

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



Date of issue: 17/04/2024

Version: 3.1

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

1.1. Product identifier

Product Form : Mixture
Product Name : Normal Human Serum
Product Code : 009-000-121

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

1.2.1. Relevant identified uses

Use of the substance/mixture : For in vitro research use only. Not for diagnostic or therapeutic use. This is not a medical device. Contact supplier for specific applications.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Jackson ImmunoResearch Laboratories, Inc.
872 West Baltimore Pike
West Grove, PA 19390
T: 800-367-5296, 610-869-4024
F: 610-869-0171
tech@jacksonimmuno.com
www.jacksonimmuno.com

European Contact

Jackson ImmunoResearch Europe LTD
Cambridge House
St Thomas' Place
Ely, Cambridgeshire CB7 4EX, UK
T: +44 (0) 1638 782616
F: +44 (0) 1353 664675
info@jacksonimmuno.com
help@jacksonimmuno.com

Email address for the person responsible for this SDS:
tech@jacksonimmuno.com

1.4. Emergency telephone number

Emergency number : +1-610-869-4024 (USA)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aquatic Chronic3 H412

Full text of hazard classes and H-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard statements (CLP)	H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	P273 - Avoid release to the environment. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	EUH032 - Contact with acids liberates very toxic gas.

2.3. Other hazards

Other hazards not contributing to the classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/information on ingredients

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



3.1. Substances

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification According to Regulation (EC) No. 1272/2008 [CLP]
Sodium azide	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7	0.65	Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodium phosphate dibasic	(CAS-No.) 7558-79-4 (EC-No.) 231-448-7	1.8	Not classified
Sodium chloride	(CAS-No.) 7647-14-5 (EC-No.) 231-598-3	19.1	Not classified
Normal Human Serum	(CAS-No.) Not assigned	78.4	Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Using proper respiratory protection, move the exposed person to fresh air at once. Immediately call a poison center, physician, or emergency medical service.
- First-aid measures after skin contact : Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.
- First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

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

- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/effects after inhalation : May be harmful or cause irritation.
- Symptoms/effects after skin contact : Prolonged exposure may cause skin irritation.
- Symptoms/effects after eye contact : May cause slight irritation to eyes.
- Symptoms/effects after ingestion : Ingestion may cause adverse effects. May be harmful if swallowed.
- Chronic symptoms : None expected under normal conditions of use.

4.3. Indication of any immediate medical attention and special treatment needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical. Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Product is not flammable.
- Explosion hazard : Product is not explosive.
- Reactivity : Hazardous reactions will not occur under normal conditions.

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



Hazardous decomposition products in case of fire : Phosphorous oxides. Sodium oxides. Hydrogen chloride gas.

5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire.
Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid prolonged contact with eyes, skin and clothing.

6.1.1. For non-emergency personnel

Protective equipment : Use appropriate personal protective equipment (PPE).

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental precautions

: Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams.

Methods for cleaning up : Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill.

6.4. Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container closed when not in use. Store at 2-8°C (35°F - 46.4°F). Keep/Store away from extremely high temperatures and incompatible materials.

Incompatible materials : Strong acids, strong bases, strong oxidizers. Heavy metals. Halogenated hydrocarbons.

7.3. Specific end use(s)

For in vitro research use only. Not for diagnostic or therapeutic use. This is not a medical device. Contact supplier for specific applications.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium chloride (7647-14-5)		
Latvia	OEL TWA (mg/m ³)	5 mg/m ³

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



Lithuania	IPRV (mg/m ³)	5 mg/m ³
Sodium azide (26628-22-8)		
EU	IOELV TWA (mg/m ³)	0,1 mg/m ³
EU	IOELV STEL (mg/m ³)	0,3 mg/m ³
EU	Notes	Possibility of significant uptake through the skin
Austria	MAK (mg/m ³)	0,1 mg/m ³
Austria	MAK Short time value (mg/m ³)	0,3 mg/m ³
Austria	OEL chemical category (AT)	Skin notation
Belgium	OEL chemical category (BE)	Skin, Skin notation
Bulgaria	OEL TWA (mg/m ³)	0,1 mg/m ³
Bulgaria	OEL STEL (mg/m ³)	0,3 mg/m ³
Croatia	GVI (graniczna vrijednost izloženosti) (mg/m ³)	0,1 mg/m ³
Croatia	KGVI (kratkotrajna graniczna vrijednost izloženosti) (mg/m ³)	0,3 mg/m ³
Croatia	OEL chemical category (HR)	Skin notation
Cyprus	OEL TWA (mg/m ³)	0,1 mg/m ³
Cyprus	OEL STEL (mg/m ³)	0,3 mg/m ³
Cyprus	OEL chemical category (CY)	Skin-potential for cutaneous absorption
France	VLE (mg/m ³)	0,3 mg/m ³ (restrictive limit)
France	VME (mg/m ³)	0,1 mg/m ³ (restrictive limit)
France	OEL chemical category (FR)	Risk of cutaneous absorption
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	0,2 mg/m ³
Gibraltar	Eight hours mg/m ³	0,1 mg/m ³
Gibraltar	Short-term mg/m ³	0,3 mg/m ³
Gibraltar	OEL chemical category (GI)	Skin notation
Greece	OEL TWA (mg/m ³)	0,3 mg/m ³
Greece	OEL TWA (ppm)	0,1 ppm
Greece	OEL STEL (mg/m ³)	0,3 mg/m ³
Greece	OEL STEL (ppm)	0,1 ppm
USA ACGIH	ACGIH Ceiling (mg/m ³)	0,29 mg/m ³
USA ACGIH	ACGIH Ceiling (ppm)	0,11 ppm
Italy	OEL TWA (mg/m ³)	0,1 mg/m ³
Italy	OEL STEL (mg/m ³)	0,3 mg/m ³
Italy	OEL chemical category (IT)	skin - potential for cutaneous absorption
Latvia	OEL TWA (mg/m ³)	0,1 mg/m ³
Latvia	OEL chemical category (LV)	skin - potential for cutaneous exposure
Spain	VLA-ED (mg/m ³)	0,1 mg/m ³ (indicative limit value)
Spain	VLA-EC (mg/m ³)	0,3 mg/m ³

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



Spain	OEL chemical category (ES)	skin - potential for cutaneous absorption
Switzerland	KZGW (mg/m ³)	0,4 mg/m ³ (inhalable dust)
Switzerland	MAK (mg/m ³)	0,2 mg/m ³ (inhalable dust)
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,1 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	0,3 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	0,3 mg/m ³
United Kingdom	WEL chemical category	Potential for cutaneous absorption
Czech Republic	Expoziciční limit (PEL) (mg/m ³)	0,1 mg/m ³
Czech Republic	OEL chemical category (CZ)	Potential for cutaneous absorption
Denmark	Grænseværdie (langvarig) (mg/m ³)	0,1 mg/m ³
Estonia	OEL TWA (mg/m ³)	0,1 mg/m ³
Estonia	OEL STEL (mg/m ³)	0,3 mg/m ³
Estonia	OEL chemical category (ET)	Sensitizer, Skin notation
Finland	HTP-arvo (8h) (mg/m ³)	0,1 mg/m ³
Finland	HTP-arvo (15 min)	0,3 mg/m ³
Finland	OEL chemical category (FI)	Potential for cutaneous absorption
Hungary	AK-érték	0,1 mg/m ³
Hungary	CK-érték	0,3 mg/m ³
Ireland	OEL (8 hours ref) (mg/m ³)	0,1 mg/m ³
Ireland	OEL (15 min ref) (mg/m ³)	0,3 mg/m ³
Ireland	OEL chemical category (IE)	Potential for cutaneous absorption
Lithuania	IPRV (mg/m ³)	0,1 mg/m ³
Lithuania	TPRV (mg/m ³)	0,3 mg/m ³
Lithuania	OEL chemical category (LT)	Skin notation
Luxembourg	OEL TWA (mg/m ³)	0,1 mg/m ³
Luxembourg	OEL STEL (mg/m ³)	0,3 mg/m ³
Luxembourg	OEL chemical category (LU)	Possibility of significant uptake through the skin
Malta	OEL TWA (mg/m ³)	0,1 mg/m ³
Malta	OEL STEL (mg/m ³)	0,3 mg/m ³
Malta	OEL chemical category (MT)	Possibility of significant uptake through the skin
Norway	Grenseverdier (AN) (mg/m ³)	0,1 mg/m ³
Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	0,3 mg/m ³ (value from the regulation)
Poland	NDS (mg/m ³)	0,1 mg/m ³
Poland	NDSch (mg/m ³)	0,3 mg/m ³
Romania	OEL TWA (mg/m ³)	0,1 mg/m ³
Romania	OEL STEL (mg/m ³)	0,3 mg/m ³
Romania	OEL chemical category (RO)	Skin notation
Slovakia	NPHV (priemerná) (mg/m ³)	0,1 mg/m ³ (Sodium azide)

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



Slovakia	NPHV (Hranicná) (mg/m ³)	0,3 mg/m ³
Slovakia	OEL chemical category (SK)	Potential for cutaneous absorption
Slovenia	OEL TWA (mg/m ³)	0,1 mg/m ³
Slovenia	OEL STEL (mg/m ³)	0,3 mg/m ³
Slovenia	OEL chemical category (SL)	Potential for cutaneous absorption
Sweden	nivågränsvärde (NVG) (mg/m ³)	0,1 mg/m ³
Sweden	kortidsvärde (KTV) (mg/m ³)	0,3 mg/m ³
Portugal	OEL TWA (mg/m ³)	0,1 mg/m ³ (indicative limit value)
Portugal	OEL STEL (mg/m ³)	0,3 mg/m ³ (indicative limit value)
Portugal	OEL - Ceilings (mg/m ³)	0,29 mg/m ³
Portugal	OEL - Ceilings (ppm)	0,11 ppm (vapor)
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure indicative limit value

8.2. Exposure controls

Appropriate engineering controls

: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal protective equipment

: Gloves. Protective clothing. Protective goggles.



Materials for protective clothing

: Chemically resistant materials and fabrics.

Hand protection

: Wear protective gloves.

Eye and Face Protection

: Chemical safety goggles.

Skin and body protection

: Wear suitable protective clothing.

Respiratory protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other information

: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Light pink to light straw solid
Odour	: Odourless, as water
Odour threshold	: No data available
pH	: 7.6, when rehydrated with indicated volume of H ₂ O
Evaporation rate	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Sodium azide in water is a weak base. Reacts with copper, lead, silver, mercury, and carbon disulfide to form shock-sensitive compounds. Reacts with acids, forming toxic and explosive hydrogen azide. Contact with acids liberates toxic gas.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Extremely high temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizers. Heavy metals. halogenated hydrocarbons.

10.6. Hazardous decomposition products

Sodium oxides. Hydrogen chloride gas. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Sodium chloride (7647-14-5)	
LD50 oral rat	3550 mg/kg (Species: Wistar)
LD50 dermal rabbit	> 10000 mg/kg (Species: New Zealand White)
LC50 inhalation rat (mg/l)	> 42 g/m ³ (Exposure time: 1 h)
Sodium azide (26628-22-8)	
LD50 oral rat	27 mg/kg
LD50 oral	45 mg/kg
LD50 dermal rabbit	20 mg/kg
Sodium phosphate dibasic (7558-79-4)	
LD50 oral rat	17 g/kg
LD50 dermal rat	>500 mg/kg (50% solution)

Skin corrosion/irritation : Not classified
pH: 7,6 when rehydrated with indicated volume of H₂O

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



Serious eye damage/irritation	: Not classified pH: 7,6 when rehydrated with indicated volume of H ₂ O
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/Injuries After Inhalation	: May be harmful or cause irritation.
Symptoms/Injuries After Skin Contact	: Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	: Ingestion may cause adverse effects. May be harmful if swallowed.
Chronic Symptoms	: None expected under normal conditions of use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Sodium chloride (7647-14-5)	
LC50 fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340,7 (340,7 - 469,2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC chronic fish	252 mg/l (Species: Pimephales promelas)
Sodium azide (26628-22-8)	
LC50 fish 1	0,8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 fish 2	0,7 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
ErC50 (algae)	0,348 mg/l

12.2. Persistence and degradability

Normal Human Serum	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Normal Human Serum	
Bioaccumulative potential	Not established.
Sodium chloride (7647-14-5)	
BCF fish 1	(no bioaccumulation)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal : Dispose of contents/container in accordance with local, regional, national, and international regulations.
Ecology - waste materials : Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: Transport information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

14.6. Special precautions for user

No additional information available

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Sodium phosphate dibasic (7558-79-4)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Sodium chloride (7647-14-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Sodium azide (26628-22-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.2. National regulations

No additional information available

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Date of Preparation or Latest Revision	: 17/04/2024
Data sources	: Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.
Other information	: According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full Text of H- and EUH-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
H300	Fatal if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.

Indication of Changes No additional information available

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
ADN – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR – European Agreement Concerning the International Carriage of Dangerous Goods by Road
ATE – Acute Toxicity Estimate
BCF – Bioconcentration Factor
BEI – Biological Exposure Indices (BEI)
BOD – Biochemical Oxygen Demand
CAS No. – Chemical Abstracts Service Number
CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008
COD – Chemical Oxygen Demand
EC – European Community
EC50 – Median Effective Concentration
EEC – European Economic Community
EINECS – European Inventory of Existing Commercial Chemical Substances
EmS-No. (Fire) – IMDG Emergency Schedule Fire
EmS-No. (Spillage) – IMDG Emergency Schedule Spillage
EU – European Union
ErC50 – EC50 in Terms of Reduction Growth Rate
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
IARC – International Agency for Research on Cancer
IATA – International Air Transport Association
IBC Code – International Bulk Chemical Code
IMDG – International Maritime Dangerous Goods

NDS – Najwyższe Dopuszczalne Stezenie
NDSCh – Najwyższe Dopuszczalne Stezenie Chwilowe
NDSP – Najwyższe Dopuszczalne Stezenie Pulapowe
NOAEL – No-Observed Adverse Effect Level
NOEC – No-Observed Effect Concentration
NRD – Nevirsytinas Ribinis Dydis
NTP – National Toxicology Program
OEL – Occupational Exposure Limits
PBT – Persistent, Bioaccumulative and Toxic
PEL – Permissible Exposure Limit
pH – Potential Hydrogen
REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail
SADT – Self Accelerating Decomposition Temperature
SDS – Safety Data Sheet
STEL – Short Term Exposure Limit
STOT – Specific Target Organ Toxicity
TA-Luft – Technische Anleitung zur Reinhaltung der Luft
TEL TRK – Technical Guidance Concentrations
ThOD – Theoretical Oxygen Demand
TLM – Median Tolerance Limit
TLV – Threshold Limit Value
TPRD – Trumpalaikio Poveikio Ribinis Dydis
TRGS 510 – Technische Regel für Gefahrstoffe 510 – Lagerung von Gefahrstoffen in ortsbeweglichen Behältern
TRGS 552 – Technische Regeln für Gefahrstoffe – N-Nitrosamine

Normal Human Serum

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



IPRV - Ilgalaikio Poveikio Ribinis Dydis
IOELV – Indicative Occupational Exposure Limit Value
LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-Observed-Effect Concentration
Log Koc - Soil Organic Carbon-water Partitioning Coefficient
Log Kow - Octanol/water Partition Coefficient
Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAK – Maximum Workplace Concentration/Maximum Permissible Concentration
MARPOL - International Convention for the Prevention of Pollution

TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
VOC – Volatile Organic Compounds
VLA-EC - Valor Límite Ambiental Exposición de Corta Duración
VLA-ED - Valor Límite Ambiental Exposición Diaria
VLE – Valeur Limite D'exposition
VME – Valeur Limite De Moyenne Exposition
vPvB - Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK - Wassergefährdungsklasse

EU GHS SDS

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