



# Material Safety Data Sheet

## SECTION I: Product and Company Identity:

TRADE NAME (AS LABELED): **TS-72 Break-Torq Nickel Compound**  
 MANUFACTURER'S NAME: T.S. Moly-Lubricants, Inc.  
 MANUFACTURER'S ADDRESS: 6205 Brookhill Drive, Suite 6  
 Houston TX 77087  
 EMERGENCY PHONE: 713/671-2676  
 BUSINESS PHONE: 713/671-2676 Fax: 713/671-9417  
 REVIEWED: July 27, 2005

## SECTION II: Composition /Information on Ingredients

The criteria for listing components in the composition section are as follows: Carcinogens are listed when present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or greater; nonhazardous components are not listed as being proprietary information. Refer to Section IX for regulatory information.

Ingredient	CAS No.	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )	% Optional
Nickel (Ni)	7440-02-0	1	1.5	48
Zinc stearate	557-05-1	TWA: 10.0 (total dust); TWA: 5.0 (respirable fraction)	NDA	>2

**Cancer rating: IARC 2b (possibly carcinogenic to humans); ACGIH A5 (Not suspected as a Human Carcinogen).** NTP regulated? No IARC Monograph? Yes (49) OSHA regulated (as carcinogen)? No

## SECTION III: Hazards Identification

EMERGENCY OVERVIEW: CAUTION! Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. Primary hazard: Possible carcinogen.

### POTENTIAL HEALTH EFFECTS, TARGET ORGAN EFFECTS (ACUTE & CHRONIC):

This product may cause eye, skin and upper respiratory tract irritation. Nickel compounds may cause eye irritation, upper respiratory tract irritation and skin sensitization. Giddiness and nausea may result from ingestion. IARC considers nickel compounds to be possibly carcinogenic to humans (Monograph 49).

HAZARDOUS MATERIAL INFORMATION SYSTEM			
HEALTH (BLUE)	2		
FLAMMABILITY (RED)	0		
REACTIVITY (YELLOW)	0		
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BO DY
See Section 8			

# MATERIAL SAFETY DATA SHEET

## TS-72 Break-Torq Nickel Compound

Page 2 of 3

**INHALATION:** Inhalation of this product may cause mild irritation of the nose, throat, and other tissues of the respiratory system.

**SKIN:** Prolonged and intimate contact with metallic nickel may cause irritation to the skin and nickel sensitivity which may result in allergic skin rashes.

**EYE:** Contact with the eyes would be expected to cause irritation.

**INGESTION:** The U.S. NIOSH concluded there is no evidence that nickel and its inorganic compounds are carcinogenic when ingested. The U.S. FDA has affirmed that nickel is generally recognized as safe (GRAS) as a direct human food ingredient.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Prolonged and intimate skin contact can cause an allergic skin rash in previously sensitized individuals.

### SECTION IV: First Aid Measures

If exposure to nickel carbonyl is suspected, seek medical attention immediately.

**EYES:** Flush eyes with plenty of water for several minutes. Get medical attention if eye irritation persists.

**SKIN:** Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

**INGESTION:** If person is conscious and can swallow, give two glasses of water but do not induce vomiting. If vomiting occurs, give fluids again. Consult a physician if symptoms develop. **DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.**

**WOUNDS:** Cleanse wounds thoroughly to remove any particles.

### SECTION V: Fire Fighting Measures

**FLASH POINT:** 350 °F. (based on component information) **METHOD:** COC **FLAMMABLE LIMITS:** NDA

**EXTINGUISHING MEDIA:** Carbon dioxide, dry chemical, alcohol foam, water spray.

**SPECIAL FIRE FIGHTING PROCEDURES:** Use water to cool containers exposed to fire. For fires in enclosed areas, firefighters should use self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** NDA

### SECTION VI: Accidental Release Measures

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Recover free product. Add sand, earth, or some other suitable adsorbent. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered sewers, water courses, or extensive land areas.

### SECTION VII: Handling and Storage

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Store in cool dry area in original or equivalent container in accordance with all applicable regulations. Do not apply high heat or flame to container. Do not store near acids or reactive substances.

**OTHER PRECAUTIONS:** Good personal hygiene practices should always be followed.

### SECTION VIII: Exposure Controls/Personal Protection

**VENTILATION AND ENGINEERING CONTROLS:** Use with adequate ventilation. Use a mechanical fan or vent area to outside.

# MATERIAL SAFETY DATA SHEET

## TS-72 Break-Torq Nickel Compound

Page 3 of 3

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators if OSHA PEL is exceeded.

EYE PROTECTION: Use side-shielded safety glasses or goggles

HAND PROTECTION: Wear impervious gloves.

BODY PROTECTION: Use body protection as needed for task.

### SECTION IX: Physical and Chemical Properties

Boiling Point: >300 °F.

Specific Gravity: 5.6

Vapor Pressure: NDA

Melting Point: NDA

Vapor Density: NDA

Solubility in Water: Not soluble

Appearance and Odor: Dark gray paste with slight odor

### SECTION X: Stability and Reactivity

STABILITY: Unstable: No      Stable: Yes

CONDITIONS TO AVOID/INCOMPATIBILITY: Exposure to strong acids, oxidizers or reducing atmospheres.

IPOLYMERIZATION: May occur: No      Will not occur: Yes

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: carbon monoxide, carbon dioxide, under special conditions nickel can react with carbon monoxide in reducing atmospheres to form nickel carbonyl, Ni(CO)<sub>4</sub>, a toxic gas.

**SECTION XI: Toxicological Information:** Nickel: LD<sub>50</sub>: ORAL RAT >9000 mg/kg

**SECTION XII: Ecological Information:** No data available.

### SECTION XIII: Disposal Considerations

WASTE DISPOSAL METHODS: Dispose of waste according to all applicable regulations.

CERCLA RQ: 100¢ pounds    ¢The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches).

### SECTION XIV: Transport Information

This material is not regulated as a DOT hazardous material

### SECTION XV: Regulatory Information

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are on the TSCA inventory or are not required to be listed on the TSCA inventory.

SARA SECTION 313 SUPPLIERS NOTIFICATION: This product contains a chemical, nickel, subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372.

### SECTION XVI: Other Information

Disclaimer: Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of this product for particular uses are beyond our control. Users should make their own investigation to determine the suitability of the information or products for their respective purposes.

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