_2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.
· **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
Carbon oxides (COx)
Nitrogen oxides (NOx)
Sulphur oxides (SOx)
· **Advice for firefighters**
· ***Protective equipment:*** As in any fire, wear a respiratory protective device, and full protective gear.

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6: Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Avoid physical contact with material.
Avoid formation of gas/mist/vapours.
Avoid breathing gas/mist/vapours.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.
Clean the affected area carefully.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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7: Handling and storage

· **Handling:**
· ***Precautions for safe handling***
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Take off contaminated clothing and wash before reuse.
Avoid physical contact with material.
Avoid formation of gas/mist/vapours.
Avoid breathing gas/mist/vapours.
Observe the warnings on the label.
· ***Information about protection against explosions and fires:*** No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· ***Storage:***
· *Requirements to be met by storerooms and receptacles:* No special requirements.
· *Information about storage in one common storage facility:* Not required.
· *Further information about storage conditions:*
Keep container tightly closed.
Protect the product from light. Avoid exposure to heat.
Do not freeze.
· *Recommended storage temperature:* 2-8 °C
· **Specific end use(s)** Data not available

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8: Exposure controls/personal protection

· **Additional information about design of technical systems:** Eyewash fountain and safety shower in the area of storage and use.

· **Control parameters**

· ***Components with limit values that require monitoring at the workplace:***	
64-19-7 acetic acid (1-5%)	
PEL (USA)	Long-term value: 25 mg/m³, 10 ppm
REL (USA)	Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm
TLV (USA)	Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm

· *Additional information:* The lists that were valid during the creation were used as basis.

· **Exposure controls**
· ***Personal protective equipment:***
· *General protective and hygienic measures:*
The usual precautionary measures for handling chemicals should be followed.
Take off contaminated clothing and wash before reuse.
Wash thoroughly after handling.
Avoid physical contact with material.
Avoid formation of gas/mist/vapours.
Avoid breathing gas/mist/vapours.
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
· *Breathing equipment:*
Under normal conditions, the use of these products should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.
Filter A/P2
Use equipment tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
· *Protection of hands:*

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Use equipment tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
· *Material of gloves*
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· *Penetration time of glove material*
Penetration time : > 480 mm
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· *Eye protection:*

Wear face shield/eye protection.

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Use equipment tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
· *Body protection:* Protective work clothing

9: Physical and chemical properties

· **Information on basic physical and chemical properties**	
· ***General Information***	
· *Appearance:*	
Form:	Liquid
Color:	Colorless to light yellow
· *Odor:*	Weak like acetic acid
· *Odour threshold:*	Data not available.
· ***pH-value at 25 °C (77 °F):***	4.5
· ***Change in condition***	
Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	Data not available.
· ***Flash point:***	Data not available.
· ***Flammability (solid, gaseous):***	Not applicable
· ***Ignition temperature:***	Data not available.
· *Decomposition temperature:*	Data not available.
· ***Auto igniting:***	Product is not selfigniting.
· ***Danger of explosion:***	Product does not present an explosion hazard.
· ***Vapor pressure:***	Data not available.
· ***Density:***	
Relative density at 20 °C (68 °F)	1.049 g/cm³ (8.754 lbs/gal)
Vapour density	Data not available.
Evaporation rate	Data not available.
· ***Solubility in / Miscibility with***	
Water:	Fully miscible.
· ***Partition coefficient (n-octanol/water):***	Data not available.
· ***Viscosity:***	
Dynamic:	Data not available.
· **Other information**	No further relevant information available.

10: Stability and reactivity

· **Reactivity** See § Possibility of hazardous reactions.
· **Chemical stability** Stable under recommended storage conditions.
· ***Thermal decomposition / conditions to be avoided:*** Data not available
· **Possibility of hazardous reactions** No dangerous reactions if used according to specifications.
· **Conditions to avoid** Data not available
· **Incompatible materials:**
Strong oxidizing agents.
Bases.
· **Hazardous decomposition products:**
Formation of toxic gases is possible during heating or in case of fire.
Carbon oxides (COx)
Nitrogen oxides (NOx)
Sulphur oxides (SOx)
· **Additional information:** Stable at the recommended storage temperature and if protected from light. Avoid exposure to heat.

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11: Toxicological information

· **Information on toxicological effects**
· ***Acute toxicity:***

· *LD/LC50 values that are relevant for classification:*		
ATE (Acute Toxicity Estimates)		
Oral	LD50	>5000 mg/kg (-)

60-32-2 aminocaproic acid		
Oral	LD50	14300 mg/kg (mouse)
64-19-7 acetic acid		
Oral	LD50	3310 mg/kg (rat)

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Dermal	LD50	1060 mg/kg (rabbit)
Inhalative	LC50/1h	13.5 mg/l (rat)
9002-92-0 dodecan-1-ol, ethoxylated		
Oral	LD50	1000 mg/kg (rat)
62-56-6 thiourea		
Oral	LD50	1750 mg/kg (rat)
Dermal	LD50	6810 mg/kg (rat)

· *Primary irritant effect:*
· *on the skin:*
Causes skin irritation.
· *on the eye:*
Causes serious eye damage.
· *Inhalation:*
May be harmful by inhalation.
May cause irritating effect.
· *Ingestion:*
May be harmful if swallowed.
May cause gastrointestinal upset, vomiting, diarrhea.
Nausea
· *Sensitization:* Data not available.
· ***Additional toxicological information:***
· *Carcinogenic categories*

· *IARC (International Agency for Research on Cancer)*		
62-56-6	thiourea	3

· *NTP (National Toxicology Program)*		
62-56-6	thiourea	R

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12: Ecological information

· **Toxicity**
· ***Aquatic toxicity:***
Information on components:

64-19-7 acetic acid	
LC50/48h	350 mg/l (fish)
9002-92-0 dodecan-1-ol, ethoxylated	
EC50	1-10 mg/l (Daphnia)
62-56-6 thiourea	
EC50/48h	35 mg/l (Daphnia)
EC50/72h	3.8-10 mg/l (Algae)
EC50/96h	6.8 mg/l (Algae)
LC50/96h	600 mg/l (fish)
Microtox	15 min - 3395 mg/L (-)

· **Persistence and degradability** Data not available.
· **Behavior in environmental systems:**
· ***Bioaccumulative potential*** Data not available.
· ***Mobility in soil*** Data not available.
· **Additional ecological information:**
· ***General notes:***
At present there are no ecotoxicological assessments.
Water hazard class 2 (Self-assessment): hazardous for water
Danger to drinking water if even small quantities leak into the ground.
Do not allow product to reach ground water, water course or sewage system.
Disposal procedures have to be respected, see Section 13.
· **Other adverse effects** No further relevant information available.

13: Disposal considerations

· **Waste treatment methods**
· ***Recommendation:*** Disposal must be made according to official regulations.

· **Uncleaned packagings:**
· ***Recommendation:*** Disposal must be made according to official regulations.
· ***Primary packaging:*** Plastic vial (composed of polyethylene high density)

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14: Transport information

· **UN-Number**	Not applicable
· ***DOT, ADR, ADN, IMDG, IATA***	-
· **UN proper shipping name**	
· ***DOT, ADR, ADN, IMDG, IATA***	-
· **Transport hazard class(es)**	
· ***DOT, ADR, ADN, IMDG, IATA***	
· *Class*	-
· **Packing group**	
· ***DOT, ADR, IMDG, IATA***	-
· **Environmental hazards:**	
· ***Marine pollutant:***	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	-

15: Regulatory information

· ***SARA***
· *Section 302/304 (40CFR355.30 / 40CFR355.40):* Available information lists none.
· *Section 313 (Specific toxic chemical listings):* Not regulated.
· ***TSCA (Toxic Substances Control Act):*** This product is regulated by the Food and Drug Administration; it is exempt from requirements of TSCA.
· ***Proposition 65***

· *Chemicals known to cause cancer:*	
62-56-6	thiourea

· *Chemicals known to cause reproductive toxicity for females:* Available information lists none.
· *Chemicals known to cause reproductive toxicity for males:* Available information lists none.
· *Chemicals known to cause developmental toxicity:* Available information lists none.

· ***Carcinogenic categories***
· *EPA (Environmental Protection Agency)* Available information lists none.
· *TLV (Threshold Limit Value established by ACGIH)* Available information lists none.
· *NIOSH-Ca (National Institute for Occupational Safety and Health)* Available information lists none.
· *OSHA-Ca (Occupational Safety & Health Administration)* Available information lists none.
· **U. S. State Regulations:**

· ***PA-RTK***	
64-19-7	acetic acid
62-56-6	thiourea

· ***NJ-RTK***	
64-19-7	acetic acid
62-56-6	thiourea

· ***MA-RTK***	
64-19-7	acetic acid
62-56-6	thiourea

· ***RI-RTK***	
64-19-7	acetic acid
62-56-6	thiourea

· **US Federal Regulation** This mixture is a component of an FDA-regulated IN VITRO diagnostic medical device.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· *Relevant phrases*
H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.

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H411 Toxic to aquatic life with long lasting effects.

· **Department issuing MSDS:** Product safety department
· **Contact:** Product safety department
· ***Abbreviations and acronyms:***
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
SVHC : Substances of Very High Concern
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOEC : No Observed Effect Concentration
EC50: Effective concentration, 50 percent
IC50 : Inhibitory concentration, 50 percent.
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Carc. 2: Carcinogenicity, Hazard Category 2
Repr. 2: Reproductive toxicity, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

· **** Data compared to the previous version altered.***

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1: Identification

· **Product identifier**

· ***Trade name:*** **Iron Reagent 2**

· *Article number:* 77360B / 79360B / FEFE-0850R2 / FEFE-6XXX
· *Synonyms* EON 100 IRON R2 / EON 300 IRON R2 / IRON ENVOY R2 / IRON FERENE R2
· ***Relevant identified uses of the substance or mixture and uses advised against***
· *Application of the substance / the mixture*
Reagent for IN VITRO diagnostic
Product included in kit(s) :
- Kit composed of two reagents : 77360 / 79360 / 55360 FEFE-0230

· **Details of the supplier of the safety data sheet**
· ***Manufacturer/Supplier:***
ELITech Clinical Systems SAS
Zone Industrielle
61500 Sées • France
Tel : +33 (0)2 33 81 21 00
Fax : +33 (0)2 33 28 77 51
www.elitechgroup.com
MSDS.ECS-SAS@elitechgroup.com

· ***Information department:*** Product safety department
· ***Emergency telephone number:*** Contact your distributor or poison control center in your country.

2: Hazard(s) identification

· **Classification of the substance or mixture**
· ***Classification according to Regulation (EC) No 1272/2008*** The product is not classified according to the CLP regulation.

· **Label elements**
· ***Labelling according to Regulation (EC) No 1272/2008*** -
· *Hazard pictograms* -
· *Signal word* -
· *Hazard statements* -
· ***Additional information:***
Safety data sheet available on request.

3: Composition/information on ingredients

· **Chemical characterization: Mixtures**
· ***Description:***
Mixture of substances.
Aqueous solution.

· ***Dangerous components:*** No dangereous component in reportable quantity.

4: First-aid measures

· **Description of first aid measures**
· ***General information:*** Show this safety data sheet to the doctor in attendance.
· ***After inhalation:***
Supply fresh air.
Move out of dangerous area.
If required, provide artificial respiration.
If symptoms appear, seek medical advice.
· ***After skin contact:***
Rinse with water.
If symptoms appear, seek medical advice.
· ***After eye contact:***
Protect unharmed eye.
Remove contact lenses, if present and easy to do.
Rinse opened eye for several minutes under running water. If symptoms appear, seek medical advice.
· ***After swallowing:***
Never give anything by mouth to an unconscious person.
Do not induce vomiting.
Rinse out mouth and then drink plenty of water.
Seek advice from a doctor or a poison control center.
· ***Information for doctor:***
· *Most important symptoms and effects, both acute and delayed* Data not available
· *Indication of any immediate medical attention and special treatment needed* Treat symptomatically.

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5: Fire-fighting measures

· **Extinguishing media**
· ***Suitable extinguishing agents:***
Use fire fighting measures that suit the environment.
CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.
· **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
Carbon oxides (COx)
Nitrogen oxides (NOx)
Sulphur oxides (SOx)
· **Advice for firefighters**
· ***Protective equipment:*** As in any fire, wear a respiratory protective device, and full protective gear.
· **Additional information** Non-combustible liquid.

6: Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective clothing.
Avoid physical contact with material.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Clean the affected area carefully.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7: Handling and storage

· **Handling:**
· ***Precautions for safe handling***
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Avoid physical contact with material.
Observe the warnings on the label.
· ***Information about protection against explosions and fires:*** No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· ***Storage:***
· *Requirements to be met by storerooms and receptacles:* Unsuitable material for receptacle: aluminium, copper, copper alloys, zinc.
· *Information about storage in one common storage facility:* Not required.
· *Further information about storage conditions:*
Keep container tightly closed.
Protect the product from light. Avoid exposure to heat.
Do not freeze.
· *Recommended storage temperature:* 2-8 °C
· **Specific end use(s)** Data not available

8: Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**
· ***Components with limit values that require monitoring at the workplace:***
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· *Additional information:* The lists that were valid during the creation were used as basis.

· **Exposure controls**
· ***Personal protective equipment:***
· *General protective and hygienic measures:*
The usual precautionary measures for handling chemicals should be followed.
Wash hands before breaks and at the end of work.
Avoid physical contact with material.
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
· *Breathing equipment:*
Under normal conditions, the use of these products should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.
Filter A/P2
Use equipment tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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· *Protection of hands:*

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Use equipment tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
· *Material of gloves*
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· *Penetration time of glove material*
Penetration time : > 480 mm
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· *Eye protection:*

Tightly sealed goggles

Use equipment tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
· *Body protection:* Protective work clothing

9: Physical and chemical properties

· **Information on basic physical and chemical properties**	
· ***General Information***	
· *Appearance:*	
Form:	Liquid
Color:	Yellow
· *Odor:*	Sulphurous
· *Odour threshold:*	Data not available
· ***pH-value at 25 °C (77 °F):***	2.5
· ***Change in condition***	
Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	Data not available
Solidification point:	Data not available
· ***Flash point:***	Not applicable.
· ***Flammability (solid, gaseous):***	Not applicable.
· ***Ignition temperature:***	Not applicable
· *Decomposition temperature:*	Data not available
· ***Auto igniting:***	Product is not selfigniting.
· ***Danger of explosion:***	Product does not present an explosion hazard.
· ***Vapor pressure:***	Data not available
· ***Density:***	
Relative density at 20 °C (68 °F)	1.022 g/cm³ (8.529 lbs/gal)
Vapour density	Data not available
Evaporation rate	Data not available
· ***Solubility in / Miscibility with***	
Water:	Fully miscible.
· ***Partition coefficient (n-octanol/water):***	Data not available
· ***Viscosity:***	
Dynamic:	Data not available
· **Other information**	No further relevant information available.

10: Stability and reactivity

· **Reactivity** See § Possibility of hazardous reactions.
· **Chemical stability** Stable under recommended storage conditions.
· ***Thermal decomposition / conditions to be avoided:*** Data not available
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** Data not available
· **Incompatible materials:**
Strong acids.
Bases.

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Copper, copper alloy, aluminum, zinc.
· **Hazardous decomposition products:**
Formation of toxic gases is possible during heating or in case of fire.
Carbon oxides (COx)
Nitrogen oxides (NOx)
Sulphur oxides (SOx)
· **Additional information:** Stable at the recommended storage temperature and if protected from light. Avoid exposure to heat.

11: Toxicological information

· **Information on toxicological effects**
· ***Acute toxicity:***

· *LD/LC50 values that are relevant for classification:*		
ATE (Acute Toxicity Estimates)		
Oral	LD50	>5000 mg/kg (rat)

· *Primary irritant effect:*
· *on the skin:*
May cause irritating effect.
· *on the eye:*
May cause irritating effect.
· *Inhalation:*
May be harmful by inhalation.
May cause irritating effect.
· *Ingestion:* May be harmful if swallowed.
· *Sensitization:* Data not available
· ***Additional toxicological information:***
· *Carcinogenic categories*
· *IARC (International Agency for Research on Cancer)* None of the ingredient is in reportable quantity.
· *NTP (National Toxicology Program)* None of the ingredient is in reportable quantity.

12: Ecological information

· **Toxicity**
· ***Aquatic toxicity:*** At present there are no ecotoxicological assessments.
· **Persistence and degradability** Data not available
· **Behavior in environmental systems:**
· ***Bioaccumulative potential*** Data not available
· ***Mobility in soil*** Data not available
· **Ecotoxical effects:**
· ***Remark:*** Can lead to changes in pH and deterioration of aquatic life.
· **Additional ecological information:**
· ***General notes:***
Water hazard class 2 (Self-assessment): hazardous for water
Danger to drinking water if even small quantities leak into the ground.
Do not allow product to reach ground water, water course or sewage system.
Disposal procedures have to be respected, see Section 13.
· **Other adverse effects** No further relevant information available.

13: Disposal considerations

· **Waste treatment methods**
· ***Recommendation:*** Disposal must be made according to official regulations.

· **Uncleaned packagings:**
· ***Recommendation:*** Disposal must be made according to official regulations.
· ***Primary packaging:*** Plastic vial (composed of polyethylene high density)

14: Transport information

· **UN-Number**	Not applicable
· ***DOT, ADR, ADN, IMDG, IATA***	-
· **UN proper shipping name**	
· ***DOT, ADR, ADN, IMDG, IATA***	-
· **Transport hazard class(es)**	
· ***DOT, ADR, ADN, IMDG, IATA***	
· *Class*	-
· **Packing group**	
· ***DOT, ADR, IMDG, IATA***	-

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Safety Data Sheet
acc. to OSHA HCS

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· **Environmental hazards:**	
· ***Marine pollutant:***	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	-

15: Regulatory information

· ***SARA***
· *Section 302/304 (40CFR355.30 / 40CFR355.40):* Available information lists none.
· *Section 313 (Specific toxic chemical listings):* Not regulated.
· ***TSCA (Toxic Substances Control Act):*** This product is regulated by the Food and Drug Administration; it is exempt from requirements of TSCA.
· ***Proposition 65***
· *Chemicals known to cause cancer:* None of the ingredient is in reportable quantity.
· *Chemicals known to cause reproductive toxicity for females:* Available information lists none.
· *Chemicals known to cause reproductive toxicity for males:* Available information lists none.
· *Chemicals known to cause developmental toxicity:* Available information lists none.

· ***Carcinogenic categories***
· *EPA (Environmental Protection Agency)* Available information lists none.
· *TLV (Threshold Limit Value established by ACGIH)* Available information lists none.
· *NIOSH-Ca (National Institute for Occupational Safety and Health)* Available information lists none.
· *OSHA-Ca (Occupational Safety & Health Administration)* Available information lists none.
· **U. S. State Regulations:**
· ***PA-RTK*** None of the ingredient is in reportable quantity.
· ***NJ-RTK*** None of the ingredient is in reportable quantity.
· ***MA-RTK*** None of the ingredient is in reportable quantity.
· ***RI-RTK*** None of the ingredient is in reportable quantity.
· **US Federal Regulation** This mixture is a component of an FDA-regulated IN VITRO diagnostic medical device.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Product safety department
· **Contact:** Product safety department
· ***Abbreviations and acronyms:***
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOEC : No Observed Effect Concentration
EC50: Effective concentration, 50 percent
IC50 : Inhibitory concentration, 50 percent.

· **** Data compared to the previous version altered.***