Material Safety Data Sheet

Flux 217

1 . Product and company identification

Common name : Flux 217

Product type : Flux.

Trade name : Flux NC 217

Material uses : Flux

Validation date : **6/20/2011.**

Contacts : In Canada:
AIM
9100 Henri Bourassa East
Montreal, QC
H1E 2S4
(514) 494-2000

In the United States:
AIM
25 Kenney Drive
Cranston, RI
(800) CALL-AIM

INFOTRAC - Emergency 24h
North America: (800) 535-5053
International: (352) 323-3500

2 . Hazards identification

Physical state : Liquid.

Odor : Alcohol like.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
Contains material that can cause target organ damage.

Potential acute health effects

Eyes : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

3 . Composition/information on ingredients

Name	CAS number	%
Hydrogenated rosin	14413-22-9	50 - 75
Isopropyl alcohol	67-63-0	5 - 15
Suberic acid	505-48-6	2 - 10

4 . First aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

5 . Fire-fighting measures

Flammability of the product : May be combustible at high temperature.

Products of combustion : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

In a fire or if heated, a pressure increase will occur and the container may burst.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

Product name	Exposure limits
Isopropyl alcohol	**ACGIH TLV (United States, 1/2005). Notes: Refers to Appendix A -- Carcinogens. ACGIH 2003 Adoption** STEL: 400 ppm 15 minute(s). Form: All forms TWA: 200 ppm 8 hour(s). Form: All forms
	NIOSH REL (United States, 12/2001). STEL: 1225 mg/m³ 15 minute(s). Form: All forms STEL: 500 ppm 15 minute(s). Form: All forms TWA: 980 mg/m³ 10 hour(s). Form: All forms TWA: 400 ppm 10 hour(s). Form: All forms **OSHA PEL (United States, 8/1997).** TWA: 980 mg/m³ 8 hour(s). Form: All forms TWA: 400 ppm 8 hour(s). Form: All forms **OSHA PEL 1989 (United States, 3/1989).** STEL: 1225 mg/m³ 15 minute(s). Form: All forms STEL: 500 ppm 15 minute(s). Form: All forms TWA: 980 mg/m³ 8 hour(s). Form: All forms TWA: 400 ppm 8 hour(s). Form: All forms

Consult local authorities for acceptable exposure limits.

Engineering measures : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protection

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

8 . Exposure controls/personal protection

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Hygiene measures : 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9 . Physical and chemical properties

Physical state : Liquid.

Odor : Alcohol like.

Solubility : Easily soluble in the following materials: cold water, hot water, methanol and diethyl ether.
Partially soluble in the following materials: n-octanol.

10 . Stability and reactivity

Stability and reactivity : The product is stable.

Incompatibility with various substances : Reactive or incompatible with the following materials: oxidizing materials and acids.
Slightly reactive or incompatible with the following materials: moisture.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions of reactivity : Highly flammable in the presence of the following materials or conditions: heat and oxidizing materials.
Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and combustible materials.

11 . Toxicological information

Chronic effects on humans : **CARCINOGENIC EFFECTS**: Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Rosin, hydrogenated]. Classified None. by NIOSH [Isopropyl alcohol]. Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [Isopropyl alcohol].
Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Other toxic effects on humans : Fumes and/or dusts produced by this product may be hazardous in case of inhalation. This product may be hazardous in case of skin contact (irritant, sensitizer, permeator), of eye contact (irritant), of ingestion.

Specific effects

Carcinogenic effects : No known significant effects or critical hazards.

Mutagenic effects : No known significant effects or critical hazards.

Teratogenicity / Reproductive toxicity : No known significant effects or critical hazards.

Sensitization

Ingestion : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Eyes : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

12 . Ecological information

Ecotoxicity data

Product/ingredient name	Species	Period	Result
Isopropyl alcohol	Pimephales promelas (EC50)	48 hour(s)	10000 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>1400 mg/l
	Pimephales promelas (LC50)	96 hour(s)	6550 mg/l
	Pimephales promelas (LC50)	96 hour(s)	9640 mg/l
	Pimephales promelas (LC50)	96 hour(s)	10400 mg/l
	Pimephales promelas (LC50)	96 hour(s)	11130 mg/l

Environmental precautions : No known significant effects or critical hazards.

Products of degradation : Products of degradation: carbon oxides (CO, CO_2) and water. Some metallic oxides.

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification	1219	Isopropanol, solution (Isopropyl alcohol)	3	II		-
TDG Classification	1219	Isopropanol, solution (Isopropyl alcohol)	3	II		-
ADR/RID Class	1219	Isopropanol, solution (Isopropyl alcohol)	3	II		-
IMDG Class	1219	Isopropanol, solution (Isopropyl alcohol)	3	II		-
IATA-DGR Class	1219	Isopropanol, solution	3	II		-

PG* : Packing group

15 . Regulatory information

United States

HCS Classification : Target organ effects

U.S. Federal regulations : TSCA 4(a) final test rules: Isopropyl alcohol
TSCA 8(a) PAIR: Isopropyl alcohol
TSCA 8(a) IUR: Isopropyl alcohol
United States inventory (TSCA 8b): Not determined.
TSCA 8(d) H and S data reporting: Isopropyl alcohol: 1986
TSCA 12(b) one-time export: Isopropyl alcohol

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Isopropyl alcohol; succinic acid
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Isopropyl alcohol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; succinic acid: Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements :	alcool isopropilico (italian); alcool isopropylique (french); avantine; dimethylcarbinol; isohol; isopropanol; iso-propylalkohol (german); lutosol; petrohol; propropan-2-ol; 2-propanol; i-propanol (german); sec-propyl alcohol; i-propylalkohol; ipa; propan-2-ol; sec-propyl alcohol; arquad dmcb, component of (with 169153); visco 1152, component of (with 107601); pro	67-63-0	5 - 15
Supplier notification :	alcool isopropilico (italian); alcool isopropylique (french); avantine; dimethylcarbinol; isohol; isopropanol; iso-propylalkohol (german); lutosol; petrohol; propropan-2-ol; 2-propanol; i-propanol (german); sec-propyl alcohol; i-propylalkohol; ipa; propan-2-ol; sec-propyl alcohol; arquad dmcb, component of (with 169153); visco 1152, component of (with 107601); pro	67-63-0	5 - 15

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations : **Connecticut Carcinogen Reporting:** None of the components are listed.
Connecticut Hazardous Material Survey: None of the components are listed.
Florida substances: None of the components are listed.
Illinois Chemical Safety Act: None of the components are listed.
Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Massachusetts Substances: None of the components are listed.
Michigan Critical Material: None of the components are listed.
Minnesota Hazardous Substances: None of the components are listed.
New Jersey Hazardous Substances: None of the components are listed.
New Jersey Spill: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
New York Acutely Hazardous Substances: None of the components are listed.
New York Toxic Chemical Release Reporting: None of the components are listed.

15 . Regulatory information

Pennsylvania RTK Hazardous Substances: None of the components are listed.
Rhode Island Hazardous Substances: None of the components are listed.

Canada

WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).

CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

EU regulations

Hazard symbol or symbols :

Risk phrases : R36/38- Irritating to eyes and skin.
R43- May cause sensitization by skin contact.

Safety phrases : S2- Keep out of the reach of children.
S24- Avoid contact with skin.
S37- Wear suitable gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.

International regulations

International lists : **Australia inventory (AICS):** Not determined.
China inventory (IECSC): Not determined.
Japan inventory: Not determined.
Korea inventory: Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.

16 . Other information

Label requirements : CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

Hazardous Material Information System (U.S.A.) :

Health	2
Fire hazard	3
Reactivity	0
Personal protection	

National Fire Protection Association (U.S.A.) :

References : -ACGIH, Threshold Limit Values, 1994-1995. -Canada Gazette Part II, Vol. 122, No. 2 Registration SOR/88-64 31 December, 1987 Hazardous Products Act "Ingredient Disclosure List". -CFR29, OSHA's Permissible Exposure Limits, revision July, 1993. -CFR29, part 1910.1200, Hazard Communication. -Components' manufacturer's Material Safety Data Sheet. -CRC Handbook of chemistry and physics, 67 th edition, CRC Press inc., Boca Rota, Florida. -CSST (Comission de Santé et Sécurité au Travail), document #RT-12: Classification of Certain Chemical Substances. -NFPA, Fire Protection Guide to Chemical Hazards, 11th edition. -NIOSH, Pocket Guide to Chemical Hazards, revision June 1994. -TSCA (Toxic Substance Contral Act), Chemical Substance Inventory List, 1985. - IATA, Dangerous Goods Regulations, 37th edition (January 1, 1996) -

16 . Other information

LOLIPRO vol. 14, Environmental Health & Safety Series II, Micromedex Inc.

Other special considerations : -ALL INGREDIENTS WITH SUSCEPTIBLE HAZARDS THAT ARE PRESENT IN A CONCENTRATION GREATER THAN 1 % (GREATER THAN 0.1 % FOR CARCINOGENS) HAVE BEEN DISCLOSED IN THIS SAFETY DOCUMENT.

Date of printing : **6/20/2011.**

Date of issue : **6/20/2011.**

Version : **1**

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.