



Revision Number: 002.1

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	MM01921 Tinner Cleaner	IDH number:	706397
Product type:	Not available	Item number:	MM01921
		Region:	United States
Company address:	Contact information:		
Henkel Corporation	Telephone: 1.888.9.HENKEL (1.888.943.6535)		
15350 Barranca Parkway	MEDICAL EMERGENCY Phone: Poison Control Center		
Irvine, CA 92618	1-877-671-4608 (toll free) or 1-303-592-1711		
	TRANSPORT EMERGENCY Phone: CHEMTREC		
	1-800-424-9300 (toll free) or 1-703-527-3887		
	Internet: www.henkelna.com		

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	paste	HEALTH:	2
Color:	grey	FLAMMABILITY:	1
Odor:	Mild	PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8
CAUTION:	MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.		

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Fumes evolved at soldering temperatures will irritate the nose, throat and lungs. Prolonged or repeated exposure to flux fumes may result in sensitisation in sensitive workers.

Skin contact: May cause skin irritation. Prolonged contact with this product may cause allergic skin sensitization reactions. Prolonged or repeated contact can result in discoloration of the skin.

Eye contact: Fumes released during thermal processing may cause eye irritation. Contact with eyes will cause irritation.

Ingestion: May be harmful if swallowed. Not expected under normal conditions of use.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders.

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Tin	7440-31-5	30 - 60
Monoammonium phosphate	7722-76-1	30 - 60
Citric acid	77-92-9	5 - 10
Quartz (SiO2)	14808-60-7	1 - 5
Malonic acid	141-82-2	0.1 - 1
Copper	7440-50-8	0.1 - 1
Silver	7440-22-4	0.1 - 1

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:	Rinse with running water and soap. Obtain medical attention if irritation persists.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice.
Ingestion:	Do not induce vomiting. Seek medical advice.

5. FIRE FIGHTING MEASURES

Flash point:	Does not flash.
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode.
Unusual fire or explosion hazards:	None
Hazardous combustion products:	High temperatures may produce heavy metal dust, fumes or vapors. Oxides of Metals in Section 2. Oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Do not let product enter drains.
Clean-up methods:	Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling:	Use only in well-ventilated areas. Avoid skin and eye contact. When using do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.
Storage:	Store in a cool, dry, well-ventilated area. Store in original container until ready to use.

Shelf Life Statement: Not available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Tin	2 mg/m3 TWA	2 mg/m3 TWA (as Sn)	None	None
Monoammonium phosphate	None	None	None	None
Citric acid	None	None	None	None
Quartz (SiO ₂)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	None	None
Malonic acid	None	None	None	None
Copper	1 mg/m3 TWA (as Cu) Dust and mist. 0.2 mg/m3 TWA Fume.	1 mg/m3 TWA (as Cu) Dust and mist. 0.1 mg/m3 TWA (as Cu) Fume.	None	None
Silver	0.1 mg/m3 TWA Dust and fume.	0.01 mg/m3 TWA (as Ag)	None	None

Engineering controls:

Heat only in areas with appropriate exhaust ventilation. Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection:

Where the potential exists for exposure to decomposition products due to heating or elevated temperatures, wear NIOSH approved respiratory protection as appropriate.

Eye/face protection:

Safety goggles or safety glasses with side shields.

Skin protection:

Heat and chemical resistant gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	paste
Color:	grey
Odor:	Mild
Odor threshold:	Not available
pH:	Not available
Vapor pressure:	Not available
Boiling point/range:	Not available
Melting point/ range:	217 °C (422.6 °F)
Vapor density:	Not available
Flash point:	Does not flash.
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Autoignition temperature:	Not available
Evaporation rate:	Not available
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not available
VOC content:	< 1 %

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of Metals in Section 2. Oxides of carbon. Oxides of carbon. Oxides of Metals in Section 2. Thermal decomposition can lead to release of irritating gases and vapors. Formaldehyde.
Incompatible materials:	Acids and bases. Oxidizing agents. Incompatible with oxidising agents. Acids and bases. Reacts with alkalis: spontaneous decomposition and production of heat
Conditions to avoid:	Solder alloy will react with concentrated nitric acid to produce toxic fumes of nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Tin	No	No	No
Monoammonium phosphate	No	No	No
Citric acid	No	No	No
Quartz (SiO ₂)	Known carcinogen.	Group 1	No
Malonic acid	No	No	No
Copper	No	No	No
Silver	No	No	No

Hazardous components	Health Effects/Target Organs
Tin	Gastrointestinal, Irritant, Kidney, Liver, Lung, Nervous System
Monoammonium phosphate	Irritant, Eyes, Kidney
Citric acid	Allergen, Corrosive, Eyes, Irritant
Quartz (SiO ₂)	Immune system, Lung, Some evidence of carcinogenicity
Malonic acid	Corrosive, Irritant, Nervous System
Copper	Allergen, Blood, Central nervous system, Developmental, Gastrointestinal, Immune system, Irritant, Kidney, Liver, Mutagen, Sensory, Skin
Silver	Allergen, Eyes, Irritant, Respiratory, Skin

12. ECOLOGICAL INFORMATION

Ecological information:	No specific studies have been conducted by Henkel on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.
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13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.
Hazardous waste number: D011. Silver

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification: None above reporting de minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health
CERCLA/SARA 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Monoammonium phosphate (CAS# 7722-76-1).
California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: D.2.A, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

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