

SAFETY DATA SHEET

HPS Accelerator 28A

SECTION 1: IDENTIFICATION

1.1. Product identifier

Trade name: Product no.:

HPS Accelerator 28A

MS-028A

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

Relevant identified uses of the substance or mixture: Uses advised against : Industrial purposes Restricted to professional users.

against : None known.

1.3. Details of the supplier of the safety data sheet

Company and address:

Contact person:

E-mail:

SDS date:

SDS Version:

Hernon Manufacturing Inc 121 Tech Drive FL 32771 Sanford USA T: +1-407-322-4000 www.hernon.com Hernon SDS Coordinator customerservice@hernon.com 4/25/2025

Date of previous version:

2.0 1/9/2025 (1.0)

1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webpoisoncontrol (triage.webpoisoncontrol.org) to get specific guidance for your case. VelocityEHS:

+1-800-255-3924 (USA) +1-813-248-0585 (International) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) 400-120-0751 (China) 000-800-100-4086 (India) 800-099-0731 (Mexico) Contract #: (MIS0002665)

SECTION 2: HAZARD(S) IDENTIFICATION

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)



2.1. ▼ Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed. Acute Tox. 2; H310, Fatal in contact with skin. Skin Irrit. 2; H315, Causes skin irritation. Eye Irrit. 2; H319, Causes serious eye irritation. Acute Tox. 1; H330, Fatal if inhaled. STOT SE 3; H335, May cause respiratory irritation. Repr. 2; H361, Suspected of damaging fertility or the unborn child.

2.2. Label elements

Hazard pictogram(s):



• • •
Danger
Harmful if swallowed. (H302) Fatal in contact with skin or if inhaled. (H310+H330) Causes skin irritation. (H315) Causes serious eye irritation. (H319) May cause respiratory irritation. (H335) Suspected of damaging fertility or the unborn child. (H361)
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Obtain special instructions before use. (P201) Do not breathe vapour/mist. (P260) Do not get in eyes, on skin, or on clothing. (P262) Wash hands thoroughly after handling. (P264) Use only outdoors or in a well-ventilated area. (P271) Wear eye protection/protective clothing. (P280) [In case of inadequate ventilation] wear respiratory protection. (P284)
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) IF exposed or concerned: Get medical advice/attention. (P308+P313) Immediately call a POISON CENTER/doctor. (P310) Specific treatment is urgent (see instructions on this label). (P320) If eye irritation persists: Get medical advice/attention. (P337+P313) Take off immediately all contaminated clothing and wash it before reuse. (P361+P364)
Store in a well-ventilated place. Keep container tightly closed. (P403+P233) Store locked up. (P405)
Dispose of contents/container in accordance with local regulation (P501)



Additional labelling:

Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Tributylamine	CAS No.: 102-82-9	60-90%	Flam. Liq. 4, H227 Acute Tox. 4, H302 Acute Tox. 2, H310 Skin Irrit. 2, H315 Acute Tox. 1, H330	
Hexanoic acid, 2-ethyl-, copper(2+) salt (Contains 2-ethylhexanoic acid 149- 57-5 and copper and copper salts as impurity)	CAS No.: 149-11-1	10-40%	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

SECTION 4: FIRST-AID MEASURES

4.1. Description of first aid measures

General information:	If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.
Inhalation:	Upon breathing difficulties or irritation of the respiratory tract: Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.



Skin contact:	Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.
Eye contact:	If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.
Ingestion:	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
Burns:	Not applicable.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

4.3. Indication of any immediate medical attention and special treatment needed IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters. If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are: Nitrogen oxides (NO_x) Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures Avoid direct contact with spilled substances.



Ensure adequate ventilation, especially in confined areas. Avoid inhalation of vapours from spilled material. Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste. See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. A sign warning of toxic materials shall be affixed the room and cupboard containing the product(s).

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material:	Always store in containers of the same material as the original container.
Storage conditions:	Keep at temperatures between 7 and 29 °C. Dry, cool and well ventilated Store away from heat, sparks, flames, or other sources of ignition.

Incompatible materials:

Strong oxidizing agents

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.



Exposure scenarios:	There are no exposure scenarios implemented for this product.
Exposure limits:	Occupational exposure limits have not been defined for the substances in this product.
Appropriate technical measures:	Apply standard precautions during use of the product. Avoid inhalation of vapours.
Hygiene measures:	Take off contaminated clothing and wash it before reuse.
Measures to avoid environmental exposure:	Keep damming materials near the workplace. If possible, collect spillage during work.
Individual protection measures, such	as personal protective equipment

Generally:

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

Respiratory Equipment:

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Skin protection:

Recommended	Type/Category	Standards	
-	Protective Clothing		R

Hand protection: Nitrile Rubber

Eye protection:

 ye proceedom		
Туре	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Color:	Green
Odor:	Unpleasant
Odor threshold (ppm):	No data available
рH:	No data available
Density (g/cm³):	0.84
Kinematic viscosity:	No data available
Particle characteristics:	No data available
Phase changes	
Melting point/freezing point (°F):	No data available



	Softening point/range (°F):	Does not apply to liquids.
	Boiling point (°F):	>392
	Boiling point (°C):	>200
	Vapor pressure:	No data available
	Relative vapor density:	No data available
	Decomposition temperature (°F):	Not applicable
Data o	on fire and explosion hazards	
	Flash point (°F):	>146
	Flash point (°C):	>63
	Flammability (°F):	No data available
	Auto-ignition temperature (°F):	No data available
	Explosion limits (% v/v):	No data available
Solubi	ility	
	Solubility in water:	Slightly soluble
	n-octanol/water coefficient (LogKow):	No data available
	Solubility in fat (g/L):	No data available
9.2.	Other information	
	Evaporation rate (n-butylacetate = 100):	No data available
	Other physical and chemical parameters:	No data available.
	Oxidizing properties:	No data available

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity** No data available.
- **10.2.** Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage".
- **10.3.** Possibility of hazardous reactions, including those associated with foreseeable emergencies None known.
- 10.4. Conditions to avoid
 Incompatible Materials
 Mechanical influences (e.g. Shock, pressure, impact, friction). Fire, sparks or other ignition sources.
 Extremes of temperature
- **10.5. Incompatible materials** Strong oxidizing agents
- **10.6.** ▼ **Hazardous decomposition products** Under normal conditions of storage and use, hazardous decomposition products should not be produced.



SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed. Fatal in contact with skin. Fatal if inhaled.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

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

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

Suspected of damaging fertility or the unborn child.

STOT-single exposure

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.

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. ▼Toxicity

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

12.2. Persistence and degradability Based on available data, the classification criteria are not met.

12.3. Bioaccumulative potential Based on available data, the classification criteria are not met.

12.4. Mobility in soil



No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
DOT	UN2542	TRIBUTYLAMINE	Transport hazard class: 6.1 Label: 6.1 Classification code: T1	II	No	Limited quantitie s: 100 ml Tunnel restrictio n code: (D/E) See below for additiona l informati on.
IMDG	UN2542	TRIBUTYLAMINE	Transport hazard class: 6.1 Label: 6.1 Classification code: T1	II	No	Limited quantitie s: 100 ml EmS: F-A S-A See below for additiona l informati on.



	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
ΙΑΤΑ	UN2542	TRIBUTYLAMINE	Transport hazard class: 6.1 Label: 6.1 Classification code: T1	п	No	See below for additiona l informati on.

* Packing group

** Environmental hazards

Additional information

This product is within scope of the regulations of transport of dangerous goods. DOT / See § 172.101 Hazardous Materials Table for any information on special provisions, requirements, or warnings in connection with transport. See § 172.602, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport. IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

14.6. Special precautions for user Not applicable.

14.7. 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

15.2. U.S. Federal regulations

TSCA (the non-confidential portion):	Tributylamine is listed Hexanoic acid, 2-ethyl-, copper(2+) salt (Contains 2- ethylhexanoic acid 149-57-5 and copper and copper salts as impurity) is listed
Clean Air Act:	None of the components are listed
EPCRA Section 302:	None of the components are listed
EPCRA Section 304:	None of the components are listed
EPCRA section 313:	None of the components are listed
CERCLA:	None of the components are listed
Hazardous chemical inventory reporting:	This product is subject to Tier II reporting.
State regulations	
California / Prop. 65:	None of the components are listed
Massachusetts / Right To Know Act:	Tributylamine is listed



New Jersey / Right To Know Act:	Tributylamine / Substance number: 1879 Tributylamine is on the Special Health Hazard Substance List
New York / Right To Know Act:	— Tributylamine is listed Tributylamine is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds
Pennsylvania / Right To Know Act:	— Tributylamine is listed —

15.4. Restrictions for application

Restricted to professional users.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

- **15.5.** Demands for specific education No specific requirements.
- **15.6. Additional information** Not applicable.
- **15.7.** Chemical safety assessment No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H227, Combustible liquid

- H302, Harmful if swallowed.
- H310, Fatal in contact with skin.
- H315, Causes skin irritation.
- H319, Causes serious eye irritation.
- H330, Fatal if inhaled.

H335, May cause respiratory irritation.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

BCF = BIOCONCENTRATION FACTOR

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation

EINECS = European Inventory of Existing Commercial chemical Substances



EPCRA = Emergency Planning and Community Right-To-Know Act GHS = Globally Harmonized System of Classification and Labelling of Chemicals HCIS = Hazardous Chemical Information System HNOC = Hazards Not Otherwise Classified IARC = International Agency for Research on Cancer IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health OECD = Organisation for Economic Co-operation and Development OSHA = Occupational Safety and Health Administration PBT = Persistent, Bioaccumulative and Toxic RCRA = Resource Conservation and Recovery Act RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SARA = Superfund Amendments and Reauthorization Act SCL = A specific concentration limit. STEL = Short-term exposure limits STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure TSCA = The Toxic Substances Control Act TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

The safety data sheet is validated by

SDS Coordinator

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification. Country-language: US-en