

		ie:10/11/2022		Version: 3.1
SECTION 1: Ide	entification of th	ne substance/m	ixture and of the com	pany/undertaking
1.1. Product ide	entifier			
Product Form		: Mixture		
Product Name		(H+L) (minimal cros	onjugated AffiniPure VHH Fragm s-reaction to Bovine, Human, an	
Product Code		: 615-624-214		
1.2.Relevant ide1.2.1.Relevant ide	ntified uses of the subs ntified uses	tance or mixture and	uses advised against	
Use of the substance	e/mixture		h use only. Not for diagnostic or ntact supplier for specific applic	
1.2.2. Uses advised	-			
No additional inform				
	he supplier of the sa	fety data sheet		
Manufacturer			European Contact	
	earch Laboratories, Ind		Jackson ImmunoResearch Europ	e LTD
872 West Baltimore			Cambridge House	
West Grove, PA 193			St Thomas' Place	
T: 800-367-5296, 61	.0-869-4024		Ely, Cambridgeshire CB7 4EX, UK	
F: 610-869-0171			T: +44 (0) 1638 782616	
tech@jacksonimmu			F: +44 (0) 1353 664675	
www.jacksonimmur	no.com		info@jacksonimmuno.com	
			help@jacksonimmuno.com	
	ne person responsible f	or this SDS:		
tech@jacksonimmu				
	telephone number			
Emergency number)-869-4024 (USA)		
SECTION 2: Ha	zards identificat	tion		
2.1. Classification	n of the substance or	r mixture		
Classification Accordin	ng to Regulation (EC) No	o. 1272/2008 [CLP]		
Aquatic Chronic3	0 0 ()	H412		
	asses and H-statements	: see section 16		
Adverse physicochem	nical, human health and	environmental effect	s	
No additional inform			-	
2.2. Label elem				
	o Regulation (EC) No. 12	77/2008 [CI P]		
Hazard statements (equatic life with long lasting effe	ects
Precautionary state			e to the environment.	
			ontents/container to hazardous	or special waste collection
		-	e with local, regional, national	
		regulation.		

а



Safety Data Sheet

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

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	%	Classification According to Regulation (EC) No.
Sodium Azide	(CAS-No.) 26628-22-8	0.54	Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400
	(EC-No.) 247-852-1, (EC		Aquatic Chronic 1, H410
	Index-No.), 011-004-00-7		
Sodium phosphate	(CAS-No.) 7558-79-4,	1.5	
dibasic	(EC-No.) 231-448-7		
			Not Classified
Alexa Fluor [®] 680-conjugated	(CAS-No.) Not assigned		
AffiniPure VHH Fragment			
Alpaca Anti-Mouse IgG (H+L)			
(minimal cross-reaction to			
Bovine, Human, and Rabbit			
Serum Proteins)		1.1	Not Classified
Sodium Chloride	(CAS-No.) 7647-14-5	15.8	
	(EC-No.) 231-598-3		Not Classified
Albumins, blood serum	(CAS-No.) 9048-46-8	16.2	
	(EC-No.) 232-936-2		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.



Safety Data Sheet

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

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.	
	medical attention and special treatment needed	
-	ice and attention. If medical advice is needed, have product container or label at hand.	
SECTION 5: Firefighting mea		
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray, fog, carbon dioxide (CO ₂), alcohol-resistant foam, or dry chemical.	
Surfaste extinguisting mean	_	
Unsuitable extinguishing media	Use extinguishing media appropriate for surrounding fire.	
U U	: Do not use a heavy water stream. Use of heavy stream of water may spread fire.	
	rom the substance or mixture	
Fire hazard	: Not Assigned	
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.	
Hazardous decomposition products in	: Hydrogen chloride. Sodium oxides. Nitrogen oxides.	
case of fire		
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 relea	se measures	
6.1. Personal precautions, protec	tive 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 co	ntainment 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 p	personal protection and Section 13 for disposal considerations.	

SECTION 7: Handling and storage

7.1. Precautions for safe handling



Safety Data Sheet

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

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, ir	ncluding 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)	5)
-----------------------	---------	----

Sodium chloride (7647-14	1-5)	
Latvia	OEL TWA (mg/m³)	5 mg/m ³
Lithuania	IPRV (mg/m³)	5 mg/m ³
Sodium azide (26628-22-8	3)	
EU	IOELV TWA (mg/m³)	0,1 mg/m³
EU	IOELV STEL (mg/m ³)	0,3 mg/m ³
EU	Notes	Possibility of significant uptake through the skin
Austria	MAK (mg/m³)	0,1 mg/m ³
Austria	MAK Short time value (mg/m³)	0,3 mg/m ³
Austria	OEL chemical category (AT)	Skin notation
Belgium	OEL chemical category (BE)	Skin, Skin notation
Bulgaria	OEL TWA (mg/m³)	0,1 mg/m ³
Bulgaria	OEL STEL (mg/m ³)	0,3 mg/m ³
Croatia	GVI (granicna vrijednost izloženosti) (mg/m ³)	0,1 mg/m³
Croatia	KGVI (kratkotrajna granicna vrijednost izloženosti) (mg/m ³)	0,3 mg/m³
Croatia	OEL chemical category (HR)	Skin notation
Cyprus	OEL TWA (mg/m³)	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/m³)	0,1 mg/m ³ (restrictive limit)
France	OEL chemical category (FR)	Risk of cutaneous absorption



Safety Data Sheet

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

Germany	TRGS 900 Occupational exposure limit value (mg/m³)	0,2 mg/m³
Gibraltar	Eight hours mg/m3	0,1 mg/m ³
Gibraltar	Short-term mg/m3	0,3 mg/m ³
Gibraltar	OEL chemical category (GI)	Skin notation
Greece	OEL TWA (mg/m³)	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/m³)	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/m³)	0,1 mg/m ³
Latvia	OEL chemical category (LV)	skin - potential for cutaneous exposure
Spain	VLA-ED (mg/m³)	0,1 mg/m ³ (indicative limit value)
Spain	VLA-EC (mg/m ³)	0,3 mg/m ³
Spain	OEL chemical category (ES)	skin - potential for cutaneous absorption
Switzerland	KZGW (mg/m ³)	0,4 mg/m³ (inhalable dust)
Switzerland	MAK (mg/m³)	0,2 mg/m³ (inhalable dust)
Netherlands	Grens waarde 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	Expozicní limity (PEL) (mg/m³)	0,1 mg/m ³
Czech Republic	OEL chemical category (CZ)	Potential for cutaneous absorption
Denmark	Grænseværdie (langvarig) (mg/m³)	0,1 mg/m ³
Estonia	OEL TWA (mg/m³)	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/m³)	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/m³
Ireland	OEL (8 hours ref) (mg/m ³)	0,1 mg/m³



Safety Data Sheet

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

Ireland	OEL (15 min ref) (mg/m3)	0,3 mg/m³
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/m3)	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)
Slovakia	NPHV (Hranicná) (mg/m³)	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/m³)	0,1 mg/m ³
Sweden	kortidsvärde (KTV) (mg/m³)	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.



Safety Data Sheet

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

Personal protective equipment

: Gloves. Protective clothing. Protective goggles.



Materials for protective clothing
Hand protection
Eye and Face Protection
Skin and body protection
Respiratory protection

: Chemically resistant materials and fabrics.

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

- : Wear protective gloves.
- : Chemical safety goggles.
- : Wear suitable protective clothing.
- : 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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

9.1. Information on basic physical and chem	ICal	properties
Physical state	:	Solid
Colour	:	Blue solid
Odour	:	Odourless, as water
Odour threshold	:	No data available
рН	:	7.6, when rehydrated with indicated volume of H_2O
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 temerature	:	No data available
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 coefficent: 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.



Safety Data Sheet

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

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/m³ (Exposure time: 1 h)	
Sodium azide (26628-22-8)		
LD50 oral rat	27 mg/kg	

Sodium phosphate dibasic (7558-79-4)	
LD50 dermal rabbit	20 mg/kg
LD50 oral	45 mg/kg
2556 6141142	

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



Safety Data Sheet

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

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

Alexa Fluor® 680-conjugated AffiniPure VHH Fragment Alpaca Anti-Mouse IgG (H+L) (minimal cross-reaction to Bovine, Human, and Rabbit Serum Proteins)

Persistence and degradability Not established.

12.3. Bioaccumulative potential

 Alexa Fluor® 680-conjugated AffiniPure VHH Fragment Alpaca Anti-Mouse IgG (H+L) (minimal cross-reaction to Bovine, Human, and Rabbit Serum Proteins)

 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

Other information	: Avoid release to the environment.	
SECTION 13: Disposal considerations		
13.1. Waste treatment method	S	
Product/Packaging disposal recommendations	: 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.



Safety Data Sheet

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

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

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN	number			
Not regulated	d for transport			
14.2. UN	proper shipping name			
Not applicab	le Not applicable	Not applicable	Not applicable	Not applicable
14.3. Tra	nsport hazard class(es)			
Not applicab	le Not applicable	Not applicable	Not applicable	Not applicable
14.4. Pac	king group			
Not applicab	le Not applicable	Not applicable	Not applicable	Not applicable
14.5. Env	ironmental hazards			
Dangerous fo	or the Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the
environment	: No environment : No	environment : No	environment : No	environment : No
	Marine pollutant : 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

Notapplicable

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)

Albumins, blood serum (9048-46-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Date of Preparation or Latest Revision : 10/11/2022



Safety Data Sheet

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

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	NDS - Najwyzsze Dopuszczalne Stezenie
ADN – European Agreement Concerning the International Carriage of	NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe
Dangerous Goods by Inland Waterways	NDSP - Najwyzsze Dopuszczalne Stezenie Pulapowe
ADR - European Agreement Concerning the International Carriage of	NOAEL - No-Observed Adverse Effect Level
Dangerous Goods by Road	NOEC - No-Observed Effect Concentration
ATE - Acute Toxicity Estimate	NRD - Nevirsytinas Ribinis Dydis
BCF - Bioconcentration Factor	NTP – National Toxicology Program
BEI - Biological Exposure Indices (BEI)	OEL - Occupational Exposure Limits
BOD – Biochemical Oxygen Demand	PBT - Persistent, Bioaccumulative and Toxic
CAS No Chemical Abstracts Service Number	PEL - Permissible Exposure Limit
CLP – Classification, Labeling and Packaging Regulation (EC) No	pH – Potential Hydrogen
1272/2008	REACH – Registration, Evaluation, Authorisation, and Restriction of
COD – Chemical Oxygen Demand	Chemicals
EC – European Community	RID – Regulations Concerning the International Carriage of Dangerous
EC50 - Median Effective Concentration	Goods by Rail
EEC – European Economic Community	SADT - Self Accelerating Decomposition Temperature
EINECS – European Inventory of Existing Commercial Chemical	SDS - Safety Data Sheet
Substances	STEL - Short Term Exposure Limit
EmS-No. (Fire) - IMDG Emergency Schedule Fire	STOT - Specific Target Organ Toxicity
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage	TA-Luft - Technische Anleitung zur Reinhaltung der Luft
EU – European Union	TEL TRK – Technical Guidance Concentrations
ErC50 - EC50 in Terms of Reduction Growth Rate	ThOD – Theoretical Oxygen Demand
GHS – Globally Harmonized System of Classification and Labeling of	TLM - Median Tolerance Limit
Chemicals	TLV - Threshold Limit Value
IARC - International Agency for Research on Cancer	TPRD - Trumpalaikio Poveikio Ribinis Dydis
IATA - International Air Transport Association	TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von
IBC Code - International Bulk Chemical Code	Gefahrstoffen in ortsbeweglichen Behältern
IMDG - International Maritime Dangerous Goods	TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine
IPRV - Ilgalaikio Poveikio Ribinis Dydis	TRGS 900 - Technische Regel für Gefahrstoffe 900 –
IOELV – Indicative Occupational Exposure Limit Value	Arbeitsplatzgrenzwerte
LC50 - Median Lethal Concentration	TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische
LD50 - Median Lethal Dose	Grenzwerte



Safety Data Sheet

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

LOAEL - Lowest Observed Adverse Effect Level TSCA - Toxic Substances Control Act LOEC - Lowest-Observed-Effect Concentration TWA - Time Weighted Average Log Koc - Soil Organic Carbon-water Partitioning Coefficient VOC - Volatile Organic Compounds Log Kow - Octanol/water Partition Coefficient VLA-EC - Valor Límite Ambiental Exposición de Corta Duración Log Pow - Ratio of the equilibrium concentration (C) of a dissolved VLA-ED - Valor Límite Ambiental Exposición Diaria substance in a two-phase system consisting of two largely immiscible VLE-Valeur Limite D'exposition solvents, in this case octanol and water VME-Valeur Limite De Moyenne Exposition MAK – Maximum Workplace Concentration/Maximum Permissible vPvB - Very Persistent and Very Bioaccumulative Concentration WEL-Workplace Exposure Limit MARPOL - International Convention for the Prevention of Pollution 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.