



**INDIUM CORPORATION OF AMERICA®\EUROPE®\ASIA-PACIFIC®
INDIUM CORPORATION (SUZHOU)®**

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: WS-446AL-SP

MSDS Number: MSDS-4563

Revised Date: 15 APRIL 2013

Product Use: INDUSTRIAL USE - WATER WASH TACFLUX

MANUFACTURER:

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2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

Eye
 Inhalation
 Skin
 Ingestion
 NTP
 IARC
 OSHA
Not Listed

Carcinogen listed in

GHS:



Signal Word: Danger

Hazard Statements:

H225 Highly Flammable liquid and vapor
 H316 Causes mild skin irritation
 H319 Causes serious eye irritation
 H336 May cause drowsiness or dizziness

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking
 P233 Keep container tightly closed
 P240 Ground container and receiving equipment
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 P270 Do not eat, drink or smoke when using this product
 P273 Avoid release to the environment
 P280 Wear protective gloves/protective clothing/eye protection/face protection
 P362 Take off contaminated clothing and wash before reuse
 P302 +P352 IF ON SKIN: Wash with plenty of soap and water
 P304 + 341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
 P305 + 351 IF IN EYES: Rinse continuously with water for several minutes (15 mins)

Classification – isopropyl alcohol

Serious eye damage/eye irritant – Category 2

Flammable liquids - Category 2

Skin – Category 3

Specific target organ systemic toxicity (single exposure) – Category 3

POTENTIAL HEALTH EFFECTS:

Eye Contact: Vapors may be irritating, liquid may damage eye tissue.

Ingestion: May cause persistent nausea, vomiting and abdominal pain. Irritating to digestive tract.

Inhalation: Vapor may cause headaches and or dizziness. Avoid inhalation of vapors. Irritating to respiratory tract.

Skin Contact: Prolonged contact may cause irritation.

Chronic: Over exposure to vapors may be harmful.

NOTE: The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% wt	CAS Registry #/EINECS#	PEL mg/m ³	TLV-TWA mg/m ³	TLV-STEL mg/m ³
ISOPROPANOL	32-36	67-63-0/200-661-7			
		(US)	980	983	1225
(PROPAN-2-OL)		(EU)	-	999	1250
		(Canada)	-	983	1228
		(Mexico)	980	-	1225
		(China)	-	350	700
		(Singapore)	983	-	1230
PROPRIETARY ALCOHOLS	50-60		N.E.	N.E.	N.E.
NON HAZARDOUS					
PROPRIETARY ACTIVATORS	10-15	-	N.E.	N.E.	N.E.

Symbol: XI, F

N.E. = Not established

Risk Phrases: R36/37/38, R11, R67

EU = European Exposure Limits

PRODUCT DOES NOT CONTAIN ANY EU SUBSTANCES OF VERY HIGH CONCERN (SVHC)

4. FIRST AID MEASURES

- Eye Contact:** Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.
- Ingestion:** If patient is conscious, ONLY induce vomiting as directed by trained personnel. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.
- Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention.
- Skin Contact:** Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

5. FIRE FIGHTING MEASURES

- Flash Point:** 15°C (59°F) **Method:** Closed Cup
- Auto-ignition Temperature:** No information available
- Flammable Limits:** No information available

Extinguishing Media: Water. Use extinguishers appropriate for the surrounding fire conditions.

Special Fire Fighting

Procedures: Wear protective clothing and self-contained breathing apparatus. Use water to cool fire exposed containers. Flammable vapors may travel great distances to ignition source and flash back.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Do not allow any materials to enter sewer system or waterway unless authorized to do so. Wear personal protective equipment. Eliminate sources of ignition. Ventilate area in accordance with regulations. Dispose of following all Federal, State and Local regulations. In the EU refer to the Special Waste Regulations.

7. HANDLING AND STORAGE

Handling Keep containers tightly closed when not in use. Use care to avoid spills. Wear personal protective equipment. Ground containers. Keep away from flame.

Storage Precautions: Store product in tightly capped original containers in a cool, dry area. Refer to product label for specific storage temperature requirements. Rotate stock to ensure use before expiration date on the label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Face velocity >2.1 cubic feet/minute in confined areas. Overall general exhaust ventilation Recommended in order to keep exposures to as low as possible.

Personal protection:

Eyes: Chemical safety glasses/goggles. Face shield for splash hazard.

Respirator: An authority approved or compliant marked air-purifying respirator with a fume/organic chemical cartridge is recommended where airborne concentrations are expected to be elevated. Use respiratory protection in confined areas. Air purifying respirators will offer no protection in oxygen deficient areas. Ensure that the protection factors of the respirator are not exceeded.

Skin: Compatible chemical resistant gloves. Use gloves such as nitrile, which are compatible with alcohols.

Other: Lab coat, eye-wash fountain in work area. Avoid the use of contact lenses in high fume areas.

Work/Hygienic Practices: Maintain good housekeeping. Clean up spills immediately. Good personal hygiene is essential. Avoid eating, smoking or drinking in the work area. Wash hands thoroughly with soap and water immediately upon leaving the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear	Boiling Point:	No information
Odor:	Alcohol odor.	Evaporation Rate:	No information
Specific Gravity:	1 g/cc	pH:	4 - 8
Vapor Pressure:	No information	Solubility in Water:	Soluble
Vapor Density:	No information	% Volatiles by volume:	No information

10. STABILITY AND REACTIVITY

General:	Stable.
Conditions to Avoid:	Direct heat, open flames and storage in aluminum.
Incompatible Materials:	acids/caustics
Hazardous Decomposition / Combustion:	Carbon dioxide/carbon monoxide.
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity:	National Toxicity Program NTP:	No
	Occupational Safety & Health Administration OSHA:	No
	International Agency for Research on Cancer IARC:	No
LD50:	Not established.	LC50: Not established.

12. ECOLOGICAL INFORMATION

Product not tested.

13. DISPOSAL CONSIDERATION

Waste Disposal Method: Dispose of in accordance with all Federal, State and Local environmental regulations.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

UN1219, Isopropanol mixture, 3, PG II



North American Emergency Guide Book – Guide # 129

Label: Flammable

15. REGULATORY INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated hereunder (29 CFR 1910.1200 ET. SEQ.).

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR).

Canadian WHMIS: Class B Division 2 Flammable, D2B Toxic Material Causing Other Toxic Effects (eye irritation in animals).



This product has been classified in accordance with the guidelines set by the Dept of Industrial Health of the Republic of Singapore.

This product has been classified in accordance with Mexican regulations: NOM-018-STPS-2000 and NOM-010-STPS-1999.

This product has been classified using the Chinese Occupational Exposure Limit for Hazardous Agents in the Workplace, GBZ2-2002.

SARA 313 Listing - 40 CFR 372.65: none

All ingredients are listed on the EPA TSCA Inventory.

EC Classification, Packaging and Labeling Requirements:

Symbol and Hazard Classification of Product

XI, F

Risk Phrases:

R36/37/38 Irritating to eyes, respiratory system and skin
 R 11 Highly Flammable
 R67 Vapors may cause drowsiness and dizziness

Safety Phrases:

S16 Keep away from sources of ignition - "No Smoking"
 S20/21 When using do not eat, drink or smoke
 S23 Do not breathe fumes
 S24/25 Avoid contact with skin and eyes
 S28 After contact with skin wash immediately with plenty of soap and water
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
 S62 If swallowed, do not induce vomiting seek medical advice immediately and show container or label
 S7 Keep container tightly closed

16. OTHER INFORMATION

HMIS Hazard Rating: **Health:** 1
 Fire: 3
 Reactivity: 0

Revised Date: 15 APRIL 2013

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