* Paner *

ITW Performance Polymers - QUALCO

Material Safety Data Sheet

Part No.: Q00201

Page 1

LOCK DE-ICER (00201, 00201-CS, 00201D, 00201S, OO202, 002020)

This product appears in the following stock number(s):

00201

00201-CS

00201D

00201S

00202

01201S

Q0020Baptqevised:

10/01/01

Printed:

10/5/2001

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename:

LOCK DE-ICER (00201, 00201-CS, 00201D, 00201S, OO202, 002020)

General use:

Chemical family:

Alcohol

MANUFACTURER

ITW Performance Polymers - QUALCO 2107 West Blue Heron Blvd. Riviera Beach, FL 33404

EMERGENCY INFORMATION

Emergency telephone number

(CHEMTREC):

(800) 424-9300

Other Calls:

561-845-2425

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS CONSTITUENTS

Exposure limits

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Carbon dioxide		124389	> 10	5000 ppm	5000 ppm	n/e
Isopropanol	IPA	67630	> 50	400 ppm	400 ppm	400 ppm (Canada)

[&]quot;TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance, form, odor: Clear liquid with solvent odor.

WARNING! F	-lammable.	Eye, s	kin and	respiratory irri	tant. I	May	ay cause central nervous system effects.	
					نسيب تنات			

Potential health effects

Primary routes of exposure: Skin contact Skin a

Skin absorption

∠Eye contact

Inhalation

Ingestion

Symptoms of acute overexposure:

Skin: May irritate the skin.

Eyes: Severe eye irritant. May cause corneal burns.

Inhalation:

May cause irritation to the nose, throat and respiratory tract and may result in central nervous system depression (narcotic effect). May cause coughing, shortness of breath, dizziness and intoxication.

Material Safety Data Sheet

Part No.: Q00201

Page 2

Ingestion:

Irritating to the gastrointestinal tract, causing abdominal pain and vomitting, sometimes bloody. Ingestion may cause CNS depression, low blood pressure, rapid heart beat and liver damage.

Effects of chronic overexposure:

Repeated or prolonged exposure may irritate mucous membranes.

Carcinogenicity -- OSHA regulated: No

ACGIH: No

National Toxicology Program: No

International Agency for Research on Cancer:No

Cancer-suspect constituent(s): NONE

Medical conditions which may be aggravated by exposure:

Existing eye, skin and respiratory disorders.

Other effects:

May effect mucous tissue or mucous membrane dysfunction. See section 11.

4. FIRST AID MEASURES

First aid for eyes:

Flush eye with clean water for at least 20 minutes while gently holding eyelids open. Get immediate medical attention.

First aid for skin:

Immediately remove contaminated clothing and excess contaminant. Flush skin with water. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

First aid for inhalation:

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get immediate medical attention.

Do NOT induce vomiting. Give two glasses of water if patient is NOT unconscious or drowsy. Keep victims head below hips to prevent aspiration if vomiting. Get medical attention immediately.

Note to physician:

Eye: if pain, tears, or rednesscontinue, patient should contact ophthalmologist. Detoxification procedure: administer an aqueous slurry of activated charcoal followed by a cathartic such as magnesium citrate or sorbitol.

5. FIRE FIGHTING MEASURES

General fire and explosion characteristics:

Flammable liquid class IB

Flammable liquid clas	13 ID.			-
Extinguishing media:	Carbon dioxide	Dry chemical	Foam	Alcohol foam
Water		Z_3		

Flash Point (°F): 53

Method: TCC

Explosive limits in air (percent) -- Lower: 2

Upper: 12.7

Special firefighting procedures:

Clear area of unprotected personnel. Fight fire from safe distance. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots) and positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water spray.

Unusual fire and explosion hazards:

Heat may build enough pressure to rupture closed containers/ spreading fire/ increasing risk of burns/injuries. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors are heavier than air, travel along floor to ignition source and flash back. Diluting with water may not suffice to raise flash point above ambient temperatures. Burning liquid may float on water. Avoid frothing/steam explosion.

Material Safety Data Sheet

Part No.: Q00201

Page 3

Hazardous products of combustion:

Carbon monoxide and other unknown organic compounds.

6. ACCIDENTAL RELEASE MEASURES

Spill control:

Avoid personal contact. Eliminate ignition sources. Ventilate area. Equip responders with proper protection.

Containment:

Dike, contain and absorb with clay, sand or other suitable material.

Cleanup:

Wear appropriate respirator and protective clothing. For large spills, blanket with firefighting foam. Pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly. Flush area with water to remove trace residue. Small spills- take up with an absorbent material and place in appropriate containers for disposal.

Special procedures:

Contain / collect rapidly to minimize dispersion. Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Use bonding/ grounding lines and non-sparking tools. On water, material is soluble and may float or sink. May biodegrade. Report per regulatory requirements.

7. HANDLING AND STORAGE

Handling precautions:

Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Do not breathe vapor or mist. Ground container when pouring. Use non-sparking tools. Handle empty containers with care, vapor residue may be flammable/explosive. Material may attack some forms of plastic, aluminum, rubber, and coatings.

Storage:

Keep in a cool place, without direct exposure to sunlight. Keep containers away from heat, sparks, open flames, and strong oxidizers. Keep container tightly closed and otherwise in accordance with NFPA regulations. Maintain air space in storage containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Ventilation:

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.

Other engineering controls:

Keep container tightly closed. Observe label precautions. Have emergency eye wash and safety shower present.

Personal protective equipment

Eye and face protection:

Wear safety glasses. Wear coverall chemical splash goggles and face shield when eye and face contact is possible. Do not wear contacts.

Skin protection:

Chemical-resistant gloves (Neoprene, nitrile) and other gear as required to prevent skin contact.

Respiratory protection:

A NIOSH/MSHA air purifying respirator with an organic vapor cartridge may be permissible as exposure levels dictate.

Material Safety Data Sheet

Part No.: Q00201

However use a positive pressure air supplied respirator if there is any potential for uncontrolled release, or unknown exposure levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:

0.789

Boiling point (°F):

180

Melting point (°F):

- 127

Vapor density (air = 1):

2.1

Vapor pressure (mmHg):

33 mm Hg at 68 °F

Evaporation rate (butyl acetate = 1): 1.4

completely

VOC (grams/liter):

790

Solubility in water:

Percent volatile by volume: 100

pH (5% solution or slurry in water): n/d

Percent solids by weight:

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid:

Avoid heat, open flames, temperatures above 120 degrees F and ignition sources, and oxidizing conditions.

Incompatible materials:

Strong oxidizing agents. Aluminum metals, NITROFORM, sulfuric acid.

Hazardous products of decomposition:

Oxides of carbon and unidentified organic combustion products.

Conditions under which hazardous polymerization may occur:

N/A

11. TOXICOLOGICAL INFORMATION

Acute oral effects:

LD50 (rat): No data available.

Acute dermal effects:

LD50 (rabbit): No data available.

Acute inhalation effects: LC50 (rat): No data available.

Exposure:

hours.

Eye irritation:

Severe eye irritant.

Subchronic effects:

Rat and mouse inhalation toxicity: The subchronic NOAEL was 500 ppm based on clinical signs of CNS depression (both species) and increased body weight and blood effects (rat only) seen at 1500 ppm

Carcinogenicity, teratogenicity, and mutagenicity:

In response to a TSCA test rule, several studies of IPA have now been completed. The studies and their results are

Material Safety Data Sheet

Part No.: Q00201

as follows: 1) Both mutagenicity studies, the mouse micronucleus and CHO assays, were negative. 2) Rat and rabbit oral teratogenicity and developmental toxicology: a) there was no evidence that IPA caused teratogenicity in rats or rabbits. b) Developmental toxicity was seen in rats at 1200 mg/kg (evidenced by body weight) while no developmental toxicity was seen in the rabbit study. For rats, the NOAEL was 400 mg/kg; for rabbits 480 mg/kg. This work also identified pregnant rabbits to be approximately eight times more sensitive to IPA's lethal effects than non-pregnant rabbits.

Other chronic effects:

In rat inhalation neurotoxicity and oral developmental neurotoxicity studies, there was no evidence that IPA caused neurotoxicity in adults (max dose 5000 ppm) or offspring (max dose 1200 ppm).

Toxicological information on hazardous chemical constituents of this product:

Toxicological information on hazardous chemical Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Carbon dioxide	n/d	n/d	n/d
Isopropanol	5045 mg/kg	12.8 g/kg	22627 ppm
			'n/d' = 'not determined

12 ECOLOGICAL INFORMATION

Ecotoxicity:

No data available.

Mobility and persistence:

No data available.

Environmental fate:

No data available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Waste management recommendations:

If this product becomes a waste, it would be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations.

Material Safety Data Sheet

Part No.: Q00201

14. TRANSPORT INFORMATION

Proper shipping name:

Aerosols*

Technical name:

Hazard class:

2.1

UN number:

1950

Packing group:

Emergency Response Guide no.:

IMDG page number:

N/A

Other:

Domestic US: Consumer Commodity, ORM-D

*Depending upon the size and type of container, this material may be reclassified as "Consumer Commodity, ORM-D" for shipments within the United States, or "Limited Quantity" elsewhere. Refer to the appropriate regulation.

15. REGULATORY INFORMATION

U.S. Federal Regulations

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

Regulatory status of hazardous chemical constituents of this product:

Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
No	No	0.0	Not required
No	Yes	0.0	Required
	Hazardous*	Hazardous* Chemical** No No	Hazardous* Chemical** RQ (lbs) No No 0.0

^{*}Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard -- Delayed health hazard -- Fire hazard -

Canadian regulations

WHMIS hazard class(es): B2; D2B

All components of this product are on the Domestic Substances List.

^{**}Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

Material Safety Data Sheet

Part No.: Q00201

Page 7

16. OTHER INFORMATION

Hazardous Materials Identification System (HMIS) ratings:	Health 2*	Flammability 3	Reactivity 0	
				_

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.