

**PENTACID DRY, H60-PA - H60-PA**

**SAFETY DATA SHEET**

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

**SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identifier**

Product name : PENTACID DRY, H60-PA

Product code : H60-PA.

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

This product is only for industrial use, as a supplement for animal feed.

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

Registered company name : PROVIT Sp. z o. o. \_.

Address : Szpitalna 44A.99-300.Kutno.Polska.

Telephone : +48 243558900. Fax : .

provit.biuro@adm.com

www.provit.pl

**1.4. Emergency telephone number : + 48 58 349 28 31.**

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

**SECTION 2 : HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Acute inhalation toxicity, Category 4 (Acute Tox. 4, H332).

Skin corrosion, Category 1B (Skin Corr. 1B, H314).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

**2.2. Label elements**

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :



GHS05



GHS07

Signal Word :

DANGER

Product identifiers :

015-011-00-6

PHOSPHORIC ACID

607-001-00-0

FORMIC ACID

Hazard statements :

H314

Causes severe skin burns and eye damage.

H332

Harmful if inhaled.

Precautionary statements - Prevention :

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

P271

Use only outdoors or in a well-ventilated area.

P280

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

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Precautionary statements - Response :

P301 + P330 + P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304 + P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338

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

P312

Call a POISON CENTER/doctor/... if you feel unwell.

P363

Wash contaminated clothing before reuse.

Precautionary statements - Storage :

P405

Store locked up.

**2.3. Other hazards**

In use, may form flammable/explosive dust-air mixture.

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances  $\geq 0.1\%$  with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2. Mixtures**

**Composition :**

Identification	Classification (EC) 1272/2008	Note	%
INDEX: DAA_7024_S CAS: 112926-00-8 REACH: 01-2119379499-16		[nano]	25 $\leq$ x % < 50
SILICIC ACID			
INDEX: I79_33_4 CAS: 79-33-4 EC: 201-196-2	GHS05 Dgr Skin Corr. 1C, H314 Eye Dam. 1, H318		10 $\leq$ x % < 25
L-LACTIC ACID (2-HYDROXY PROPIONIC ACID)			
INDEX: 015-011-00-6 CAS: 7664-38-2 EC: 231-633-2	GHS05 Dgr Skin Corr. 1B, H314	B [1]	10 $\leq$ x % < 25
PHOSPHORIC ACID			
INDEX: 607-001-00-0 CAS: 64-18-6 EC: 200-579-1	GHS05 Dgr Skin Corr. 1A, H314	B [1]	10 $\leq$ x % < 25
FORMIC ACID			
INDEX: 607-146-00-X CAS: 110-17-8 EC: 203-743-0	GHS07 Wng Eye Irrit. 2, H319		0 $\leq$ x % < 2.5
FUMARIC ACID			
INDEX: 607-750-00-3 CAS: 77-92-9 EC: 201-069-1	GHS07 Wng Eye Irrit. 2, H319 STOT SE 3, H335	[1]	0 $\leq$ x % < 2.5
CITRIC ACID			

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**Specific concentration limits:**

Identification	Specific concentration limits	ATE
INDEX: 179_33_4 CAS: 79-33-4 EC: 201-196-2  L-LACTIC ACID (2-HYDROXY PROPIONIC ACID)		oral: ATE = 3540 mg/kg BW
INDEX: 015-011-00-6 CAS: 7664-38-2 EC: 231-633-2  PHOSPHORIC ACID	Skin Corr. 1B: H314 C $\geq$ 25% Skin Irrit. 2: H315 10% $\leq$ C < 25% Eye Dam. 1: H318 C $\geq$ 25% Eye Irrit. 2: H319 10% $\leq$ C < 25%	
INDEX: 607-001-00-0 CAS: 64-18-6 EC: 200-579-1  FORMIC ACID	Skin Corr. 1A: H314 C $\geq$ 90% Skin Corr. 1B: H314 10% $\leq$ C < 90% Skin Irrit. 2: H315 2% $\leq$ C < 10% Eye Dam. 1: H318 C $\geq$ 10% Eye Irrit. 2: H319 2% $\leq$ C < 10%	

**Nanoform**

Identification	Nanoform

**Information on ingredients :**

(Full text of H-phrases: see section 16)

[Nano] Nanoform.

[1] Substance for which maximum workplace exposure limits are available.

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. description of first aid measures**

**In the event of exposure by inhalation :**

In the event of massive inhalation of dust, remove the person exposed to fresh air. Keep warm and at rest.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation. Use the appropriate equipment.

**In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

**In the event of splashes or contact with skin :**

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

**In the event of swallowing :**

Do not give the patient anything orally.

Seek medical attention immediately, showing the label.

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

No data available.

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

No data available.

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**SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

**5.1. Extinguishing media**

**Suitable methods of extinction**

In the event of a fire, use :

Foam, powder, carbon dioxide, water in spray

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

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

No data available.

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**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

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

Consult the safety measures listed under headings 7 and 8.

**For non first aid worker**

Avoid any contact with the skin and eyes.

Avoid inhaling dust.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Prevent any material from entering drains or waterways.

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

Neutralise with an alkaline decontaminant, such as an aqueous solution of sodium carbonate or similar.

Retrieve the product by mechanical means (sweeping/vacuuming) : do not generate dust.

**6.4. Reference to other sections**

No data available.

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**SECTION 7 : HANDLING AND STORAGE**

Requirements relating to storage premises apply to all facilities where the mixture is handled.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

**Fire prevention :**

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Do not breathe in dust.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

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**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the mixture is used.

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

No data available.

**Storage**

Keep the container tightly closed in a dry, well-ventilated place.

**Packaging**

Always keep in packaging made of an identical material to the original.

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

No data available.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

**Occupational exposure limits :**

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m <sup>3</sup> :	VME-ppm :	VLE-mg/m <sup>3</sup> :	VLE-ppm :	Notes :
7664-38-2	1	-	2	-	-
64-18-6	9	5	-	-	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7664-38-2	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>			
64-18-6	5 ppm	10 ppm			

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
7664-38-2		2E mg/m <sup>3</sup>		2(I)
64-18-6		5 ppm 9.5 mg/m <sup>3</sup>		2(I)
77-92-9		2E mg/m <sup>3</sup>		2 (I)

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m <sup>3</sup> :	VLE-ppm :	VLE-mg/m <sup>3</sup> :	Notes :	TMP No :
7664-38-2	0.2	1	0.5	2	-	-
64-18-6	5	9	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7664-38-2	1 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>			
64-18-6	5 ppm 9.6 mg/m <sup>3</sup>				

**8.2. Exposure controls**

**Personal protection measures, such as personal protective equipment**

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

**- Eye / face protection**

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

Prescription glasses are not considered as protection.

Provide eyewash stations in facilities where the product is handled constantly.

**- Hand protection**

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

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Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

**- Body protection**

Avoid skin contact.

Wear suitable protective clothing.

These clothes shall be chosen to ensure there is no inflammation or irritation of the skin at the neck and wrist by contact with the powder

Suitable type of protective clothing :

Wear protective clothing against solid chemicals and particles suspended in the air (type 5) in accordance with standard EN13982-1/A1 to prevent skin contact.

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

**- Respiratory protection**

Avoid inhaling dust.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask :

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

Category :

- FFP1

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

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**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**

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

**Physical state**

Physical state : Powder or dust.

**Colour**

Unspecified

**Odour**

Odour threshold : Not stated.

**Melting point**

Melting point/melting range : Not specified.

**Freezing point**

Freezing point / Freezing range : Not stated.

**Boiling point or initial boiling point and boiling range**

Boiling point/boiling range : Not specified.

**Flammability**

Flammability (solid, gas) : Not stated.

**Lower and upper explosion limit**

Explosive properties, lower explosivity limit (%) : Not stated.

Explosive properties, upper explosivity limit (%) : Not stated.

**Flash point**

Flash point interval : Not relevant.

**Auto-ignition temperature**

Self-ignition temperature : Not specified.

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**Decomposition temperature**

Decomposition point/decomposition range : Not specified.

**pH**

pH : Not stated.  
Slightly acidic.  
pH (aqueous solution) : Not stated.

**Kinematic viscosity**

Viscosity : Not stated.

**Solubility**

Water solubility : Soluble.  
Fat solubility : Not stated.

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

Partition coefficient: n-octanol/water : Not stated.

**Vapour pressure**

Vapour pressure (50°C) : Not relevant.

**Density and/or relative density**

Density : < 1

**Relative vapour density**

Vapour density : Not stated.

**9.2. Other information**

No data available.

**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

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**SECTION 10 : STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Avoid :  
- formation of dusts  
Dusts can form an explosive mixture with air.

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :  
- carbon monoxide (CO)  
- carbon dioxide (CO<sub>2</sub>)

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**SECTION 11 : TOXICOLOGICAL INFORMATION**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Harmful by inhalation.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

**11.1.1. Substances**

**Acute toxicity :**

L-LACTIC ACID (2-HYDROXY PROPIONIC ACID) (CAS: 79-33-4)

Oral route : LD50 = 3540 mg/kg bodyweight/day

**11.1.2. Mixture**

**Acute toxicity :**

Inhalation route (Dusts/mist) :

Harmful by inhalation.

Duration of exposure : 4 h

LC50 = 1.71 mg/l

**Serious damage to eyes/eye irritation :**

Results: Mixture is by bridging of test data on similar formulations.

**11.2. Information on other hazards**

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**SECTION 12 : ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability**

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

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

No data available.

**12.6. Endocrine disrupting properties**

No data available.

**12.7. Other adverse effects**

No data available.

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**SECTION 13 : DISPOSAL CONSIDERATIONS**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.



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**Soiled packaging :**

Empty container completely. Keep label(s) on container.  
Give to a certified disposal contractor.

**SECTION 14 : TRANSPORT INFORMATION**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2020 [40-20] - ICAO/IATA 2023 [64]).

**14.1. UN number or ID number**

1759

**14.2. UN proper shipping name**

UN1759=CORROSIVE SOLID, N.O.S.  
(l-lactic acid (2-hydroxy propionic acid))

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

- Classification :



8

**14.4. Packing group**

II

**14.5. Environmental hazards**

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**14.6. Special precautions for user**

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C10	II	8	80	1 kg	274	E2	2	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	8	-	II	1 kg	F-A. S-B	274	E2	Category A	-

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	II	859	15 kg	863	50 kg	A3 A803	E2
	8	-	II	Y844	5 kg	-	-	A3 A803	E2

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

**14.7. Maritime transport in bulk according to IMO instruments**

No data available.

**SECTION 15: Regulatory information**

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

**Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

**Container information:**

No data available.

**Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):**

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):  
<https://echa.europa.eu/substances-restricted-under-reach>.

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**Explosives precursors :**

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

**Particular provisions :**

No data available.

**15.2. Chemical safety assessment**

No data available.

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**SECTION 16 : OTHER INFORMATION**

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Wording of the phrases mentioned in section 3 :**

H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

**Abbreviations and acronyms :**

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.