Dynaflux SDS 790B 4/22/2014

Safety Data Sheet
Product: HTR-30 Heat Tint Remover

Part 1: Product and Company Identification

Identification No: 790B
Product Use Description: Removes heat tint from weld zone.
Trade Name: HTR-30 Heat Tint Remover
Manufacturers Name: Dynaflux, Inc.
241 Brown Farm Rd.
Cartersville, GA 30120 U.S.A.
Emergency Telephone Number: CHEM-TEL: For U.S.: 800-255-3924 International: 813-248-0585

Part 2: Composition / Information on ingredients

Components	CAS Number	Concentration (Weight)	TWA ppm	STEL ppm
Nitric acid	7697-37-2	10-20%	2	4
Hydrofluoric acid	7664-39-3	5-12%	3	3

Part 3: Hazards Identification

Signal Word: DANGER
H290: May be corrosive to metals
H300: Fatal if swallowed
H310: Fatal in contact with skin
H330: Fatal if inhaled

Emergency Overview

Corrosive.
Oxidant. Strongly supports combustion. May react violently with combustible materials.
Oxidizer, will increase risk of fire or the intensity of a fire. Emergency responders must practice extreme caution when approaching, because of the reactivity potential; may cause violent and sometimes explosive reactions.
Harmful by inhalation.
Symptoms may be delayed.
Can cause severe burns if inhaled or upon skin contact.
Requires specialized medical treatment procedures.

Potential Health Effects

Exposure routes

Eye contact, Skin contact, Ingestion, Inhalation

Eye contact

Causes eye burns. May cause blindness.

Skin contact

Causes skin burns. Causes severe burns which may not be immediately painful or visible.

Ingestion
If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and stomach. Skin contact, characterized by a yellowing of the tissue, will produce chemical burns. Ingestion of nitric acid will produce chemical burns of the mucous membranes of the mouth, larynx, and esophagus with immediate pain, necrosis of tissues, edema, and possible obstruction of the airway. Irritation and corrosion of the stomach may be associated with nausea and vomiting of blood or coffee ground-like material. Profound shock is common. Rupture of the esophagus or stomach may occur. Esophageal structure, other permanent injury, or death may occur. The toxic oxides of nitrogen are very insidious and exposure to low concentrations may not be recognized initially. The oxides are readily recognized at higher concentrations as light to deep reddish-brown fumes. The vapors of nitric acid are characterized by their acrid odor.

Inhalation
Inhalation may cause irritation to the upper respiratory tract. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns. Harmful if inhaled.

Chronic Health Hazard
This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Chronic fluoride exposure may cause bone and joint changes in humans (fluorosis).

Exposure Guidelines

Target Organs

Respiratory system
Skin
Eyes
Lungs
Kidney
Liver
Heart
Teeth and bone

Aggravated Medical Condition
Asthma, eye disease, skin disorders and allergies. Liver disorders, kidney disorders, acute or chronic respiratory conditions.

Part 4: First Aid Measures

General Advice
Prompt medical attention is required in all cases of overexposure. Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has topped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye Contact
Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Seek medical treatment immediately, Irrigate eye intermittently for 20 minutes with an aqueous calcium gluconate 1% solution, if available. **GHS Category 1**

Skin Contact
Immediately remove contaminated clothing, and any extraneous chemical, if possible do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing. A physician should be consulted for all exposures. Burns covering an area greater than fifty-two square centimeters (8 square inches) require immediate treatment by a medical doctor. Remove contaminated clothing. With gloved hand apply 2.5% calcium gluconate gel to the burn area. Alternative treatment is to soak the affected areas in an iced 0.13% water solution (1:750) of Zephiran® chloride (benzalkonium chloride solution, NF). Use ice cubes, not shaved ice, to prevent frostbite. If soaking is impractical, soaks or compresses may be used. (Do not use Zephiran® for burns of the eye). If immersion is impractical, soaked compresses of the same solution should be applied to the area. Immersion or compresses must be used continuously for two hours. **GHS Subcategory 1B**

Ingestion
If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Drink 1 or 2 glasses of water. Do not induce vomiting. Call a physician immediately. Gastric lavage with calcium chloride or calcium gluconate may be performed by a physician. Administer several vials of 10% aqueous calcium gluconate orally. (Calcium carbonate or an antacid containing calcium carbonate or magnesium carbonate or hydroxide may also be used.) Prevent aspiration of vomit. Turn victim's head to the side. **GHS Category 1**

Inhalation
If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Evidence of damage to the lungs following exposure to oxides of nitrogen characteristically appears after a delay of 4-30 hours. As soon as possible give 2.5% to 3% calcium gluconate solution by nebulizer. Move to fresh air. **GHS Category 1**

Notes to physician
Treatment
This advice is provided to the attending physician because of the specific properties of hydrogen fluoride and hydrofluoric acid. All cases of ingestion and airway exposure, and skin burns with hydrofluoric acid >20% should be regarded as potentially fatal. Patients who have burns and pain within minutes of exposure can be assumed to have been exposed to concentrated acid and are at risk of rapid clinical deterioration and death. Burns can be accompanied by absorption of fluoride through the skin with sequestration of circulating calcium leading to hypocalcaemia and hyperkalemia from the release of cell contents. Fatal cardiac dysrhythmias may ensue. A person who has FG burns should be admitted immediately to an intensive care unit and carefully monitored by EKG for 24 to 48 hours. Blood sampling should be taken to monitor circulating fluoride, potassium and calcium levels. Hemodialysis may be necessary for fluoride removal and correction of hyperkalemia. JF inhaled in high concentrations may cause acute inflammation and edema of the airway and acute pulmonary edema. Anyone who has been exposed to JF gas or mists and experiences respiratory irritation should be admitted to and monitored in an intensive care unit. In some cases, if the eyes are exposed to JF, it may penetrate to internal structures resulting in irreversible damage. JF skin burns are usually accompanied by severe, throbbing pain, which is thought to be due to irritation of nerve endings by increased levels of potassium ions entering the extracellular space to compensate for the reduced levels of calcium ions, which have been bound to the fluoride. RELIEF OF PAIN IS AN IMPORTANT GUIDE TO THE SUCCESS OF THREATMENT.

Part 5: Fire Fighting Measures

Suitable extinguishing media
Alcohol resistant foam
The product itself does not burn.
Carbon dioxide (CO2)
Dry chemical
Dry sand
Limestone powder

Specific Hazards
Downwind personnel must be evacuated. This product is not flammable, but it is an oxidizing material and can increase risk of fire or intensity of a fire. Danger of explosion on contact with flammable liquids and other organic materials.

Special protective equipment for firefighters
Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for firefighting if necessary.

Further information
The product as distributed is noncombustible. Do not allow run-off from firefighting to enter drains or water courses.

Part 6: Accidental Release Measures

Personal precautions
Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Contact with combustible material may cause fire. Use chemically protective clothing. Evacuate personnel to safe areas.

Environmental precautions
Construct a dike to prevent spreading.

Methods for cleaning up
Approach suspected leak areas with caution. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local, state and federal regulations. Neutralize with a dilute solution of sodium carbonate. Place in appropriate chemical waste container.

Additional Advice
Open enclosed spaces to outside atmosphere. Never return spills in original containers for re-use. Reduce vapor with fog or fine water spray. Large releases may require considerable downwind evacuation. If possible, stop flow of product.

Part 7: Handling and Storage

Handling
Avoid contact with skin and eyes. Use only in well-ventilated areas. Avoid breathing vapors. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Contact with combustible material may cause fire. Prevent contamination by any source during handling and storage. This product should be kept in its original container until time of use to avoid any contamination. Never return unused product to its original storage container. All equipment that may contact this product should be cleaned thoroughly to avoid potential reactions with organic contaminates. Empty containers may contain residual liquid or vapors; therefore, empty containers should be handled with care. Dispose of in accordance with local regulations. Inexperienced or first time users of product should contact supplier for additional information on the storage, handling and use of this product. Use personal protective equipment. When using do not eat, drink or smoke.

Storage
Keep away from alkalis. Keep away from organic materials. Keep away from combustible material. Keep in a swell-ventilated place. Keep away from powdered metals, carbides, turpentine, and hydrogen sulfide.
Storage temperature: <100°F (<38°C).

Part 8: Exposure Controls / Personal Protection

Engineering measures
Provide readily accessible eye wash stations and safety showers.

Personal Protective Equipment
Respiratory protection
Wear appropriate respirator when ventilation is inadequate.

Hand protection
Neoprene gloves, impervious gloves.

Eye Protection
Full face shield with goggles underneath.

Skin & Body protection
Slicker suit, impervious clothing
Rubber or plastic boots

Environmental exposure controls
Use vermiculite or other hazard materials handling substrate to prevent spreading.

Special instructions for protection and hygiene
Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking or using the toilet.

Part 9: Physical and Chemical Properties

Boiling Point	215°F
Color	white
Flashpoint	None
Form	Liquid/Paste
Odor	acidic, pungent
ph	>1
Solubility in water	Complete
Specific Gravity (H2O=1)	2.1
Vapor density (Air=1)	0.62
VOC	0
Water Reactive	No

Part 10: Stability and Reactivity

Stability
Stable under normal conditions

Conditions to avoid
Avoid oil, grease and all other combustible materials. Decomposes on heating, exposure to light.

Materials to avoid
Amines
Incompatible with bases.
Reducing agents
Flammable materials
Organic materials
Combustible material
Nitric acid attacks most metals vigorously with evolution of nitric oxide(s) fumes, hydrogen fumes.
Materials made of glass or ceramic
May react violently with alkalis
Zinc Brass Aluminum

Hazardous Decomposition
Nitrogen oxides (NOx)
Gives off hydrogen by reaction with metals.

Part 11. Toxicological Information

Acute Health Hazard

Ingestion

No data available on the product itself.

Inhalation

Harmful by inhalation

Inhalation Components

Nitric acid LC50 (4 h): 49 ppm Species: Rat

Hydrofluoric acid LC50 (1h): 1276 ppm Species: Rat

Skin:

No data available

Chronic Health Hazard

Animals exposed to hydrogen fluoride have exhibited kidney, lung, heart and liver damage.

Part 12. Ecological Information

Ecotoxicity effects

Aquatic toxicity

Toxic to aquatic organisms, May cause pH changes in aqueous ecological systems

Part 13. Disposal Considerations

Waste disposal methods

Must not be disposed of together with general refuse. Do not allow product to reach sewage system.
Dispose of container and unused contents in accordance with federal, state and local regulations.

Part 14. Transport Information

Corrosive Liquid, Oxidizing N.O.S., 8, UN3093, PGII

Part 15. Regulatory Information

Section 313 (Specific toxic chemical listings):

7697-37-2 nitric acid
7664-39-3 hydrofluoric acid

TSCA (Toxic Substances Control Act):

All ingredients are listed

Proposition 65

Chemicals known to cause cancer

None of the ingredients listed

Chemicals known to cause cancer: None of the ingredients listed
Chemicals known to cause reproductive toxicity for females: None of the ingredients listed
Chemicals known to cause reproductive toxicity for males: None of the ingredients listed
Chemicals known to cause developmental toxicity: None of the ingredients listed

Continued

Cancerogenity categories
EPA (Environmental Protection Agency): None of the ingredients listed

IARC (International Agency for Research on Cancer): None of the ingredients listed

NTP (National Toxicology Program: None of the ingredients listed

TLV (Threshold Limit Value established by ACGIH): None of the ingredients listed

NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients listed

National hazard class: Water hazard class 2 (self-assessment): hazardous to water.

Part 16. Other Information

This information is based on our present knowledge; however, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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