

SECTION 1 – PRODUCT and COMPANY INFORMATION

Product Name: MARTRON IMPABOND 40

Product Number: MFC-005002

Chemical Family: Metalworking Chemicals

Recommended Uses: For industrial use only for parts processing.

Supplier: Martron Inc.

1394-A Walkup Ave Monroe, NC 28110 704-289-1934

Website: www.martroninc.com

Emergency Number:

CHEMTREC 800-424-9300

SECTION 2 – HAZARD IDENTIFICATION

GHS Classification and Hazard Statements in Accordance With 29 CFR 1910 (OSHA HCS) Physical Hazard

Corrosive to metals (Category 1), May be corrosive to metals.

Health Hazard

Skin corrosion (Category 1), Causes severe skin burns and eye damage. Serious eye damage (Category 1), Causes serious eye damage.

Environmental Hazard

Acute aquatic toxicity (Category 3), Harmful to aquatic life. Chronic aquatic toxicity (Category 3), Harmful to aquatic life with long lasting effects.

GHS Label Elements and Precautionary Statements.

Pictogram

CORROSION

T. S.

Signal Word

DANGER

Prevention:

Keep only in original container. Wash skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response:

If Swallowed:

Rinse mouth. Do NOT induce vomiting.

If on Skin (or hair):

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If Inhaled:

Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

If in Eyes:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Page 2 of 7

Storage:

Store locked up. Store in corrosive resistant stainless-steel container with a resistant inner liner.

Disposal:

Dispose of contents/container to an approved waste disposal plant. Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards Not Otherwise Classified (HNOC) or Not Covered by GHS.

HMIS Rating:

Health hazard: 3 Chronic Health Hazard: Flammability: 0 Physical Hazard 0

NFPA Rating:

Health hazard: 3 Fire Hazard: 0 Reactivity Hazard: 0

SECTION 3 – COMPOSITION / INFORMATION OF INGREDIENTS

 Component
 CAS Number
 Wt. %

 Sodium Hydroxide
 1310-73-2
 <35</td>

 Zinc Chloride
 7646-85-7
 <5</td>

SECTION 4 - FIRST AID MEASURES

General Advice:

Consult a physician. Show this safety data sheet. Move out of dangerous area.

Eye Contact:

Immediately flush with large amounts of water for at least 30 minutes, lifting upper and lower lids. Remove contact lenses, if worn, while rinsing.

Skin Contact:

Quickly remove contaminated clothing. Immediately wash contaminated skin with large amounts of soap and water.

Inhalation:

Remove the person from exposure. Begin rescue breathing (using universal precautions) if breathing has stopped and CPR if heart action has stopped. Transfer promptly to a medical facility.

If Swallowed:

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Note to Physicians:

No specific treatment. Treat symptomatically. Contact poison treatment specialist if large quantities have been ingested or inhaled. The most important known symptoms and effects are described in Section 2.

Poison Control:

1-800-222-1222

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media:

Use dry chemical, CO2, water spray (FOG) or foam.

Unsuitable Extinguishing Media:

Avoid solid water stream as it may scatter and spread fire.

Special Hazards Arising from the Substance or Mixture:

Containers can build up pressure and may explode if exposed to heat (fire). Use water spray to cool fire exposed container surfaces and to protect personnel. Thermal decomposition can produce oxides of zinc, sodium, carbon monoxide (highly toxic) and carbon dioxide (an asphyxiate at sufficient concentrations).

Advice for Firefighters:

As in any fire, firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. (MSHA/NIOSH approved or equivalent).

Further information:

If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA Fire Brigades Standard (29 CFR 1910.156).

SECTION 6 - ACCIDENTIAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. **Environmental precautions:** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains, waterways, sewers, basements or confined areas.

Methods and Materials for Containment and Cleanup:

Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers for disposal.

Reference to Other Sections and Resources:

For personal protection see Section 8. For disposal see Section 13. If employees are required to clean-up spills, they must be properly trained and equipped. The OSHA Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120) may apply.

SECTION 7 - HANDLING and STORAGE

Precautions for Safe Handling:

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Conditions for Safe Storage, Including Any Incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Protect from freezing. Store away from acids and oxidizers. Avoid contact with chemically active metals (nickel, cobalt, copper and aluminum)

Specific End Use:

Section 1

SECTION 8 – EXPOSURE CONTROL and PERSONAL PROTECTION

Workplace Control Parameters:

Exposure limits are for air levels only. When skin contact also occurs, worker may be overexposed, even though air levels are less than the limits listed below.

Component Exposure Limits:

Sodium hydroxide (1310-73-2):

OSHA: The legal airborne permissible exposure limit (PEL) is 2 mg/m3 averaged over an 8-hour work shift. NIOSH: The recommended airborne exposure limit (REL) is 2 mg/m3, which should not be exceeded at any time. ACGIH: The threshold limit value (TLV) is 2 mg/m3, which should not be exceeded at any time.

Zinc Chloride (7646-85-7): The following exposure limits are for Zinc Chloride fume:

OSHA: The legal airborne permissible exposure limit (PEL) is 1 mg/m3 averaged over an 8-hour work shift.

Page 4 of 7

NIOSH: The recommended airborne exposure limit (REL) is 1 mg/m3 averaged over a 10-hour work shift and 2 mg/m3, not to be exceeded during any 15-minute work period. ACGIH: The threshold limit value (TLV) is 1 mg/m3 averaged over an 8-hour work shift and 2 mg/m3 as a STEL (short-term exposure limit).

Total Dust (Particulates Not Otherwise Regulated - PNOR):

OSHA: Permissible Exposure Limit (PEL) 15 mg/m3 (50 ppcf) TWA.

ACGIH: 10 mg/m3 TWA (inhalable particles) CAL/OSHA PEL: 10 mg/m3 TWA

Engineering Controls:

Monitor airborne chemical concentrations. Use engineering controls if concentrations exceed recommended exposure levels. Provide eye wash fountains and emergency showers. Where engineering controls are required refer to the OSHA standard for the chemical or mixture components. Before entering a confined space where product may be present, check to make sure that an explosive concentration does not exist.

Personal Protective Equipment:

The OSHA Personal Protective Equipment Standard (29 CFR 1910.132) requires employers to determine the appropriate personal protective equipment for each hazard and to train employees on how and when to use protective equipment. The following recommendations are only guidelines and may not apply to every situation.

Gloves and Clothing:

Avoid skin contact with product. Wear personal protective equipment made from material which cannot be permeated or degraded by this substance. Safety equipment suppliers and manufacturers can provide recommendations on the most protective glove and clothing material. All protective clothing (suits, gloves, footwear, headgear) should be clean, available each day, and put on before work. (Rubber, butyl, neoprene or plastic gloves should be worn when using this material to avoid skin contact.)

Eve Protection:

Wear indirect-vent, impact and splash resistant goggles when working with liquids. Wear non-vented, impact resistant goggles when working with fumes, gases, or vapors. Wear a face shield along with goggles when working with corrosive, highly irritating or toxic substances. Do not wear contact lenses when working with this substance.

Respiratory Protection:

Improper use of respirators is dangerous. Respirators should only be used if the employer has implemented a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing, and medical exams, as described in the OSHA Respiratory Protection Standard (29 CFR 1910.134).

General Hygiene:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Provide employees with hazard information and training.

Control of Environmental Exposure:

Do not let product enter drains.

SECTION 9 – PHYSICAL and CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Liquid

Color: Clear Yellow to Green

Odor: Mild Odor
Boiling Point/Range: Not Determined

Flash Point (Tag Closed Cup): >212°F

Auto Ignition Temperature:

Lower Flammability Limit:

Upper Flammability Limit:

Vapor Pressure:

Vapor Density:

Freezing Point/Melting Point:

Not Determined

Not Determined

Heavier Than Air

Not Determined

Page 5 of 7

Solubility (Water): Complete Specific Gravity (Water=1): 1.45

Evaporation Rate (Water=1): Equal to Water Viscosity: Not Determined pH: (As Is) 13.5

Other Information: None

Note: Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Please see the Product Specification Sheet for further information.

SECTION 10 - STABILITY and REACTIVITY

Reactivity:

Not reactive under normal conditions.

Chemical Stability:

Stable under usual conditions.

Possibility of Hazardous Reactions:

Dust may form explosive mixture with air.

Conditions to Avoid:

None known.

Incompatible Materials:

Water, acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, Zinc Water, acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, Zinc

Hazardous Decomposition Products:

Does not decompose under normal conditions. During fire, thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations).

Other Decomposition Products:

None known. In the event of fire: See Section 5.

Hazardous Polymerization:

Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

General:

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.

Acute and Chronic Toxicity:

 $\frac{Sodium\ Hydroxide}{LD50\ Rabbit\ Dermal} > 2\ g/kgLD50\ Rat\ Oral\ 300\ -\ 500\ mg/kg$ $\frac{LD50\ Mouse\ Other\ 40\ mg/kg,\ Intraperitoneal\ Standard\ Draize\ Test:\ 500\ mg/24-h\ o\ u\ r\ (s)\ skin\ -\ rabbit\ severe.$ $Standard\ Draize\ Test:\ 400\ \mu g\ eyes\ -\ rabbit\ mild;\ 1\ percent\ eyes\ -\ rabbit\ severe.$

<u>Zinc Chloride</u> (7646-85-7): Acute toxicity LD50 Oral - Rat - 350 mg/kg Inhalation - Dermal - Skin corrosion/irritation -Serious eye damage/eye irritation

Skin Corrosion/Irritation:

No information for this mixture.

Inhalation; Serious eye damage/eye irritation; Respiratory or skin sensitization; Germ cell mutagenicity Reproductive toxicity; Specific target organ toxicity - single exposure; Specific target organ toxicity -repeated exposure; Aspiration hazard:

All no data available.

Page 6 of 7

Carcinogenicity:

Product not classified as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Sodium Hydroxide (1310-73-2): Acute toxicity Fish LC50 Bluegill (Lepomis macrochirus) 99 mg/l, 48 hours Mosquitofish (Gambusia affinis) 125 mg/l, 96 hours

Zinc Chloride (7646-85-7): Toxicity to fish LC50 - Cyprinus carpio (Carp) - 0.4 - 2.2 mg/l - 96.0 h Sigma - Z4875 Page 7 of 8 Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0.2 mg/l - 48 h Toxicity to algae Growth inhibition LOEC - Pseudokirchneriella subcapitata - 12.5 mg/l - 96 h.

Persistence and Degradability:

No data available.

Bio-Accumulative Potential:

Bio-accumulative potential: Zinc Chloride (7646-85-7): Bio-accumulation Pimephales promelas (fathead minnow) - 63 d Bio-concentration factor (BCF): 21,000

Mobility in Soil:

No data available

Other Adverse Effects:

No data available.

SECTION 13 – DISPOSAL CONSIDERATION

Waste Disposal Method:

Dispose of waste in accordance with Federal, State and Local laws.

Disposal Regulatory Requirements:

Under RCRA, it is the responsibility of the user of products to determine, at the time of disposal, whether product meets RCRA criteria for hazardous waste. This is because product uses transformations, mixture, processes, etc., may render the resulting material hazardous (see waste classification)

Container Cleaning and Disposal:

Containers should be cleaned of residual product before disposal, and disposed of in accordance with all applicable laws and regulations.

SECTION 14 – TRANSPORT INFORMATION

DOT Hazard Classification:

D.O.T. DESCRIPTION FROM HAZARDOUS MATERIALS TABLE 49 CFR 172.101: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (CONTAINS SODIUM HYDROXIDE), 8, UN3266, PGII REPORTABLE QUANTITY IF APPLICABLE: 1,000 pounds.

SECTION 15 – REGULATORY INFORMATION

<u>Federal</u>

TSCA (Toxic Substance Control Act):

Components of this product are listed on the TSCA Inventory.

DSL:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substances List

SARA Title III

SARA 302 Components:

None subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

The following components are subject to reporting levels established by SARA Title III, Section 313: Zinc chloride (7646-85-7)

SARA 311/312 Hazards:

Acute Health Hazard

States

State Right to Know Components:

MA Sodium hydroxide (1310-73-2) Zinc chloride (7646-85-7) PA & NJ: Water (7732-18-5) and Sodium hydroxide (1310-73-2) Zinc chloride (7646-85-7)

California Prop. 65 Components:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 – OTHER INFORMATION

Hazard (H) and Precautionary (P) Phrases/Numbers:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H402 Harmful to aquatic life.

P234 Keep only in original container.

P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.

P273 Avoid release to the environment.

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

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/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

P405 Store locked up.

P406 Store in corrosive resistant stainless-steel container with a resistant inner liner.

P501 Dispose of contents/container to an approved waste disposal plant.

H402 Harmful to aquatic life.

HMIS Rating:

Health hazard: 3 Chronic Health Hazard: Flammability: 0 Physical Hazard 0

NFPA Rating:

Health hazard: 3 Fire Hazard: 0 Reactivity

Disclaimer:

The information on this Safety Data Sheet (SDS) reflects the latest information and data available to *Martron Inc.* on the hazards, properties and handling of this product under the recommended conditions of use. The use of this product being beyond the control of *Martron Inc.* No warranty, express or implied, is made if not used in accordance with directions or established safe practices.