

Metal Tap #5

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1 - IDENTIFICATION

1.1 Product Identifier

Product Name : Metal Tap #5
Manufacturer Product Number : 1041D

1.2 Other Means of Identification

Other Identifiers : Not Available

1.3 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended Use : Manual tapping and drilling fluid
Restrictions on Use : None Identified

1.4 Supplier Details

	Manufacturer Details	Supplier Details
Company Name	Chem-Pak Inc	Chem-Pak Inc
Address	242 Corning Way, Martinsburg, WV 25405 - United States	242 Corning Way, Martinsburg, WV 25405 - United States
Phone Number	304-262-1880	304-262-1880
Fax Number	304-262-9643	304-262-9643
Email	msds@chem-pak.com	
Website	http://www.chem-pak.com	

1.5 24 hr Emergency Phone Number

Emergency Number : 800-255-3924

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Flam. Aerosol 2	H223	Physical Hazards	Flammable aerosol Category 2
Press. Gas (Comp.)	H280	Physical Hazards	Gases under pressure Compressed gas
Skin Irrit. 2	H315	Health Hazards	Skin corrosion/irritation Category 2
Eye Irrit. 2	H319	Health Hazards	Serious eye damage/eye irritation Category 2
Muta. 2	H341	Health Hazards	Germ cell mutagenicity Category 2
Carc. 1b	H350	Health Hazards	Carcinogenicity Category 1B
Lact.	H362	Health Hazards	Reproductive toxicity (Lact.)
Stot Se 3	H336	Health Hazards	Specific target organ toxicity (single exposure) Category 3
Asp. Tox. 1	H304	Health Hazards	Aspiration hazard Category 1
Aquatic Acute 1	H400	Environmental Hazards	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 2	H411	Environmental Hazards	Hazardous to the aquatic environment - Chronic Hazard Category 2

2.2 Label Elements

Hazard Pictograms



GHS02



GHS04



GHS07



GHS08



GHS09

Signal Word

Danger

Hazard Statements

H223 : Flammable aerosol
H280 : Contains gas under pressure; may explode if heated
H304 : May be fatal if swallowed and enters airways
H315 : Causes skin irritation



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H319 : Causes serious eye irritation
H336 : May cause drowsiness or dizziness
H341 : Suspected of causing genetic defects
H350 : May cause cancer
H362 : May cause harm to breast-fed children
H400 : Very toxic to aquatic life
H411 : Toxic to aquatic life with long lasting effects

Precautionary Statements

P202 : Do not handle until all safety precautions have been read and understood.
P210 : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211 : Do not spray on an open flame or other ignition source.
P251 : Pressurized container: Do not pierce or burn, even after use.
P260 : Do not breathe spray.
P263 : Avoid contact during pregnancy/while nursing.
P264 : Wash hands thoroughly after handling.
P270 : Do not eat, drink or smoke when using this product.
P271 : Use only outdoors or in a well-ventilated area.
P273 : Avoid release to the environment.
P280 : Wear protective gloves and eye protection.
P301+P310 : If swallowed: Immediately call POISON CENTER
P302+P352 : If on skin: Wash with plenty of water
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
P308+P313 : If exposed or concerned: Get medical advice/attention.
P312 : Call physician if you feel unwell
P331 : Do NOT induce vomiting.
P332+P313 : If skin irritation occurs: Get medical advice/attention.
P337+P313 : If eye irritation persists: Get medical advice/attention.
P362+P364 : Take off contaminated clothing and wash it before reuse.
P391 : Collect spillage.
P403 : Store in a well-ventilated place.
P410+P412 : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 : Dispose of contents/container to applicable regulations

2.3 Other Hazards Which Do Not Result In Classification

Hazards Not Otherwise Classified : None Identified.

2.4 Unknown acute toxicity

29.65% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
29.65% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
27.65% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance / Mixture

Substance / Mixture : Mixture

3.2 Composition

Substance name	CAS Number	% wt*	Classification
Trichloroethylene	79-01-6	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Muta. 2, H341 Carc. 1B, H350 STOT SE 3, H336 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Hydrotreated Heavy Naphthenic Distillate	64742-52-5	10 - 30	Asp. Tox. 1, H304



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Substance name	CAS Number	% wt*	Classification
Chloroalkanes C14-C17	85535-85-9	10 - 30	Lact., H362 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
N-Butane	106-97-8	5 - 10	Flam. Gas 1, H220 Press. Gas (Diss.), H280
Isobutane	75-28-5	5 - 10	Flam. Gas 1, H220 Press. Gas (Diss.), H280
Propane	74-98-6	1 - 5	Flam. Gas 1, H220 Press. Gas (Diss.), H280

Full text of hazard classes and H-statements : see section 16

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4 - FIRST-AID MEASURES

4.1 Description of First-Aid Measures

General Measures	: Call a physician immediately.
Inhalation	: Remove person to fresh air and keep comfortable for breathing.
Skin Contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
Eye Contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	: Do NOT induce vomiting. Call a physician immediately.
First-Aid Responder Protection	: Wear adequate personal protective equipment based on the nature and severity of the emergency.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms of Exposure	: Eye Irritation, Lassitude (Weakness), Liver Damage, Dermatitis, Confusion, Skin Irritation, Headache, Dizziness, Nausea, Narcosis, Drowsiness, Vomiting, Tremor, Cardiac Arrhythmias, Visual Disturbance.
Delayed Effects	: No known delayed effects.
Immediate Effects	: No known immediate effects.
Chronic Effects	: No known chronic effects.
Target Organs	: Central Nervous System, Eyes, Heart, Liver, Respiratory System, Skin, Kidneys.

4.3 Indication of Immediate Medical Attention and Special Treatment

Notes to Physician	: Treat symptomatically.
Specific Treatments/Antidotes	: No Information Available.
Medical Conditions Aggravated	: May aggravate personnel with pre-existing disorders associated with any of the Target Organs.

SECTION 5 - FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media

Extinguishing Media	: Water, carbon dioxide, dry chemical, universal aqueous film forming foam.
Unsuitable Media	: Water jet.

5.2 Specific Hazards Arising from the Chemical or Mixture

Hazardous Combustion Products	: Decomposition products may include: oxides of carbon, smoke, vapors. See also Section 10.6.
Specific Hazards During Firefighting	: Flammable. Contents under pressure. In a fire or if heated, a pressure increase will occur which may result in container bursting. Vapors heavier than air may spread along the ground and travel to an ignition source.

5.3 Special Protective Actions for Fire-Fighters

Firefighting Instructions	: Use water spray to cool fire exposed aerosol containers, as contents can rupture violently from heat developed pressure.
Protection during Firefighting	: Firemen should wear self-contained breathing apparatus with full face-piece operated in positive pressure mode.

SECTION 6 - ACCIDENTAL RELEASE MEASURES



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6.1 Personal Precautions, Protective Equipment and Emergency Procedures

- For Non-Emergency Personnel** : No action should be taken involving any personnel without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill. Remove ignition sources and provide adequate ventilation only if it is safe to do so.
- For Emergency Personnel** : Use personal protection as recommended in Section 8. Observe precautions provided for non-emergency personnel above.

6.2 Environmental Precautions

- Environmental Precautions** : Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

6.3 Methods and Materials for Containment and Cleaning up

- Containment Procedures** : Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content may be contained with oil/solvent absorbent pads, socks, and/or absorbents.
- Cleanup Procedures** : Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally considered a problem. In case of actual rupture, avoid breathing vapors and ventilate area well. Remove sources of ignition and use non-sparking equipment. Soak up material with inert absorbent and place in safety containers for proper disposal.
- Other Information** : Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned.
- Prohibited Materials** : Combustible absorbent material such as sawdust. Use of equipment that may cause sparking.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

- General Handling Precautions** : KEEP OUT OF THE REACH OF CHILDREN. Avoid prolonged or repeated skin contact. Avoid breathing of vapors. Do not incinerate (burn) containers. Always replace overcap when not in use. Avoid use around open flames or other sources of ignition. Exposure to heat or prolonged exposure to sun may cause can to burst. Use only with adequate ventilation, opening doors or windows to achieve cross-ventilation.
- Hygiene Recommendations** : Do not eat, drink or smoke when using this product. Wash hands thoroughly after use. Remove contaminated clothing and protective equipment before entering eating or smoking areas.

7.2 Conditions for Safe Storage Including Any Incompatibilities

- Storage Requirements** : Storage of individual cans should be done in an area below 55°C (120 °F), and away from heat sources. Ensure can is in a secure place to prevent knocking over and accidental rupture. For storage of pallet quantities, compliance with NFPA 30B (Manufacture and Storage of Aerosol Products) is recommended.
- Incompatibilities** : Segregate storage away from materials indicated in Section 10.
- NFPA 30B Classification** : This product is classified as a Level 2 Aerosol per NFPA 30B

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

N-Butane (106-97-8)

ACGIH	ACGIH TWA (mg/m ³)	1000 ppm
OSHA	OSHA PEL (TWA) (ppm)	800 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900
NIOSH	NIOSH REL (TWA) (ppm)	800 ppm
California	California PEL (TWA) (mg/m ³)	1900 mg/m ³
California	California PEL (TWA) (ppm)	800 ppm

Propane (74-98-6)

OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
NIOSH	US IDLH (ppm)	2100 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1800 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm



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Propane (74-98-6)

California	California PEL (TWA) (mg/m ³)	1800 mg/m ³
California	California PEL (TWA) (ppm)	1000 ppm

Isobutane (75-28-5)

ACGIH	ACGIH TWA (mg/m ³)	1000 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	800 ppm

Trichloroethylene (79-01-6)

ACGIH	ACGIH TWA (mg/m ³)	10 ppm
ACGIH	ACGIH TWA (ppm)	54 mg/m ³
ACGIH	ACGIH Ceiling (mg/m ³)	25 ppm
ACGIH	ACGIH Ceiling (ppm)	135 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm
NIOSH	US IDLH (ppm)	1000 ppm
California	California PEL (TWA) (mg/m ³)	135 mg/m ³
California	California PEL (TWA) (ppm)	25 ppm
California	California PEL (STEL) (ppm)	300 ppm
California	California PEL (Ceiling) (mg/m ³)	537 mg/m ³
California	California PEL (Ceiling) (ppm)	100 ppm
Biological Exposure Index	Trichloroacetic acid in urine, End of workweek (Ns)	100 mg/g creatinine
Biological Exposure Index	Trichloroacetic acid and trichloroethanol in urine, End of shift at end of workweek (Ns)	300 mg/g creatinine
Biological Exposure Index	Free trichloroethanol in blood, End of shift at end of workweek (Ns)	4 mg/l

Hydrotreated Heavy Naphthenic Distillate (64742-52-5)

ACGIH	ACGIH TWA (ppm)	5 mg/m ³ Oil Mist
OSHA	OSHA PEL (TWA) (mg/m ³)	10 mg/m ³ Oil Mist
California	California PEL (TWA) (mg/m ³)	5 mg/m ³

8.2 Exposure Controls

Engineering Measures	: Use only with adequate ventilation. General ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system may be necessary to control air contamination below that of the lowest OEL from the table above.
Personal Protective Equipment	
Eye / Face Protection	: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact with this material could occur, chemical splash proof goggles are recommended.
Hand Protection	: Chemical-resistant gloves, tested according to ASTM F903-17.
Remarks	: Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to the place of work.
Skin and Body Protection	: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing impervious to the ingredients listed in Section 2.
Respiratory Protection	: An approved respirator with an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed occupational exposure limits.
Compliance	: If needed, compliance with OSHA standard 29 CFR 1910.134 is necessary.
Other Protective Equipment	: Safety showers and eye-wash stations should be available in the workplace near where the material will be used.
Environmental Exposure Controls	: Avoid release to the environment.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical Properties

Boiling Point	> 63.00 °C	Melting / Freezing Point	> -86.00 °C
Flash Point, Liquid	> 0.00 °C	Flash Point, Propellant	-104.00 °C
Explosive Limits	LEL: 1.00 UEL: 19.00 vol %	Autoignition Temperature, Liquid	250.00 °C
Flammability	Flammable Liquid	Density	0.916 g/cm ³
Molecular Weight	Not Available	Weight	7.644 lbs/gal
Vapor Pressure	Not Available	pH	Not Available



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Vapor Density	Not Available	Evaporation Rate (nBAC=1)	Not Available
Viscosity	Not Available	Partition Coefficient (Log Pow)	Not Available
Odor Threshold	Not Available	Refractive Index	Not Available
Physical State	Pressurized Product	Heat Of Combustion	11009.90 BTU/lb
Appearance / Color	Straw colored liquid	Water Solubility	Not Available
Odor	Characteristic	Decomposition Temperature	Not Available

9.2 Environmental Properties

Percent Volatile	42.70 % wt	VOC Regulatory	209.77 g/L (1.75 lbs/gal)
Percent VOC	17.02 % wt	VOC Actual	155.90 g/L (1.30 lbs/gal)
Percent HAP	25.68 % wt	HAP Content	235.23 g/L (1.96 lbs/gal)
Global Warming Potential	36.19 GWP	Maximum Incremental Reactivity	0.3400 g O3/g
Ozone Depletion Potential	0.00 ODP		

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity : No specific test data related to reactivity is available for this products or its ingredients.

10.2 Chemical Stability

Chemical Stability : This product is stable.

10.3 Possibility of Hazardous Reactions

Hazardous Reactions : Under normal conditions of storage and use, hazardous reactions are not expected to occur.

10.4 Conditions to Avoid

Conditions to Avoid : Electrostatic Discharge, Other Ignition Sources, Hot Surfaces, Heat, Flames, Sparks.

10.5 Incompatible Materials

Materials to Avoid : Strong Oxidizing Agents, Strong Reducing Agents, Alkali Metals, Halogen Compounds, Aluminum Chloride, Potassium Nitrate, Aluminum Powder, Epoxides, Strong Bases.

10.6 Hazardous Decomposition Products

Thermal Decomposition : Hydrogen Chloride Gas, Phosgene.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

N-Butane (CAS: 106-97-8 / EC: 203-448-7)

LC50 Inhalation (Rat)	658 mg/l/4h (ChemInfo)
LC50 Inhalation (Rat)	276000 ppm/4h (ChemInfo)

Propane (CAS: 74-98-6 / EC: 200-827-9)

LC50 Inhalation (Rat)	658 mg/l/4h (Lit.)
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Isobutane (CAS: 75-28-5 / EC: 200-857-2)

LC50 Inhalation (Rat)	368000 ppm/4h (ChemInfo)
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Trichloroethylene (CAS: 79-01-6 / EC: 201-167-4)

LD50 Oral (Rat)	5620 mg/kg (ChemInfo)
LD50 Dermal (Rabbit)	> 20000 mg/kg (RTECS)
LC50 Inhalation (Rat)	7250 ppm/4h (ChemInfo)

Hydrotreated Heavy Naphthenic Distillate (CAS: 64742-52-5 / EC: 265-156-6)

LD50 Oral (Rat)	> 5000 mg/kg (ChemInfo)
LD50 Dermal (Rabbit)	> 2000 mg/kg (ChemInfo)



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Hydrotreated Heavy Naphthenic Distillate (CAS: 64742-52-5 / EC: 265-156-6)

LC50 Inhalation (Rat) 2180 ml/m³

Chloroalkanes C14-C17 (CAS: 85535-85-9 / EC: 287-477-0)

LD50 Oral (Rat) > 2000 mg/kg (External SDS)

LD50 Dermal (Rat) > 2000 mg/kg (External SDS)

Routes Of Exposure : Eye Contact, Ingestion, Skin Contact, Inhalation, Skin Absorption.
Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure : See Section 4.2
Skin Corrosion/Irritation : Causes skin irritation.
Eye Damage/Irritation : Causes serious eye irritation.
Respiratory or Skin Sensitization : Not classified
Germ Cell Mutagenicity : Suspected of causing genetic defects.
Reproductive Toxicity : May cause harm to breast-fed children.
STOT-Single Exposure : May cause drowsiness or dizziness.
STOT-Repeated Exposure : Not classified
Aspiration Hazard : May be fatal if swallowed and enters airways.
Vaporizer : Aerosol
Carcinogen Data : The following ingredients are listed as known or suspected carcinogens:

Trichloroethylene (CAS: 79-01-6 / EC: 201-167-4)

IARC group	2A - Probably Carcinogenic to Humans
National Toxicity Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen
ACGIH Category	A2 - Suspected human carcinogen

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Ecotoxicity and Ecological Properties

n-Butane (106-97-8)

Persistence and Degradability	Readily biodegradable in water.
Bioconcentration Factor	33.52
Log Pow	2.89
Bioaccumulative Potential	Low potential for bioaccumulation (Log Kow < 4).
Log Koc	1.641

Propane (74-98-6)

Persistence and Degradability	Readily biodegradable in water. Not applicable (gas). Photodegradation in the air.
BCF Fish	9 - 25 (BCF)
Log Pow	2.28 (Calculated)
Bioaccumulative Potential	Low potential for bioaccumulation (Log Kow < 4).

Isobutane (75-28-5)

Persistence and Degradability	Readily biodegradable in water. Biodegradable in the soil. Not applicable (gas).
BCF Fish	26.62
Log Pow	2.76
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500).
Log Koc	1.545

Trichloroethylene (79-01-6)

LC50 Fish	41 mg/l Fathead Minnow - 96h
EC50 Daphnia	18 mg/l Water Flea - 48hr
Persistence and Degradability	Not readily biodegradable in water. Non degradable in the soil. Biodegradable in the soil under anaerobic conditions.
BCF Fish	17 (BCF; 336 h)
BCF Other Aquatic Organisms	3440 (BCF; 120 h)
Log Pow	2.29 - 2.42 (Experimental value)
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500).



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Hydrotreated Heavy Naphthenic Distillate (64742-52-5)

LC50 Fish	> 5000 mg/l Rainbow Trout - 96hr
EC50 Daphnia	> 1000 mg/l Water Flea - 48hr
Persistence and Degradability	Biodegradability in water: no data available.
Log Pow	> 6.5
Bioaccumulative Potential	No bioaccumulation data available.

Chloroalkanes C14-C17 (85535-85-9)


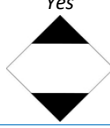

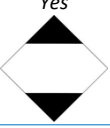
LC50 Fish	>= 5000 mg/l Common Bleak - 96hr
EC50 Daphnia	0.0059 mg/l Water Flea - 48hr
EC50 Other Aquatic Organisms	3.2 mg/l Green Algae - 96hr
Persistence and Degradability	Not readily biodegradable in water. Forming sediments in water. Not readily biodegradable in the soil. Low potential for mobility in soil.
BCF Fish	6660 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 35 days; Oncorhynchus mykiss; Flow-through system; Fresh water; Experimental value)
Log Pow	5.47-8.01, Experimental value; >5; Literature
Bioaccumulative Potential	High potential for bioaccumulation (Log Kow > 5).
Log Koc	log Koc, 5; Experimental value

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste Disposal	: Characteristics and waste stream classification can change with product use and location. It is the responsibility of the user to determine the proper storage, transportation, treatment, and/or disposal methodologies for spent materials and residues at the time of disposition. All waste must be disposed of in compliance with the respective national, federal, state, and/or local regulations.
Waste Disposal Of Packaging	: In the United States, an aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6)), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations.
Landfill Precautions	: Not Available.
Incineration Precautions	: ** DO NOT INCINERATE ** CONTENTS UNDER PRESSURE **.

SECTION 14 - TRANSPORTATION INFORMATION

14.1 UN Number	DOT (USA)	IATA (AIR)	IMDG (OCEAN)
UN Number	: UN1950	UN1950	UN1950
14.2 UN Proper Shipping Name	DOT (USA)	IATA (AIR)	IMDG (OCEAN)
UN Proper Shipping Name	: Aerosols, Limited Quantity	Aerosols, Flammable, Limited Quantity	Aerosols, Limited Quantity
14.3 Transport Hazard Class(es)	DOT (USA)	IATA (AIR)	IMDG (OCEAN)
Transport Hazard Class(es)	: 2.1	2.1	2.1
Labels	: None	2.1 - Flammable gas 	None
Limited Quantity	: 	: 	: 
EmS Code	: Not Applicable	Not Applicable	F-D, S-U
14.4 Packing Group	DOT (USA)	IATA (AIR)	IMDG (OCEAN)
Packing Group	: None	None	None



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14.5 Environmental Hazards

Marine Pollutant : No IATA (AIR) No IMDG (OCEAN) No

14.6 Special Precautions

Precautions : None Identified

14.7 Transport in Bulk

Remarks : Not applicable for product as supplied

SECTION 15 - REGULATORY INFORMATION

15.1 Federal Regulations

SARA Section 313 : Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Trichloroethylene	CAS-No. 79-01-6	10 - 30%
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TSCA Section 12(b) : This product or mixture is not known to contain a chemical or chemicals subject to the export notification requirements of section 12(b) of the Toxic Substances Control Act (TSCA) and 40 CFR Part 707, subpart D

CERCLA Reportable Quantity : Chemical(s) subject to reporting requirements of Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) if released to the environment at or above the reportable quantity

Trichloroethylene	CAS-No. 79-01-6	100 lb
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SARA Section 311/312 Hazard Classes : Fire hazard, Sudden release of pressure hazard.
TSCA Inventory (United States) : All chemical substances in this product are either listed on the Toxic Substances Control Act (TSCA) Inventory or are in compliance with a TSCA Inventory exemption.

15.2 State Regulations

California Proposition 65 : This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Trichloroethylene (79-01-6)	Cancer	Yes	25.68 %
Trichloroethylene (79-01-6)	Developmental Toxicity	Yes	25.68 %
Trichloroethylene (79-01-6)	Reproductive Toxicity, Male	Yes	25.68 %
Trichloroethylene (79-01-6)	No significance risk level (NSRL)	14 µg/day	

State Right-to-Know Lists : The following chemical(s) appear on one or more state RTK (Right to Know) lists as indicated

n-Butane (106-97-8)	U.S. - New Jersey - Right to Know Hazardous Substance List
Propane (74-98-6)	U.S. - New Jersey - Right to Know Hazardous Substance List
Isobutane (75-28-5)	U.S. - New Jersey - Right to Know Hazardous Substance List
Trichloroethylene (79-01-6)	U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Methyl Salicylate (119-36-8)	U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16 - OTHER INFORMATION

Indication of changes																																												
	<table><thead><tr><th>Section</th><th>Changed item</th><th>Change</th></tr></thead><tbody><tr><td>1</td><td>SDS US Regulation reference</td><td>Added</td></tr><tr><td>2.1</td><td>GHS-US classification</td><td>Added</td></tr><tr><td>2.2</td><td>Precautionary statements (GHS-US)</td><td>Added</td></tr><tr><td>2.2</td><td>Hazard statements (GHS-US)</td><td>Added</td></tr><tr><td>2.2</td><td>Signal word (GHS-US)</td><td>Added</td></tr><tr><td>2.2</td><td>Hazard pictograms (GHS-US)</td><td>Added</td></tr><tr><td>2.3</td><td>Other hazards not contributing to the classification</td><td>Added</td></tr><tr><td>4</td><td>Symptoms/effects after inhalation</td><td>Added</td></tr><tr><td>4</td><td>Other medical advice or treatment</td><td>Added</td></tr><tr><td>4</td><td>Symptoms/effects after ingestion</td><td>Added</td></tr><tr><td>4</td><td>Symptoms/effects after eye contact</td><td>Added</td></tr><tr><td>4</td><td>Symptoms/effects after skin contact</td><td>Added</td></tr><tr><td>4</td><td>Symptoms/effects</td><td>Added</td></tr></tbody></table>	Section	Changed item	Change	1	SDS US Regulation reference	Added	2.1	GHS-US classification	Added	2.2	Precautionary statements (GHS-US)	Added	2.2	Hazard statements (GHS-US)	Added	2.2	Signal word (GHS-US)	Added	2.2	Hazard pictograms (GHS-US)	Added	2.3	Other hazards not contributing to the classification	Added	4	Symptoms/effects after inhalation	Added	4	Other medical advice or treatment	Added	4	Symptoms/effects after ingestion	Added	4	Symptoms/effects after eye contact	Added	4	Symptoms/effects after skin contact	Added	4	Symptoms/effects	Added	
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SAFETY DATA SHEET

Part No. 1041D (Aerosol)

Print Date: 3/1/2018
Revision Date: 3/1/2018
Supersedes Date: 2/17/2015
Issue Date: 2/24/2003
Version: 8.0 (EN)-US
Page: 10/10

Metal Tap #5

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4.1	First-aid measures after inhalation	Added
4.1	First-aid measures after ingestion	Added
4.1	First-aid measures after eye contact	Added
4.1	First-aid measures after skin contact	Added
4.1	First-aid measures general	Added
7.2	NFPA 30B Classification	Added
8.2	Compliance	Added
8.2	Remarks	Added
8.2	Environmental Exposure Controls	Added
8.2	Eye / Face Protection	Added
8.2	Skin and Body Protection	Added
8.2	Engineering Measures	Added
8.2	Respiratory Protection	Added
8.2	Hand protection	Added
8.2	Eye protection	Added
8.2	Appropriate engineering controls	Added
9	Explosive properties	Added
9	Gas group	Added
9	Melting point	Added
9	Flash point	Added
9	Explosive limits (vol %)	Added
9	Boiling point	Added
9	Auto-ignition temperature	Added
9	Specific gravity / density	Added
10	Hazardous decomposition products	Added
10	Conditions to avoid	Added
11	Carcinogen Status	Added
12.1	Ecology - general	Added
14	User Precautions	Added
14	EmS Code (Column 15 in IMDG Book 2)	Added
15	Select the Appropriate Proposition 65 Notice	Added
15	Display TSCA summary in 15.1	Added
15	Display SARA 313 summary in 15.1	Added
15	Display California Proposition 65 summary in 15.3	Added

Full Text of H-Statements

H Code	H Phrase
H220	Extremely flammable gas
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H350	May cause cancer
H362	May cause harm to breast-fed children
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Disclaimer of Liability

The information contained herein is based upon data provided to us by our suppliers, and reflects our best judgement. However, no warranty of merchantability, fitness for any use, or any other warranty or guarantee is expressed or implied regarding the accuracy of such data, or the results to be obtained from use thereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of such application. This information is furnished upon the condition that the persons receiving it shall make their own determinations of the suitability of the material for any particular use. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist.