

SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

1.1. GHS product identifier

Trade name: **PROVECTA**

1.2. Recommended use of the chemical and restrictions on use

1.2.1. Relevant identified uses

Insecticide efficacy enhancer. Physical mode of action formulation.

1.2.2. Uses advised against

Use inconsistent with the information provided on the product label.

1.3. Supplier's details

ICB Pharma Tomasz Świętosławski Paweł Świętosławski Spółka Jawna

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43-602 Jaworzno

Phone: +48 32 745 47 00

e-mail: office@icbpharma.com

Person responsible for SDS: sds@icbpharma.com

1.4. Emergency phone number

112 – emergency number

+48 32 745 47 00 (at working hours: 8.00 a.m. – 4 p.m.) – manufacturer number

SECTION 2: HAZARDS IDENTIFICATION

2.1. GHS classification of the substance/mixture and any national or regional information

According to the GHS, 9th revised edition:

The product is classified as hazardous in accordance with applicable regulations.

Acute Tox. 4	H332	Harmful if inhaled.
Eye Irrit. 2	H319	Causes serious eye irritation.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

Physical/chemical hazards:	none
Health hazards:	harmful if inhaled, irritating in contact with eyes
Environmental hazards:	toxic to aquatic life, may cause long lasting adverse effect to aquatic environment
Other hazards:	not flammable

2.2. GHS label elements

According to the GHS, 9th revised edition:

Pictograms:



Signal word:
WARNING

Hazard statements:

H332	Harmful if inhaled.
H319	Causes serious eye irritation.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statement:

P101	If medical advice is needed, have a product container or label at hand.
P261	Avoid breathing mist, vapours, spray.
P273	Avoid release to the environment.
P280	Wear protective gloves, eye 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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P501	Dispose of contents/container to point authorized to receive hazardous waste.

Additional labelling requirements:

Substance names to show on the label: polyalkyleneoxide modified heptamethyltrisiloxane.

2.3. Other hazards which do not result in classification or are not covered by the GHS

Not applicable.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable.

3.2. Mixture

Product is a mixture.

Hazardous ingredients content (ingredients contained in the mixture below general or specific concentration limits are not disclosed):

Name	Identifiers	Concentration	CLP Classification
Polyalkyleneoxide modified heptamethyltrisiloxane	CAS: 67674-67-3	90 - <100% w/w	Acute Tox. 4 (inhal.), H332 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
	EC: 614-100-2		
	Index No: not applicable		
	Nr WE: 200-661-7		
	Nr indeksu: 603-117-00-0		

Full text of H phrases is provided in Section 16.

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

SECTION 4: FIRST AID MEASURES

4.1. Description of necessary measures

General recommendations:

if any adverse effects occur, the exposure to the product should be discontinued, if in doubt, consult a physician and show him the label or safety data sheet. The injured should be provided with access to fresh air, kept in warm and calm, and with medical assistance. If not breathing CPR may be required. In the event of loss of consciousness, the injured should be placed and, if possible, transported in a recovery position. Do not give an unconscious person anything by mouth.

Protection of personnel providing first aid:

REMEMBER - your safety first. Do not take any action that would pose a risk to the rescuer, unless suitable trained and aware of risks.

Contamination of the skin:

take off immediately all contaminated clothing and shoes. In the event of direct contact of the product with the skin, wash the affected area with water and soap with a pH similar to the skin's, rinse thoroughly.

Contamination of the eyes:

flush contaminated eyes with clean water or a suitable eye wash for at least 15 minutes by opening your eyelids. Do not rub your eyes. Avoid strong water stream - risk of corneal damage. Consult an ophthalmologist if any adverse symptoms occur.

Inhalation:

in case of symptoms of poisoning, remove the injured from the exposure area and provide with fresh air. Consult a physician if symptoms persist or worsen.

Ingestion:

rinse mouth and throat with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. In case of feeling unwell get medical help.

4.2. Most important symptoms/effects, acute and delayed

Acute symptoms

Inhalation: respiratory irritation
Skin contamination: irritation
Eye contamination: redness, tearing lacrimation
Ingestion: nausea, abdominal pain

Delayed symptoms – no data

Effects of exposure – no data

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Note to Physician: no specific antidote is known. The decision on how to proceed is made by a doctor after a thorough assessment of the injured person's condition. Symptomatic treatment.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

use foam, snow (CO₂) or dry powder extinguishers to extinguish small fire. In case of large fire use foam or water mist.

Unsuitable extinguishing media:

no specific guide. Get surrounding material into consideration for suitability of extinguishing media. A strong water jet is NOT RECOMMENDED – risk of fire spread and environment contamination.

5.2. Specific hazards arising from the chemical

During the fire of the product following compounds might be emitted – carbon oxides, other hazardous gases. Avoid breathing of combustion products, they might be hazardous to health.

5.3. Special protective equipment and precautions for fire-fighters

Obligatory use personal breathing apparatus and wear appropriate protective clothing during firefighting and cleaning after the fire inside closed and poorly ventilated rooms.

General: remove from the endangered area all unauthorized persons, not involved in extinguishing the fire, order evacuation if necessary. Dispose of all ignition sources. In the event of fire, cool the vessels and storage tanks. Do not allow extinguishing agents used to extinguish the fire to get into the watercourse.

Additional remarks: tanks and packaging not covered by fire, exposed to fire or high temperature cool with water, from a safe distance (risk of explosion), if possible remove them from the danger area. Dispose of fire residues and contaminated fire extinguishing water in accordance with applicable regulations. Do not allow extinguishing media used to extinguish fire and extinguishing water to get into sewage system.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures****For non-emergency personnel:**

Limit the access of bystanders to the contaminated area. In the event of large spills, isolate the affected area. Use personal protection equipment. Avoid eyes and skin contamination. Avoid direct contact with the released product. Ensure adequate ventilation.

For emergency responders:

Follow instructions, use appropriate personal protection measures.

6.2. Environmental precautions

If larger quantities of the product are released, steps should be taken to prevent spreading in the wild. Avoid entering drains, groundwater, soil and open water courses. In the event of significant quantities of product getting into waters, relevant services should be notified.

6.3. Methods and material for containment and cleaning up

If the container is unsealed, spills occur, secure the source of the leak, pour the product into an empty container. Spilled product should be treated with a suitable sorbent (sand, sawdust, diatomaceous earth, vermiculite, universal sorbent), collected in the described containers and handed over for disposal. Clean the contamination surface. Maintenance and cleaning work should be carried out with adequate ventilation.

6.4. Reference to other sections

Personal protective equipment – section 8

Waste disposal – section 13

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Use only as intended. Read the label before using the product. Work in accordance with the principles of health and safety. Wash hands before breaks and after finishing work. Use personal protection equipment. Avoid eyes and skin contamination. Ensure adequate ventilation. Do not consume. Maintain cleanliness and order when handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

Specific measures against fire and explosion: no specific requirements.

Industrial hygiene:

- ensure good ventilation (overall and local exhausted ventilation)
- ensure place for eyes and skin rinsing
- wash hands with soap and water before eating, smoking and after work
- use general caution while working with chemical substances

7.2. Conditions for safe storage, including any incompatibilities

Store only in original, tightly closed containers away from direct sunlight, in a dry, cool room. Avoid water and moisture during storage. It is recommended to store absorbent material nearby (section 6.3). Do not peel off the label from the packaging. Do not reuse the container. The container should be upright to prevent leakage of the mixture. Do not store in unlabelled containers. Keep out of the reach of children, keep away from food, drink and feed. Store and transport at temperatures from 0°C to 35°C.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1. Control parameters****Occupational Exposure Limit Value:**

There is no exposure standard allocated to hazardous components of this product.

DNELs (Derived No Effect Levels) available for mixture components:

Polyalkyleneoxide modified heptamethyltrisiloxane

CAS: 67674-67-3

EC: 614-100-2

Exposure route	WORKERS				GENERAL POPULATION			
	Systemic Effects		Local Effects		Systemic Effects		Local Effects	
	Long-term	Acute	Long-term	Acute	Long-term	Acute	Long-term	Acute
Inhalation	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Dermal	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Oral	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Eye	n.d.				n.d.			

n.d. - no data

8.2. Appropriate engineering controls

Technical exposure controls:

local exhaust ventilation is necessary, which removes vapours from product emission sites, as well as general room ventilation.

8.3. Individual protection measures

Personal protection measures:

the necessity and appropriateness of personal protective equipment should be assessed on the basis of the hazard posed by the product and the conditions in which it is used. Use personal protective equipment only from reputable manufacturers.

Respiratory protection:

is not necessary under normal conditions with sufficient ventilation or outdoor. Required during exposure to high concentrations of vapours/mist/aerosol. Normally recommended to wear cloth masks or protective masks with a particle filter P2 or respirator completed with the filter type K or better.

Hand protection:

Wear protective gloves, especially when particularly sensitive.

The material from which the gloves are made must be impermeable and resistant to the product. Use protective gloves made of neoprene or nitrile rubber. Min thickness 0.4 mm. If prolonged or often repeated contact with the product is expected, it is recommended to wear gloves with protection class 5 (breakthrough time greater than 240 minutes according to PN-EN 374). If only brief contact with the product is expected, it is recommended to wear gloves with protection class 3 or higher (breakthrough time greater than 60 minutes according to PN-EN 374). The resistance of materials from which gloves are made must be checked before use. Information on the permeation time of the substance from the gloves manufacturer must be obtained and this time must be observed. Gloves should be reviewed before use. Use the correct technique for removing gloves (without touching the outer surface of the glove) to avoid skin contact with the product. Dispose of contaminated gloves after use in accordance with applicable regulations. It is recommended to change gloves regularly and replace them immediately if they show any signs of wear, damage (rupture, perforation) or changes in appearance (color, elasticity, shape).

In case of frequent or prolonged contact, protective hand cream should be used at the end of the work.

Eye protection:

wear safety glasses when working with the product. To protect the eyes use equipment certified according to the relevant standards.

Skin protection:

use suitable protective clothing when working with the product.

Protective equipment standards:

EN 140:2001 Respiratory protective devices – Half masks and quarter masks – Requirements, testing, marking.

EN 143:2004 Respiratory protective devices – Particle filters – Requirements, testing, marking.

EN 149+A1:2010 Respiratory protective devices – Filtering half masks to protect against particles – Requirements, testing, marking.

EN 14387+A1:2010 Respiratory protective devices – Gas filter(s) and combined filter(s) – Requirements, testing, marking.

EN 374-1:2017-01 Protective gloves against dangerous chemicals and micro-organisms – Part 1: Terminology and performance requirements for chemical risks.

EN 374-2:2015-04 Protective gloves against dangerous chemicals and micro-organisms – Part 2: Determination of penetration resistance.

EN 16523-1+A1:2018-11 Determination of material resistance to permeation by chemicals – Part 1: Permeation by potentially hazardous liquid chemicals under conditions of continuous contact.

EN 166:2005 Personal eye protection. Specifications.

EN 14605+A1:2010 Protective clothing against liquid chemicals – Performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4]).

EN ISO 20344:2012 Personal protective equipment – Test methods for footwear

Environmental exposure controls

Do not allow to enter large amounts of product into ground water, sewage, waste water or soil.

PNECs (Predicted No Effect Concentrations) for mixture components:

Polyalkyleneoxide modified heptamethyltrisiloxane

CAS: 67674-67-3

EC: 614-100-2

Environment compartment

Freshwater:
Intermittent releases (freshwater):
Marine water:
Intermittent releases (marine water):
Sewage treatment plant:
Sediment (freshwater):
Sediment (marine water):
Air:
Soil:
Hazard for Predators:

PNEC

No data
No data
No data
No data
No data
No data
No data
No data
No data
No data

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:

Clear liquid

Colour:

Colourless to pale yellow

Odour:

Characteristic, faint

Melting point/freezing point:

No data

Boiling point or initial boiling point and boiling range:

No data

Flammability:

Not applicable

Lower and upper explosion limit:

Not applicable

Flash point:

>100 °C

Auto-ignition temperature:

No data

Decomposition temperature:

No data

pH:

5,87 (1% emulsion)

Kinematic viscosity:

Not applicable

Solubility:

insoluble, emulsifies at 0,1 to 1,0%

Partition coefficient n-octanol/water (log value):

Not applicable

Vapour pressure:

No data

Density and/or relative density:

1,01-1,02 g/cm³ (20°C)

Relative vapour density:

No data

Particle characteristics:

No data; product does not contain the substance as a nano-form

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Product does not show reactivity under recommended storage and use conditions.

10.2. Chemical stability

Product is stable under normal conditions.

10.3. Possibility of hazardous reactions

No data.

10.4. Conditions to avoid

Direct sunlight, low temperature (<5°C) and high temperature (> 35°C), humidity.

10.5. Incompatible materials

No data.

10.6. Hazardous decomposition products

Under recommended conditions of storage and handling product does not decompose with evolution of hazardous decomposition products. Hazardous decomposition products may be developed under thermal decomposition (fire).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Globally Harmonized System of Classification and Labelling of Chemicals (GHS Rev. 9, 2021)

Classification of the product was conducted by calculation method according to Globally Harmonized System of Classification and Labelling of Chemicals (GHS Rev. 9, 2021) based on the content of hazardous ingredients.

Acute toxicity:

Acute Oral Toxicity: product does not meet criteria for classification

Acute Dermal Toxicity: product does not meet criteria for classification

Acute Inhalation Toxicity: Product is classified as harmful if inhaled.

Skin corrosion/irritation:

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

Serious eye damage/irritation:

product classified as causing serious eye irritation.

Respiratory or skin sensitisation:

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

Germ cell mutagenicity:

product does not contain any compounds with germ cell mutagenicity hazard.

Carcinogenicity:

product does not contain any compounds with carcinogenic hazard.

Reproductive toxicity:

product does not contain any compounds with reprotoxic hazard.

STOT-single exposure:

product may cause respiratory irritation.

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.

Toxicological data for hazardous components:

Polyalkyleneoxide modified heptamethyltrisiloxane

CAS: 67674-67-3

EC: 614-100-2

Acute toxicity

Exposure route	Value	Species	Additional data
Oral	LD50 > 2000 mg/kg	Rat	-
Dermal	LD50 > 4000 mg/kg	Rat	-
Inhalation	LC50 = 2mg/L	Rat	4h, aerosol

Skin corrosion/irritation: no skin irritation (rabbit)

Serious eye damage/irritation: strongly irritating (rabbit)

Respiratory or skin sensitisation: not sensitizing (guinea pig)

Germ cell mutagenicity:

- Ames-Test, result: negative (not mutagenic)
- Chromosomal aberration, result: negative
- Mammalian cytogenicity test, result: negative
- Micronucleus Test (OECD 474), result: negative

Carcinogenicity: no data

Reproductive toxicity: no data

STOT-single exposure: no data

STOT-repeated exposure: oral (*rat*): NOAEL:150 mg/kg (28 days)

Aspiration hazard: no data

Potential health hazards:

Ingestion: nausea, abdominal pain,

Inhalation: cough, sore throat, irritation of the respiratory tract

Skin: irritating effect, possible allergic reaction, redness, rash, pruritus

Eyes: irritating effect, redness, tearing

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity

The product was not tested for environmental hazards. Classification of the product was conducted by calculation method according to Globally Harmonized System of Classification and Labelling of Chemicals (GHS Rev. 9, 2021) based on the content of hazardous ingredients. According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS Rev. 9, 2021) the product is classified as toxic to aquatic life with long lasting effects, category 2.

12.2. Persistence and degradability

Product has not been tested for biodegradation.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Other adverse effects

With proper handling of the mixture, no negative effects are to be expected. The product is not classified as dangerous to the environment. Nevertheless, make sure that the product does not get into the soil, drinking water sources or water reservoirs.

This mixture contains no constituents considered to be or persistent subject to bioaccumulation and toxic or very persistent and very bioaccumulating (vPvB) of 0.1% or more.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste from residues/unused products:

Unused remains keep in original containers. Get the wastes to the establishment authorized for transport,

recovery and disposal of wastes. Residues of the product should be treated as hazardous waste. Disposal should be made through a company authorized to dispose of hazardous waste, in accordance with national and local regulations.

Disposing of the packaging:

Recycling or disposal of empty packaging must be performed in compliance with current legislation. Do not mixed with other wastes.

SECTION 14: TRANSPORT INFORMATION

The product is a dangerous goods in transport.

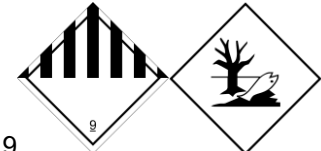


14.1. UN number

ADR	IMDG Code	IATA DGR
UN 3082	UN 3082	UN 3082

14.2. UN proper shipping name

ADR	IMDG Code	IATA DGR
ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S (Polyalkyleneoxide modified heptamethyltrisiloxane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S (Polyalkyleneoxide modified heptamethyltrisiloxane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S (Polyalkyleneoxide modified heptamethyltrisiloxane)

14.3. Transport hazard class(es)

ADR	IMDG Code	IATA DGR
		

14.4. Packing group

ADR	IMDG Code	IATA DGR
III	III	III

14.5. Environmental hazards

ADR	IMDG Code	IATA DGR
YES	YES	YES

14.6. Special precautions for user

ADR	IMDG Code	IATA DGR
Classification code: M6 Labels: 9 Hazard identification No: 90 Packing instructions: P001, IBC03, LP01, R001 Transport category (tunnel restriction code): 3 (E) Special provision 375: These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per	EmS codes: F-A, S-F Marine pollutant: yes Provision 2.10.2.7 of IMDG CODE: "Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants	Class or Div.: 9 Hazard Label: Miscellaneous Passenger and Cargo Aircraft PI: 964 Cargo Aircraft Only PI: 964 Special provision A197: These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging 5 kg or less for solids, are not subject to

single or inner packaging 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8

provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting criteria for inclusion in another hazard class, all provision of this Code relevant to any additional continue to apply"

any other provisions of these Regulations provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8

14.7. Special precautions for user

ADR

Not applicable

IMDG Code

Not applicable

IATA DGR

Not applicable

SECTION 15: REGULATORY INFORMATION

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

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS Rev. 9, 2021),
- European agreement concerning international road transport of dangerous products (ADR),
- Federal, State and Local regulations.

SECTION 16: OTHER INFORMATION

Explanation of abbreviations and acronyms used in safety data sheet:

Full text of the H-phrases, mentioned in section 3 of the safety data sheet:

H319 – Causes serious eye irritation.

H332 – Harmful if inhaled.

H411 – Toxic to aquatic life with long lasting effects.

Explanation of abbreviations:

Acute Tox. 4 (inhal.) – Acute Toxicity, category 4, inhalation route

Aquatic Chronic 2 – Hazardous to Aquatic Environment, chronic, category 2

Eye Irrit. 2 – Serious damage to eyes/Eye irritation, category 2

Explanations of of acronyms:

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road under framework Directive 94/55/EC, as amended

ATE Acute Toxicity Estimate: acute toxicity values are expressed as (approximate) LD50 (oral, dermal) or LC50 (inhalation) values or as ATEs.

CAS Chemical Abstracts Service

DNEL derived no-effect level

EC number unique seven-digit identifier assigned to substances for regulatory purposes withing European Inventory of Existing Commercial Chemical Substances (EINECS)

EC50 median effective concentration

EINECS European Inventory of Existing Commercial Chemical Substances

GHS (United Nations) Globally Harmonised System of Classification and Labelling of Chemicals

ICAO International Civil Aviation Organisation

IMDG International Maritime Dangerous Goods Code for the transport of dangerous goods by sea

IUPAC International Union of Pure and Applied Chemistry

LOEC Lowest Observed Effect Concentration

LD50 Lethal Dose; dose at which 50% of the animals will be expected to die.

LC50 Lethal Concentration; standard measure of the toxicity of the surrounding medium that will kill half of the sample population of a specific test-animal in a specified period through exposure via inhalation

NOEC No Observed Effect Concentration

OECD Organisation for Economic Cooperation and Development

PBT Persistent, bioaccumulative and toxic

PNEC Predicted No Effect Concentration

(Q)SAR (Quantitative) Structure-Activity Relationships

SVHC Substance of Very High Concern

UFI Unique Formula Identifier

vPvB very Persistent and very Bioaccumulative

This SDS was prepared in accordance with chapter 1.5 of Globally Harmonized System of Classification and Labelling of Chemicals (GHS Rev. 9, 2021).

Classification of the product was based on the content of ingredients and according to Globally Harmonized System of Classification and Labelling of Chemicals (GHS Rev. 9, 2021).

Training

Before handling with the product, the user should be familiar with the principles of health and safety regarding the handling of chemicals, and in particular undergo appropriate workplace training.

References to key literature and data sources

The safety data sheet for this product has been created on the basis of a safety data sheet provided by the manufacturer, literature data, online databases and possessed knowledge and experience, taking into account the currently applicable to actual legislation.

Changes from the previous version of the safety data sheet:

Version 1.0 – no changes have been made.