

DETECTAMET

Material Safety Data Sheet

Document Reference	148
Date of Issue	12 th Jan 2026
Revision Number	001
Date of Last Revision	12 th Jan 2026

148 Meat Marker Red Ink



Technical Data Sheet Applicable To:

148-T041-P03	Retractable Meat Markers Blue Ink
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Section 1 – Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Code: PENRO1501AA

Product Name: Stamping Ink Red 1501

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

Intended use: Stamping Ink

Identified uses: Industrial/Professional

Do not use for uses other than those indicated

Section 2 – Hazards identification

2.1 Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) regulation 1272/2008 (CLP)(and subsequent amendments and supplements). The product thus requires a safety data sheet that complies with the provisions of (EU) regulation 2015/830.

Any additional information concerning the risks for health and/or the environments are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 2

H225 Highly flammable liquid and vapour.

2.2 Label elements

Hazard labelling pursuant to EU Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

Hazard statements:

H225 Highly flammable liquid and vapour

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P370+P378 In case of fire: use extinguishing media appropriate to extinguish

P233 Keep container tightly closed

2.3 Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0.1%

Section 3 – Composition/information on ingredients

3.1 Mixtures

Contains:

Identification	X = Conc. %	Classification (EC) 1272/2008 (CLP)
Ethanol CAS: 64-17-5 EC: 200-578-6 INDEX: 603-002-00-5 REACH Reg.: 0.1- 21194576190430-xxxx	$3 \leq x < 5$	Flam. Liq. 2 H225, Eye irrit. 2 H319

The full wording of hazards (H) phrases is given in section 16 of the sheet.

Section 4 – First aid measures

4.1 Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing, Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects cause by the product are unknown.

4.3 Indication of any immediate medical attention and special treatment needed

Information not available

Section 5 – Firefighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collecting extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Section 6 – Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2 Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3 Specific end use(s)

Information not available

Section 8 – Exposure controls/personal protection

8.1 Control Parameters

Regulatory References

BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г (4 Септември 2018г)
CZE	Ceská Republika	Nařízení vlády č. 246/2018 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	LIMITES DE EXPOSICION PROFESIONAL PARA AGENTES QUIMICOS EN ESPANA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
NLD	Nederland	Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 13 juli 2018, 2018-0000118517 tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2017/164 in Bijlage XIII
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
SWE	Sverige	Hygieniska gränsvärden, AFS 2018:1
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
	TLV-ACGIH	ACGIH 2020

ETHANOL

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks/Observations
		Mg/m ³	Ppm	Mg/m ³	Ppm	
TLV	BGR	1000				
TLV	CZE	1000		3000		
AGW	DEU	960	500	1920	1000	
MAK	DEU	960	500	1920	1000	
VLA	ESP			1910	1000	
VLEP	FRA	1900	1000	9500	5000	
TGG	NLD	260		1900		SKIN
NDS/NDSch	POL	1900				
NGV/KGV	SWE	1000	500	1900	1000	
WEL	GBR	1920	1000			
TLV-ACGIH		1884	1000			

Predicted no-effect concentration – PNEC		
Normal value in fresh water	0.96	Mg/l
Normal value in marine water	0.79	Mg/l
Normal value for fresh water sediment	3.6	Mg/kg
Normal value for marine water sediment	2.9	Mg/kg
Normal value for water, intermittent release	2.75	Mg/l
Normal value of STP microorganisms	580	Mg/l
Normal value for the food chain (secondary poisoning)	380	Mg/kg
Normal value for the terrestrial compartment	0.63	Mg/kg

		Health – Derived no-effect level – DNEL/DMEL
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Route of exposure	Effects on consumers				Effects on workers			
	Acute Local	Acute systemic	Chronic Local	Chronic systemic	Acute Local	Acute systemic	Chronic Local	Chronic systemic
Oral	NPI	NPI	NPI	87 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	114 mg/m ³	NPI	NPI	NPI	950 mg/m ³
Skin	NPI	NPI	NPI	206 mg/kg bw/d	NPI	NPI	NPI	343 mg/kg bw/d

Legend:

(C) = Ceiling

INHAL = Inhalable Fraction

RESP = Respirable Fraction

THORA = Thoracic Fraction

VND = Hazard identified by no DNEL/PNEC available

NEA = No exposure expected

NPI – no hazard identified

LOW = low hazard

MED = medium hazard

HIGH = high hazard

8.2 Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374); compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing process, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Section 9 – Physical and chemical properties

9.1 Information on basic physical and chemical properties

Properties	Value
Appearance	Liquid
Colour	Red
Odour	Alcoholic
Odour Threshold	Not determined
pH	Not determined
Melting point/Freezing point	Not available
Initial boiling point	> 70°C (158°F)
Boiling range	Not available
Flash point	< 23°C (73.4°F)
Evaporation rate	Not determined
Flammability	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not determined
Relative vapour density	Not determined
Relative density	1000 +/- 0.050 kg/l
Solubility	Water-miscible
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not available
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Explosive properties	Not available
Oxidising properties	Not available

9.2 Other information

VOC (Directive 2010/75/EC): 5.00%

VOC (volatile carbon): 2.64%

Section 10 – Stability and reactivity

10.1 Reactivity

These are no particular risks of reaction with other substances in normal conditions of use

10.2 Chemical stability

The product is stable in normal conditions of use and storage

10.3 Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air

10.4 Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5 Incompatible materials

Information not available

10.6 Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

Section 11 – Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1 Information on toxicological effects

Metabolism toxicokinetics, mechanism of action and other information
Information not available

Information on likely routes of exposure
Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Information not available

Interactive effects
Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture: Not classified (no significant component)

ATE (Oral) of the mixture: Not classified (no significant component)

ATE (Dermal) of the mixture: Not classified (no significant component)

Skin Corrosion / Irritation
Does not meet the classification criteria for this hazard class

Serious Eye Damage/Irritation
Does not meet the classification criteria for this hazard class

Respiratory or Skin Sensitisation
Does not meet the classification criteria for this hazard class

Germ Cell Muagenicity
Does not meet the classification criteria for this hazard class

Carcinogenicity
Does not meet the classification criteria for this hazard class

Reproductive Toxicity
Does not meet the classification criteria for this hazard class

STOT – Single Exposure
Does not meet the classification criteria for this hazard class

STOT – Repeated Exposure
Does not meet the classification criteria for this hazard class

Aspiration Hazard
Does not meet the classification criteria for this hazard class

Section 12 - Ecological Information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity

ETHANOL	
LC50 – For Fish	15400 mg/l/96h <i>Lepomis macrochirus</i> – EPA-660/3-75-009, 1975
EC50 – For Crustacea	5012 mg/l/48h <i>Ceriodaphnia dubia</i> – ASTM E729-80
EC50 – for Algae / Aquatic Plants	275 mg/l/72h <i>Chlorella vulgaris</i> – OECD Guideline 201
Chronic NOEC for Fish	250 mg/l <i>Danio rerio</i> – OECD Guideline 212 – Total exposure duration: 120h
Chronic NOES for Crustacea	9.6 mg/l <i>Ceriodaphnia dubia</i> (Reproduction) – Total exposure duration: 10d

12.2 Persistence and degradability

ETHANOL

Solubility in water: 789000 mg/l

Rapidly degradable

12.3 Bioaccumulative potential

ETHANOL

Partition coefficient: n-octanol/water: -0.35

12.4 Mobility in soil

Information not available

12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0.1%

12.6 Other adverse effects

Information not available

Section 13 – Disposal Considerations

12.1 Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Section 14 – Transport Information

14.1 UN Number

ADR/RID, IMDG, IATA: 1170

14.2 UN Proper shipping name

ADR/RID: Ethanol (Ethyl Alcohol) or Ethanol Solution (Ethyl Alcohol Solution)

IMDG: Ethanol (Ethyl Alcohol) or Ethanol Solution (Ethyl Alcohol Solution)

IATA: Ethanol (Ethyl Alcohol) or Ethanol Solution (Ethyl Alcohol Solution)

14.3 Transport hazard class(es)

ADR/RID: Class: 3 Label: 3



IMDG: Class: 3 Label: 3



IATA: Class: 3 Label: 3



14.4 Packing Group

ADR/RID, IMDG, IATA: II

14.5 Environmental Hazards

ADR/RID: NO

IMDG: NO

IATA: NO

14.6 Special precautions for user

ADR/RID	HIN – Kemler: 33 Special provision: -	Limited Quantities: 1L	Tunnel Restriction Code: (D/E)
IMDG:	EMS: F-E,S-D	Limited Quantities: 1L	
IATA:	Cargo:	Maximum Quantity: 60L	Packaging Instructions: 364
	Passengers:	Maximum Quantity: 5L	Packaging Instructions: 353
	Special Provision:	A3, A58, A180	

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

Section 15 – Regulatory Information

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

Seveso Category – Directive 2012/18/EU: P5c

Restrictions relating to the product or contained substances pursuant to annex XVII to EC Regulation 1907/2006
Product Point 3-40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0.1%

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls
information not available

15.2 Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3

Section 16 – Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet

Flam. Liq. 2	Flammable Liquid, Category 2
Eye Irrit. 2	Eye irritation, Category 2
H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonised System of classification and labelling of chemicals

- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and Very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
16. Regulation (EU) 2019/521 (XII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Regulation (EU) 2020/217 (XIV Atp. CLP)

- The Merck Index. – 10th Edition
- Handling Chemical Safety
- INRS – Fiche Toxicologique (toxicological sheet)
- Patty – Industrial Hygiene and Toxicology
- N.I. Sax – Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals – Ministry of Health and ISS (Istituto Superiore di Sanita) – Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

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