



Be Right™

# SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Issue Date 05-Oct-2005

Revision Date 14-Feb-2023

Version 3.2

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**Product Code(s)** 2395266  
**Product Name** Ammonia Salicylate Reagent  
**Unique Formula Identifier (UFI)** GUG2-KATG-8000-58UA  
**Molecular weight** No data available

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

**Recommended Use** Water Analysis. Reagent for ammonia test.  
**Uses advised against** Consumer use

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

HACH UK  
Laser House  
Ground Floor, Suite B  
Waterfront Quay, Salford Quays  
GB - Manchester, M50 3XW  
Tel. +44 (0) 161 872 1487  
info-uk@hach.com

HACH Ireland  
Unit 34 GB Business Park  
Little Island  
IRL-Co. Cork  
T45 H681  
Tel. +353 (0)146 02 522  
info-ie@hach.com

### 1.4. Emergency telephone number

UK: Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service  
IE: National Poisons Information Centre (NPIC) 01 809 2566 (24/7)

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 4 - (H302)
Serious eye damage/eye irritation	Category 2 - (H319)
Reproductive toxicity	Category 2 - (H361)

Specific target organ toxicity — single exposure

Category 3 - (H335)

**2.2. Label elements**

Contains Sodium salicylate

**Signal word**

Warning

**Hazard statements**

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H361 - Suspected of damaging fertility or the unborn child

**Precautionary Statements - EU (§28, 1272/2008)**

P201 - Obtain special instructions before use

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P312 - Call a POISON CENTER or doctor if you feel unwell

P501 - Dispose of contents/ container to an approved waste disposal plant

**2.3. Other hazards**

No information available.

**PBT & vPvB**

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT)

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	CAS No. EC No. Index No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Disodium pentacyanonitrosylfer rate	13755-38-9 238-373-9 -	<1%	Acute Tox. 3 - H301	-	-	-

**Full text of H- and EUH-phrases: see section 16**

Acute Toxicity Estimate No information available

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** May cause redness and tearing of the eyes. Burning sensation.

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

**Note to doctors** Treat symptomatically.

## Section 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

<b>Suitable Extinguishing Media</b>	Product itself does not burn.
<b>Unsuitable extinguishing media</b>	No information available.

### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards arising from the chemical</b>	Thermal decomposition can lead to release of irritating and toxic gases and vapours.
<b>Hazardous combustion products</b>	May emit acrid smoke and fumes.

### 5.3. Advice for firefighters

<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
<b>Additional information</b>	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## Section 6: ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

**For emergency responders** Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

**Environmental precautions** Should not be released into the environment. See Section 12 for additional Ecological Information.

**6.3. Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Avoid creating dust. Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## Section 7: HANDLING AND STORAGE

**7.1. Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Ensure adequate ventilation. Avoid breathing vapours or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

**General hygiene considerations** The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Avoid creating dust. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

**7.3. Specific end use(s)**

**Specific use(s)** Analytical reagent.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1. Control parameters****Exposure Limits**

Chemical name	European Union	United Kingdom	Ireland
Disodium pentacyanonitrosylferrate 13755-38-9	-	TWA: 5 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>

		STEL: 15 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup> Sk*	STEL: 15 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>
--	--	--	---

**Biological occupational exposure limits**

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

**Additional information** No information available.

**8.2. Exposure controls**

**Engineering controls** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Personal protective equipment  
Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374-1:2016 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III acco. Barrier creams may help to protect the exposed areas of skin. Wear suitable gloves.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)	Wear protective Viton™ gloves	0,70 mm	>480 minutes
Short term	Wear protective nitrile rubber gloves	0,20 mm	>30 minutes

**Skin and body protection** Wash contaminated clothing before reuse. Wear suitable protective clothing.

**Respiratory protection** Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**Recommended filter type:** ABEK-P3.

**General hygiene considerations** The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Avoid creating dust. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties**

**Physical state** Solid

**Colour** Tan

**Odour** Odourless

**Odour threshold** No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	No data available	
pH	7.84	5% @ 20°C
Melting point / freezing point	97 °C / 206.6 °F	
Initial boiling point and boiling range	No data available	
Evaporation rate	Not applicable	
Vapour pressure	Not applicable	
Relative vapor density	No data available	
Specific Gravity	1.689	
Partition coefficient	log K <sub>ow</sub> ~ -0.6	
Soil Organic Carbon-Water Partition Coefficient	log K <sub>oc</sub> ~ -0.84	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	No data available	
Kinematic viscosity	No data available	
Relative density	1.689 g/cm <sup>3</sup>	@ 20 °C

**Solubility(ies)****Water solubility**

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

**Solubility in other solvents**

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

**Metal Corrosivity**

<b>Steel Corrosion Rate</b>	No data available
<b>Aluminum Corrosion Rate</b>	No data available

**Explosive properties**

<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available

**Flammable properties**

<b>Flash point</b>	Not applicable
--------------------	----------------

**Flammability**

<b>Upper flammability limit:</b>	No data available
----------------------------------	-------------------

Lower flammability limit

No data available

Oxidising properties

No data available.

Bulk density

No data available

**9.2. Other information**

No information available.

**Section 10: STABILITY AND REACTIVITY****10.1. Reactivity**

Reactivity

No information available.

**10.2. Chemical stability**

Stability

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerisation

None under normal processing.

**10.4. Conditions to avoid**

Conditions to avoid

None known based on information supplied.

**10.5. Incompatible materials**

Incompatible materials

None known based on information supplied.

**10.6. Hazardous decomposition products**

Hazardous Decomposition Products Cyanide. nitrogen oxides. Sodium oxides.

**Section 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Acute toxicity**

Harmful if swallowed

Mixture

No data available.

Substance

Test data reported below.

**Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium salicylate	Rat LD <sub>50</sub>	930 mg/kg	None reported	<b>Behavioral</b> Convulsions or effect on seizure threshold Muscle contraction or spasticity	RTECS
Sodium tartrate dihydrate	Mouse LD <sub>50</sub>	4360 mg/kg	None reported	None reported	EPA
Disodium	Rat	99 mg/kg	None reported	None reported	LOLI

pentacyanonitrosylfer rate	LD <sub>50</sub>				
m-Nitrophenol	Rat LD <sub>50</sub>	328 mg/kg	None reported	None reported	Vendor SDS

**Acute Toxicity Estimate (ATE)**

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	1,750.60 mg/kg
----------------------	----------------

**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

**Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD Test 404: Acute Dermal Corrosion/Irritation	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA
Trisodium citrate	Draize Test	Rabbit	500 mg	24 hours	Not corrosive or irritating to skin	ECHA
m-Nitrophenol	Draize Test	Rabbit	20 mg	24 hours	Skin irritant	RTECS

**Serious eye damage/eye irritation**

Classification based on data available for ingredients. Causes serious eye irritation.

Mixture No data available.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD Test 439: In Vitro Skin Irritation: Reconstructed Human Epidermis (Rhe) Test Method	Human	50 mg	6 hours	Eye irritant	ECHA
Trisodium citrate	Draize Test	Rabbit	0.1 mL	24 hours	Mild eye irritant	IUCLID
Sodium tartrate dihydrate	None reported	Human	None reported	None reported	Not corrosive or irritating to eyes	ECHA
m-Nitrophenol	Draize Test	Rabbit	5 mg	24 hours	Corrosive to eyes	RTECS

**Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.



**Skin Sensitization Exposure Route:**

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium salicylate	Based on human experience	Human	No sensitisation responses were observed.	Vendor SDS
Trisodium citrate	OECD Test No. 406: Skin Sensitisation	Guinea pig	No sensitisation responses were observed.	IUCLID
Sodium tartrate dihydrate	None reported	Human	No sensitisation responses were observed.	ECHA

**Respiratory Sensitization Exposure Route:**

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium salicylate	Based on human experience	Human	Not confirmed to be a respiratory sensitizer	Vendor SDS
Sodium tartrate dihydrate	None reported	Human	No sensitisation responses were observed.	ECHA

**STOT - single exposure**

May cause respiratory irritation.

Mixture

No data available.

Substance

Test data reported below.

**Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium salicylate	Human LD <sub>Lo</sub>	700 mg/kg	None reported	Lungs, Thorax, or Respiration Dyspnea	RTECS

**STOT - repeated exposure**

Based on available data, the classification criteria are not met.

Mixture

No data available.

Substance

No data available.

**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

Mixture invitro **Data**

No data available.

Substance invitro **Data**

Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD 471	<i>Salmonella typhimurium</i>	0.158 mg/plate	48 hours	Negative	No information available
Trisodium citrate	Mutation in microorganisms	<i>Salmonella typhimurium</i>	None reported	None reported	Negative	IUCLID
m-Nitrophenol	Mutation in microorganisms	<i>Salmonella typhimurium</i>	1 mg/plate	None reported	Positive test result for	CCRIS

					mutagenicity	
--	--	--	--	--	--------------	--

Mixture **invivo Data** No data available.

Substance **invivo Data** Test data reported below.

**Oral Exposure Route:**

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	DNA damage	Rat	30 mg/L	None reported	Positive test result for mutagenicity	RTECS

**Carcinogenicity**

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

**Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Trisodium citrate	Rat	3000 mg/kg	2 years	Not Carcinogenic	IUCLID

**Reproductive toxicity**

Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.

Mixture No data available.

Substance Test data reported below.

**Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium salicylate	Rat TD <sub>Lo</sub>	40 mg/kg	1 days	Effects on Newborn Stillbirth	RTECS

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**11.2 Information on other hazards**

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

**11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties**

**11.2.2. Other information**

**Other adverse effects** No information available.

**Section 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**Ecotoxicity** Based on available data, the classification criteria are not met.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

**Mixture**

**Acute aquatic toxicity:** No data available.

**Aquatic Chronic Toxicity:** No data available.

**Substance**

**Acute aquatic toxicity:** Test data reported below.

Fish:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium salicylate	96 hours	<i>Pimephales promelas</i>	LC <sub>50</sub>	1370 mg/L	GESTIS
Sodium tartrate dihydrate	96 hours	None reported	LC <sub>50</sub>	612000 mg/L	ECOSARS

Crustacea:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium tartrate dihydrate	48 Hours	None reported	LC <sub>50</sub>	263000 mg/L	ECOSARS

Algae:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium tartrate dihydrate	96 hours	None reported	EC <sub>50</sub>	623770 mg/L	ECOSARS

**Aquatic Chronic Toxicity:** No data available.

**12.2. Persistence and degradability**

**Mixture** No data available.

**12.3. Bioaccumulative potential**

**Mixture:** No data available.

Partition coefficient log K<sub>ow</sub> ~ -0.6

**12.4. Mobility in soil**

Soil Organic Carbon-Water Partition Coefficient log K<sub>oc</sub> ~ -0.84

**12.5. Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

**12.6. Endocrine disrupting properties**

Endocrine Disruptor Information: This product does not contain any known or suspected endocrine disruptors

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Disodium pentacyanonitrosylferrate	Group III Chemical	-	-

**12.7. Other adverse effects**

No information available.

Ozone: Not applicable

Ozone depletion potential (ODP): No information available

**Section 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

**Advice on Disposal**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Our local agencies will accept used cuvettes to ensure their proper disposal.

**Waste disposal number of waste from residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste.

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste.

**Contaminated packaging** Dispose of contents/containers in accordance with local regulations.

**Other Information** Waste codes should be assigned by the user based on the application for which the product was used.

**Section 14: TRANSPORT INFORMATION**

**IMDG**

- 14.1 UN number or ID number Not regulated
- 14.2 Proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing Group Not regulated
- 14.5 Marine pollutant Not applicable
- 14.6 Special precautions for user See section 6-8 for more information
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable

**ADR**

- 14.1 UN number or ID number Not regulated
- 14.2 Proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing Group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user See section 6-8 for more information

**IATA**

- 14.1 UN number or ID number Not regulated

<b>14.2 Proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special precautions for user</b>	See section 6-8 for more information

**Additional information****Section 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

**Authorisations and/or restrictions on use:**

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Disodium pentacyanonitrosylferrate - 13755-38-9	75.	

**Persistent Organic Pollutants** Not applicable

**Dangerous substance category per Seveso Directive (2012/18/EU)**

• Non-controlled

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**Germany**

**Water hazard class (WGK)** obviously hazardous to water (WGK 2)

**International Inventories**

<b>EINECS/ELINCS</b>	Does not comply
<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL - Existing substances</b>	Complies

PICCS Complies  
AICS Complies

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### 15.2. Chemical safety assessment

**Chemical Safety Report** Chemical safety assessments for substances in this mixture were not carried out.

## Section 16: OTHER INFORMATION

**Issue Date** 05-Oct-2005  
**Revision Date** 14-Feb-2023  
**Revision Note** New SDS, SDS sections updated, 3, 9, 11, 12.

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend

**	Hazard Designation
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieure
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service Number
Ceiling	Maximum limit value
CLP	Classification, Labelling and Packaging of substances and mixtures [Regulation (EC) No. 1272/2008]
DNEL	Derived No Effect Level (DNEL)
EC	European Community
ECHA	ECHA (The European Chemicals Agency)
EC50	Effective Concentration to 50% of a test population
EEC	European Economic Community
EN	European Standard
IMDG	International Maritime Dangerous Goods (IMDG)
IATA	International Air Transport Association (IATA)
IATA-DGR	International Air Transport Association - Dangerous Goods Regulations
ICAO	International Civil Aviation Organization
ICAO-TI	International Civil Aviation Organization - Technical Instructions
IUCLID	IUCLID (The International Uniform Chemical Information Database)
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LOAEL	Lowest observed adverse effect level
LOAEC	Lowest observed adverse effect concentration
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)
MAK	Maximale Arbeitsplatz-Konzentration, a German expression corresponding to threshold limit value, which relates to safe daily exposure levels to chemical substances
NOAEL	NOAEL (No observed adverse effect level)
NOAEC	No observed adverse effect concentration

OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labour)
PEC	Predicted Effect Concentration
PNEC	Predicted No Effect Concentration (PNEC)
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No. 1907/2006]
RID	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
TWA	TWA (time-weighted average)
SKN*	Skin designation
SKN+	Skin sensitisation
STEL	STEL (Short Term Exposure Limit)
STOT	Specific Target Organ Toxicity
STOT RE	Specific target organ toxicity — repeated exposure
STOT SE	Specific target organ toxicity — single exposure
SVHC	Substances of Very High Concern
TLV	Threshold Limit Value
TRGS	Technical rules for hazardous substances, Germany
TSCA	Toxic Substances Control Act
UN	United Nations
vPvB	very persistent and very bioaccumulative
VOC	Volatile organic compounds
AwSV	Administrative regulation of water polluting substances, Germany

**Key literature references and sources for data**

See Section 11: TOXICOLOGICAL INFORMATION

See Section 12: ECOLOGICAL INFORMATION

**Classification procedure**

<b>Classification according to Regulation (EC) No. 1272/2008 [CLP]</b>	<b>Method Used</b>
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration toxicity	Calculation method
Ozone	Calculation method

**Training Advice**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**Restrictions on use**

For Laboratory Use Only.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****End of Safety Data Sheet**