



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and
Regulation (EC) No. 1272/2008

Supersedes date 17-Aug-2023

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Revision Number 1.01

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

1.1. Product identifier

Product Code(s) HA **** / HB **** / HI ****
Product Name Hybridisation Solution
Synonyms None
Pure substance/mixture Mixture

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

Recommended use Laboratory chemicals
For professional use only
Uses advised against None known

1.3. Details of the supplier of the safety data sheet

Manufacturer	Supplier
CytoCell Ltd., Oxford Gene Technology 418 Cambridge Science Park, Milton Road, Cambridge CB4 0PZ, United Kingdom T: +44 (0)1223 294048 F: +44 (0)1223 294986 probes@cytoCell.com http://www.ogt.com	Sysmex Europe SE Deelböge 19D 22297 Hamburg Germany T: +49 (40) 527 26 0

For further information, please contact

E-mail address probes@cytoCell.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1223 294048 (Monday - Friday, 9am - 5pm)

Emergency telephone - §45 - (EC)1272/2008
Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
- (H315) - (H319)

Reproductive toxicity	Category 1B - (H360D)
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2.2. Label elements

Contains Formamide

**Signal word**

Danger

Hazard statements

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H360D - May damage the unborn child.

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

P201 - Obtain special instructions before use.

P264 - Wash skin thoroughly after handling.

P280 - Wear protective gloves, protective clothing, eye protection and face protection.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

P501 - Dispose of contents/containers in accordance with local regulations.

2.3. Other hazards**Other hazards**

The product does not contain any substance(s) classified as PBT or vPvB.

PBT or vPvB properties

None known.

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

Chemical name	Weight-%	REACH registration number	EC No. (Index No.)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Formamide 75-12-7	65-85	No data available	200-842-0 (616-052-00-8)	Repr. 1B (H360D)	-	-	-	-
Dextran sulfate sodium 9011-18-1	10-30	No data available	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	-	-	-	-

Sodium chloride 7647-14-5	<1	No data available	231-598-3	[C]	-	-	-	-
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Classification according to Regulation (EC) No. 1272/2008 [CLP] - Notes

[C] - Components with occupational exposure limits and/or biological occupational exposure limits requiring monitoring

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Formamide 75-12-7	5577	6000	21.021	No data available	No data available
Dextran sulfate sodium 9011-18-1	20600	No data available	No data available	No data available	No data available
Sodium chloride 7647-14-5	3550	10010	10.5105	No data available	No data available

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59).

Chemical name	CAS No.	SVHC candidates
Formamide	75-12-7	X

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur. Remove person to fresh air and keep comfortable for breathing.
Eye contact	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.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.
Self-protection of the first aider	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. Skin irritation.
Effects of Exposure	Contains a known or suspected reproductive toxin. May damage the unborn child.

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**

Suitable Extinguishing Media Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

Hazardous combustion products Thermal decomposition can lead to release of irritating and toxic gases and vapours. Carbon oxides. Sodium oxides. Nitrogen oxides (NOx). Hydrogen cyanide. Ammonia.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. See section 8 for more information. Avoid breathing vapours or mists. Do not touch or walk through spilled material.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Methods for cleaning up Pick up and transfer to properly labelled containers. After cleaning, flush away traces with water. Wash thoroughly after handling.

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. Take off contaminated clothing and wash it before reuse. Wear personal protective equipment. Wash hands thoroughly after handling.

General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

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

Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from Incompatible materials.

Storage class (TRGS 510)

LGK 6.1C.

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

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

Chemical name	Austria	Belgium	Bulgaria	Croatia
Formamide 75-12-7	TWA-TMW: 9 ppm; TWA-TMW: 16 mg/m ³ ; STEL-KZGW: 18 ppm (4 X 15 min); STEL-KZGW: 32 mg/m ³ (4 X 15 min); Sk	TWA: 10 ppm; TWA: 18 mg/m ³ ; Sd	TWA: 15.0 mg/m ³ ; STEL: 30.0 mg/m ³ ;	TWA-GVI: 20 ppm; TWA-GVI: 37 mg/m ³ ; STEL-KGVI: 30 ppm; STEL-KGVI: 56 mg/m ³ ;
Chemical name	Cyprus	Czech Republic	Denmark	Estonia
Formamide 75-12-7	-	-	TWA: 10 ppm; TWA: 18 mg/m ³ ; STEL: 20 ppm; STEL: 36 mg/m ³ ; pSk	TWA: 10 ppm; TWA: 20 mg/m ³ ; STEL: 15 ppm; STEL: 30 mg/m ³ ; Sk
Chemical name	Finland	France	Germany TRGS	Germany DFG
Formamide 75-12-7	TWA: 10 ppm; TWA: 19 mg/m ³ ; STEL: 20 ppm; STEL: 37 mg/m ³ ; pSk	TWA-VME: 20 ppm; TWA-VME: 30 mg/m ³ ;	-	Sk
Chemical name	Greece	Hungary	Italy MDLPS	Italy AIDII
Formamide 75-12-7	TWA: 20 ppm; TWA: 30 mg/m ³ ; STEL: 30 ppm; STEL: 45 mg/m ³ ; pSk	-	-	TWA: 10 ppm; TWA: 18.4 mg/m ³ ; pSk
Chemical name	Ireland	Latvia	Lithuania	Luxembourg
Formamide 75-12-7	TWA: 10 ppm; TWA: 18 mg/m ³ ;	-	TWA-IPRD: 10 ppm; TWA-IPRD: 20 mg/m ³ ;	-

	STEL: 30 ppm (calculated); STEL: 54 mg/m ³ (calculated);		STEL-TPRD: 15 ppm; STEL-TPRD: 30 mg/m ³ ; Sk	
Sodium chloride 7647-14-5	-	TWA: 5 mg/m ³ ;	TWA-IPRD: 5 mg/m ³ ;	-
Chemical name	Malta	Netherlands	Norway	Poland
Formamide 75-12-7	-	-	TWA: 10 ppm; TWA: 18 mg/m ³ ; STEL: 20 ppm (value calculated); STEL: 27 mg/m ³ (value calculated); Sk	TWA-NDS: 23 mg/m ³ ; Sk
Chemical name	Portugal	Romania	Slovakia	Slovenia
Formamide 75-12-7	TWA (VLE-MP): 10 ppm; pSk	TWA: 11 ppm; TWA: 20 mg/m ³ ; STEL: 16 ppm; STEL: 30 mg/m ³ ;	-	-
Chemical name	Spain	Sweden	Switzerland	United Kingdom
Formamide 75-12-7	TWA-(VLA-ED): 10 ppm; TWA-(VLA-ED): 19 mg/m ³ ; pSk	TLV-NGV: 10 ppm; TLV-NGV: 20 mg/m ³ ; STEL (Vägledande KGV): 15 ppm; STEL (Vägledande KGV): 30 mg/m ³ ; Sk	TWA-MAK: 10 ppm; TWA-MAK: 18 mg/m ³ ; Sk	TWA: 20 ppm; TWA: 37 mg/m ³ ; STEL: 30 ppm; STEL: 56 mg/m ³ ;

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Sodium chloride 7647-14-5	-	295.52 mg/kg bw/day [4] [6] 295.52 mg/kg bw/day [4] [7]	2068.62 mg/m ³ [4] [6] 2068.62 mg/m ³ [4] [7]

Notes

[4]	Systemic health effects.
[6]	Long term.
[7]	Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Sodium chloride 7647-14-5	126.65 mg/kg bw/day [4] [6] 126.65 mg/kg bw/day [4] [7]	126.65 mg/kg bw/day [4] [6] 126.65 mg/kg bw/day [4] [7]	443.28 mg/m ³ [4] [6] 443.28 mg/m ³ [4] [7]

Notes

[4]	Systemic health effects.
[6]	Long term.
[7]	Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Formamide 75-12-7	0.5 mg/L	5 mg/L	0.5 mg/L	-	-
Sodium chloride 7647-14-5	5 mg/L	-	-	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Formamide 75-12-7	1.26 mg/kg sediment dw	-	100 mg/L	0.151 mg/kg soil dw	-
Sodium chloride 7647-14-5	-	-	500 mg/L	4.86 mg/kg soil dw	-

8.2. Exposure controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Personal protective equipment

Eye/face protection

Eye protection must conform to standard EN 166. If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection

Gloves must conform to standard EN 374. Wear suitable gloves. Impervious gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state

Liquid

Colour

Varies

Odour

Odourless

Odour threshold

No information available

Property

Values

Remarks • Method

Melting point / freezing point

No data available

Boiling point or initial boiling point and boiling range

No data available

Flammability

No data available

Lower and upper explosion limit/flammability limit

Lower explosion limit		Not applicable
Upper explosion limit		Not applicable
Flash point	154 °C	
Autoignition temperature		No data available
Decomposition temperature		No data available
SADT (°C)		No data available
pH		Not applicable
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility		No data available
Solubility		No data available
Partition coefficient n-octanol/water (log value)		No data available
Vapour pressure		No data available
Density and/or relative density		No data available
Bulk density		No data available
Liquid Density		No data available
Relative vapour density		No data available
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

9.2. Other information

Molecular weight	No information available
VOC content	No information available
Softening point	No information available

9.2.1. Information with regards to physical hazard classes**Explosives**

Explosive properties No information available

Oxidising properties No information available

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity None under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents. Metals. Sulphur trioxide.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx). Silicon oxides. Hydrogen cyanide. Ammonia.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information**

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	May cause redness and tearing of the eyes. Burning sensation. Skin irritation.
Acute toxicity	Based on available data, the classification criteria are not met.
Numerical measures of toxicity	Based on available data, the classification criteria are not met.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Formamide	= 5577 mg/kg (Rat)	= 6 g/kg (Rabbit)	> 21 mg/L (Rat) 4 h
Dextran sulfate sodium	= 20600 mg/kg (Rat)	-	-
Sodium chloride	= 3550 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat) 1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Causes skin irritation.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.

Reproductive toxicity Classification based on data available for ingredients. May damage the unborn child.
 Reproductive toxicity
 The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Formamide	Repr. 1B

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

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

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disruption for human health Based on available data, the classification criteria are not met.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity Not considered to be harmful to aquatic life.

Chemical name	Fish	Crustacea	Algae/aquatic plants	Toxicity to microorganisms
Formamide	LC50: =9135mg/L (96h, Brachydanio rerio)	EC50: >500mg/L (48h, Daphnia magna)	EC50: >500mg/L (72h, Desmodemus subspicatus) EC50: >500mg/L (96h, Desmodemus subspicatus)	-
Sodium chloride	LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: =7050mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: 4747 - 7824mg/L	EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)	-	-

	(96h, Oncorhynchus mykiss)			
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Chemical name	Earthworm	Avian	Honeybees
Sodium chloride	Acute Toxicity: LC50 0.1 - 1 mg/cm ² (Eisenia foetida, 48 h filter paper)	-	-

12.2. Persistence and degradability No information available.

12.3. Bioaccumulative potential

Chemical name	Partition coefficient	Bioconcentration factor (BCF)	Trophic magnification factor (TMF)
Formamide	-0.82	-	-

12.4. Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
Formamide	Not PBT/vPvB
Sodium chloride	Not PBT/vPvB

12.6. Endocrine disrupting properties Based on available data, the classification criteria are not met.

12.7. Other adverse effects No information available.

PMT or vPvM properties Based on available data, the classification criteria are not met.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IATA Not regulated

14.1 UN number or ID number	Not regulated
14.2 UN 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	
Special Provisions	None
IMDG	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN 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	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available
RID	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN 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	
Special Provisions	None
ADR	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN 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	
Special Provisions	None
ADN	Not regulated
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not applicable
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Sodium chloride 7647-14-5	RG 78

Water hazard class (WGK) slightly hazardous to water (WGK 1)

Chemical Prohibition Ordinance (ChemVerbotsV)

Not applicable.

TRGS 905

Not applicable

Netherlands**Carcinogenic, mutagenic and reproductive toxic effects**

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Formamide 75-12-7	-	-	Development Category 1B

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018 Not applicable**Storage of Hazardous Material** Not applicable**WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20** Not applicable**Major Accidents Ordinance SR 814.012** Not applicable**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.

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
Formamide 75-12-7	30 75	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 2024/590

Not applicable.

EU - Plant Protection Products (1107/2009/EC)

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Sodium chloride 7647-14-5	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Sodium chloride 7647-14-5	Product-type 1: Human hygiene

Explosives Precursors Marketing and Use (2019/1148)

Not applicable.

International Inventories

Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available.

SECTION 16: Other information**Full text of any hazard and/or precautionary statements referred to under Sections 2-15**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H360D - May damage the unborn child

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

P280 - Wear protective gloves, protective clothing, eye protection and face protection

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P321 - Specific treatment (see supplemental first aid instructions on this label)

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P362 + P364 - Take off contaminated clothing and wash it before reuse

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

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

List may include phrases which are not applicable to this product

ACGIH	American Conference of Governmental Industrial Hygienists
AIDII	Italian Association of Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CLP	Classification, Labelling and Packaging Regulation; Regulation (EC) No 1272/2008
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DFG	German Research Foundation
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
ECHA	European Chemicals Agency
EC Number	European Community number
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
EWC	European Waste Codes

GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organisation
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organisation for Standardisation
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MAK	Maximum Concentration at the Workplace
MAL	Measuring Technical Hygienic Air Needs
MARPOL	International Convention for the Prevention of Pollution from Ships
MDLPS	Ministry of Labour and Social Policy
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
SVHC	Substance of very high concern
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TRGS	Technical Rule for Hazardous Substances
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
C	Carcinogen
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitiser
RS	Respiratory Sensitiser
S	Sensitiser

poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
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 hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 U.S. Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
 International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
 International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
 United Nations World Health Organization (WHO)

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End of Safety Data Sheet