Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 *version number 20 (replaces version 19)* *Revision: 10.04.2025*

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

***1.1 Product identifier**
***Trade name:** **MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C**

***Article number:** BMP0535
***CAS Number:**
99-99-0
***EC number:**
202-808-0
***Index number:**
609-006-00-3
***Registration number**
A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
***UFI:** SM61-J0QD-U00A-J4NW
***1.2 Relevant identified uses of the substance or mixture and uses advised against**
***Product category** For experiments, research, or testing purposes only. Prohibited of use for other purposes.
***Application of the substance / the mixture** Laboratory Chemicals

***1.3 Details of the supplier of the safety data sheet**
***Manufacturer/Supplier:** See Below
***Manufacturer:**
Reagecon Diagnostics Ltd.
Shannon Free Zone,
Shannon,
Co. Clare,
Ireland.
Tel +353 61 472622
Fax +353 61 472642
***Supplier:**
BÜCHI Labortechnik AG
Meierseggstrasse 40
CH - 9230 Flawil
Telephone: +41 71 394 63 63
FAX: +41 71 394 65 65
Email: buchi@buchi.com
Internet: www.buchi.com

***Further information obtainable by contacting:** sds@reagecon.ie
***1.4 Emergency telephone number:**
National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

For Hazardous Materials [or Dangerous Goods] Incident
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC
For Ireland call +(353)-19014670
For Outside Ireland call +1 703-741-5970 / 1-800-424-9300 CCN849800

*
SECTION 2: Hazards identification

***2.1 Classification of the substance or mixture**
***Classification according to Regulation (EC) No 1272/2008**


GHS06 skull and crossbones

Acute Tox. 3	H301 Toxic if swallowed.
Acute Tox. 3	H311 Toxic in contact with skin.
Acute Tox. 3	H331 Toxic if inhaled.

(Contd. on page 2)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 *version number 20 (replaces version 19)* *Revision: 10.04.2025*

Trade name: MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C

(Contd. of page 1)

GHS08 health hazard

STOT RE 2 *H373 May cause damage to the liver, the blood and the immune system through prolonged or repeated exposure.*

GHS09 environment

Aquatic Chronic 2 *H411 Toxic to aquatic life with long lasting effects.*

***2.2 Label elements**

***Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

***Hazard pictograms**

GHS06 GHS08 GHS09

***Signal word** Danger*

***Hazard-determining components of labelling:**

4-nitrotoluene

***Hazard statements**

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H373 May cause damage to the liver, the blood and the immune system through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

***Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P321 Specific treatment (see on this label).
P330 Rinse mouth.
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

***2.3 Other hazards**

***Results of PBT and vPvB assessment**

***PBT:** Not applicable.*

***vPvB:** Not applicable.*

*
SECTION 3: Composition/information on ingredients

***3.1 Substances**

***CAS No. Description**

CAS: 99-99-0 4-nitrotoluene

***Identification number(s)**

***EC number:** 202-808-0*

***Index number:** 609-006-00-3*

(Contd. on page 3)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 *version number 20 (replaces version 19)* *Revision: 10.04.2025*

Trade name: MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C

(Contd. of page 2)

SECTION 4: First aid measures

***4.1 Description of first aid measures**
***General information:**
Immediately remove any clothing soiled by the product.
Remove breathing equipment only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
***After inhalation:**
Provide fresh air, warmth and rest. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Obtain medical attention.
In case of unconsciousness place patient stably in side position for transportation.
***After skin contact:**
Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if any discomfort continues.
***After eye contact:**
Promptly wash eyes with plenty of water for up to 15 minutes. Open eyes wide apart and rinse well to remove any contact lenses. Do not remove contact lenses by hand. Get medical attention. Continue to rinse.
***After swallowing:**
Do not induce vomiting; call for medical help immediately. Rinse mouth thoroughly with water and give large amounts of water to drink. Never give anything by mouth to an unconscious person.
***4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
***4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

***5.1 Extinguishing media**
***Suitable extinguishing agents:**
Indications shall be given whether any extinguishing media are inappropriate for a particular situation involving the substance or mixture
Use fire extinguishing methods suitable to surrounding conditions.
***5.2 Special hazards arising from the substance or mixture** No further relevant information available.
***5.3 Advice for firefighters**
***Protective equipment:** Mount respiratory protective device.

SECTION 6: Accidental release measures

***6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment as described in Section 8 below. Keep unprotected persons away.
***6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
***6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
***6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

***7.1 Precautions for safe handling**
Thorough dedusting.

(Contd. on page 4)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 *version number 20 (replaces version 19)* *Revision: 10.04.2025*

Trade name: MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C

(Contd. of page 3)

Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
***Information about fire - and explosion protection:** Keep respiratory protective device available.*

***7.2 Conditions for safe storage, including any incompatibilities**
***Storage:**
***Requirements to be met by storerooms and receptacles:** No special requirements.*
***Information about storage in one common storage facility:** Not required.*
***Further information about storage conditions:** Keep receptacle tightly sealed.*
***7.3 Specific end use(s)** No further relevant information available.*

*
SECTION 8: Exposure controls/personal protection

***8.1 Control parameters**

***Ingredients with limit values that require monitoring at the workplace:**	
CAS: 99-99-0 4-nitrotoluene	
PEL (USA)	Long-term value: 30 mg/m³, 5 ppm Skin
REL (USA)	Long-term value: 11 mg/m³, 2 ppm Skin
TLV (USA)	Long-term value: 2 ppm Skin; BEI-M

***Ingredients with biological limit values:**	
CAS: 99-99-0 4-nitrotoluene	
BEI (USA)	1.5 % of hemoglobin Medium: blood Time: during or end of shift Parameter: Methemoglobin (background, nonspecific, semi-quantitative)

***Additional information:** The lists valid during the making were used as basis.*

***8.2 Exposure controls**
***Appropriate engineering controls** No further data; see section 7.*
***Individual protection measures, such as personal protective equipment**
***General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
***Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Where risk assessment shows air-purifying respirators are appropriate use a respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges as back up to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Always ensure that gloves are inspected before use.
Selection of protective gloves must include consideration of the penetration times along with rates of diffusion and degradation. The selected glove should comply with the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it.

(Contd. on page 5)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 *version number 20 (replaces version 19)* *Revision: 10.04.2025*

Trade name: MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C

(Contd. of page 4)

***Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
***Penetration time of glove material**
In the absence of data above, the exact break through time has to be sourced from the manufacturer of the protective gloves and has to be observed.
***Eye/face protection** Not required.

*
SECTION 9: Physical and chemical properties

***9.1 Information on basic physical and chemical properties**	
***General Information**	
***Physical state**	Liquid
***Colour:**	Light yellow
***Odour:**	Characteristic
***Odour threshold:**	Not determined.
***Melting point/freezing point:**	51-54 °C
***Boiling point or initial boiling point and boiling range**	239 °C (CAS: 99-99-0 4-nitrotoluene)
***Flammability**	Product is not flammable.
***Lower and upper explosion limit**	
***Lower:**	Not determined.
***Upper:**	1.6 Vol %
***Flash point:**	106 °C (CAS: 99-99-0 4-nitrotoluene)
***Auto-ignition temperature:**	450 °C (CAS: 99-99-0 4-nitrotoluene)
***Decomposition temperature:**	Not determined.
***pH**	Not applicable.
***Viscosity:**	
***Kinematic viscosity**	Not applicable.
***Dynamic:**	Not applicable.
***Solubility**	
***water at 20 °C:**	0.345 g/l
***Partition coefficient n-octanol/water (log value)**	Not determined.
***Vapour pressure at 20 °C:**	0.13 hPa (CAS: 99-99-0 4-nitrotoluene)
***Density and/or relative density**	
***Density at 20 °C:**	1.392 g/cm³
***Relative density**	Not determined.
***Vapour density**	Not applicable.
***Particle characteristics**	See section 3.
***9.2 Other information**	
***Appearance:**	
***Form:**	Crystalline
***Important information on protection of health and environment, and on safety.**	
***Ignition temperature:**	Not determined.
***Explosive properties:**	Product does not present an explosion hazard.
***Molecular weight**	137.14 g/mol
***Change in condition**	
***Evaporation rate**	Not applicable.
***Information with regard to physical hazard classes**	
***Explosives**	Void
***Flammable gases**	Void
***Aerosols**	Void

(Contd. on page 6)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 version number 20 (replaces version 19) Revision: 10.04.2025

Trade name: MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C

(Contd. of page 5)

*Oxidising gases	Void
*Gases under pressure	Void
*Flammable liquids	Void
*Flammable solids	Void
*Self-reactive substances and mixtures	Void
*Pyrophoric liquids	Void
*Pyrophoric solids	Void
*Self-heating substances and mixtures	Void
*Substances and mixtures, which emit flammable gases in contact with water	Void
*Oxidising liquids	Void
*Oxidising solids	Void
*Organic peroxides	Void
*Corrosive to metals	Void
*Desensitised explosives	Void

SECTION 10: Stability and reactivity

*10.1 Reactivity No further relevant information available.
*10.2 Chemical stability
*Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
*10.3 Possibility of hazardous reactions No dangerous reactions known.
*10.4 Conditions to avoid No further relevant information available.
*10.5 Incompatible materials: No further relevant information available.
*10.6 Hazardous decomposition products: No dangerous decomposition products known.

*

SECTION 11: Toxicological information

*11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
*Acute toxicity Toxic if swallowed, in contact with skin or if inhaled.
*Primary irritant effect:
*Skin corrosion/irritation Based on available data, the classification criteria are not met.
*Serious eye damage/irritation Based on available data, the classification criteria are not met.
*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 Based on available data, the classification criteria are not met.
*STOT-single exposure Based on available data, the classification criteria are not met.
*STOT-repeated exposure
May cause damage to the liver, the blood and the immune system through prolonged or repeated exposure.
*Aspiration hazard Based on available data, the classification criteria are not met.
*11.2 Information on other hazards

*Endocrine disrupting properties
Substance is not listed.

*

SECTION 12: Ecological information

*12.1 Toxicity
*Aquatic toxicity: No further relevant information available.
*12.2 Persistence and degradability No further relevant information available.
*12.3 Bioaccumulative potential No further relevant information available.
*12.4 Mobility in soil No further relevant information available.

(Contd. on page 7)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 *version number 20 (replaces version 19)* *Revision: 10.04.2025*

Trade name: MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C

(Contd. of page 6)

***12.5 Results of PBT and vPvB assessment**
***PBT:** Not applicable.
***vPvB:** Not applicable.
***12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
***12.7 Other adverse effects**
***Remark:** Toxic for fish
***Additional ecological information:**
***General notes:**
Water hazard class 3 (German Regulation) (Assessment by list): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

*
SECTION 13: Disposal considerations

***13.1 Waste treatment methods**
***Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

***European waste catalogue**	
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP14	Ecotoxic

***Uncleaned packaging:**
***Recommendation:** Disposal must be made according to official regulations.

*
SECTION 14: Transport information

***14.1 UN number or ID number**
***ADR, IMDG, IATA** UN3446

***14.2 UN proper shipping name**
***ADR** 3446 NITROTOLUENES, SOLID, ENVIRONMENTALLY HAZARDOUS
1664 NITROTOLUENE, FEST
***IMDG** NITROTOLUENES, SOLID, MARINE POLLUTANT
***IATA** NITROTOLUENES, SOLID

***14.3 Transport hazard class(es)**

***ADR, IMDG**

***Class** 6.1 Toxic substances.
***Label** 6.1

(Contd. on page 8)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 version number 20 (replaces version 19) Revision: 10.04.2025

Trade name: MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C

(Contd. of page 7)

***IATA**

***Class**	6.1 Toxic substances.
***Label**	6.1
***14.4 Packing group**	
***ADR, IMDG, IATA**	II
***14.5 Environmental hazards:**	
***Marine pollutant:**	No Symbol (fish and tree)
***Special marking (ADR):**	Symbol (fish and tree)
***14.6 Special precautions for user**	Warning: Toxic substances.
***Hazard identification number (Kemler code):**	60
***EMS Number:**	F-A,S-A
***Stowage Category**	A
***14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
***Transport/Additional information:**	
***ADR**	
***Limited quantities (LQ)**	500 g
***Transport category**	2
***Tunnel restriction code**	D/E
***UN "Model Regulation":**	UN 3446 NITROTOLUENES, SOLID, 6.1, II, ENVIRONMENTALLY HAZARDOUS

*

SECTION 15: Regulatory information

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

***Directive 2012/18/EU**
***Named dangerous substances - ANNEX I** Substance is not listed.
***Seveso category**
H2 ACUTE TOXIC
E2 Hazardous to the Aquatic Environment
***Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
***Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

***DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

Substance is not listed.

***REGULATION (EU) 2019/1148**

***Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

Substance is not listed.

***Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

Substance is not listed.

(Contd. on page 9)

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing 10.04.2025 version number 20 (replaces version 19) Revision: 10.04.2025

Trade name: MELTING POINT STANDARD 4-NITROTOLUENE 51 °C to 54 °C

(Contd. of page 8)

***Regulation (EC) No 273/2004 on drug precursors**

Substance is not listed.

***Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

Substance is not listed.

***National regulations:**

***Breakdown regulations:**

Class	Share in %
I	100.0

***Waterhazard class:** Water hazard class 3 (Assessment by list):extremely hazardous for water.
***15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

*
SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

***Department issuing SDS:** Health and Safety
***Contact:** sds@reagecon.ie
***Date of previous version:** 28.01.2025
***Version number of previous version:** 19
***Abbreviations and acronyms:**
REACH (Registration, Evaluation, Authorisation and restriction of Chemicals)
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
***NO**