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	HI84533-61 - Formol Number Base Reagent	
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Safety data sheet according to U. SOR/88-66	S.A. Federal Hazcom 2012 and Canadian Regulation
SECTION 1. Identification of the sub	ostance/mixture and of the company/undertaking.
1.1. Product identifier.	
Code. Product name.	HI84533-61 Formol Number Base Reagent
1.2. Relevant identified uses of the substance or	mixture and uses advised against.
Intended use.	Reagents for Measuring Formol Number (Nitrogen) in Wine and Fruit Juice.
1.3. Details of the supplier of the safety data shee	ət.
Name. Full address. District and Country.	Hanna Instruments S.R.L. str. Hanna Nr 1 457260 loc. Nusfalau (Salaj) Romania Tel. (+40) 260607700 Fax. (+40) 260607700
e-mail address of the competent person. responsible for the Safety Data Sheet.	sds@hannainst.com
Product distribution by:	Hanna Intruments, Inc - 584 Park East, Woonsochet, Rhode Island, USA 02895 - Technical Service Contact Information: +1-800-426-6287
1.4. Emergency telephone number.	
For urgent inquiries refer to.	USA Emergency Contact Information: +1-800-424-9300 - CHEMTREC 24 hours/365 days - International Emergency Contact Information: +1-703-527-3887 - CHEMTREC 24hours/365 days

## **SECTION 2. Hazards identification.**

## 2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement. Flammable liquid, category 4 Carcinogenicity, category 1B Germ cell mutagenicity, category 2 Acute toxicity, category 3 Acute toxicity, category 3 Acute toxicity, category 3 Skin corrosion, category 1B Serious eye damage, category 1 Specific target organ toxicity - single exposure, category 3 Skin sensitization, category 1

Hazard pictograms:



Signal words:

Hazard statements: H227 H350

Combustible liquid. May cause cancer. Combustible liquid. May cause cancer. Suspected of causing genetic defects. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. May cause an allergic skin reaction.



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SECTION 2. Hazards identification. ... / >>

		SECTION 2. Hazards identification / >>			
H341	Suspected of cau	sing genetic defects.			
H301	Toxic if swallowed.				
H311	Toxic in contact w	vith skin.			
H331	Toxic if inhaled.				
H314		kin burns and eye damage.			
H335	May cause respire				
H317	May cause an alle	ergic skin reaction.			
Precautionary statement Prevention:	ts:				
P201	Obtain special ins	structions before use.			
P243		ry measures against static discharge.			
P261		lust, fume, gas, mist, vapours, spray.			
P280		ploves, protective clothing, eye protection and face protection.			
Response:					
P303+P361+P353	IF ON SKIN (or h	air): Take off immediately all contaminated clothing. Rinse skin with water / shower.			
P304+P340		nove person to fresh air and keep comfortable for breathing.			
P305+P351+P338	IF IN EYES: Rins Continue rinsing.	e cautiously with water for several minutes. Remove contact lenses, if present and easy to do.			
P308+P313		ncerned: Get medical advice / attention.			
P312		ENTER or doctor, if you feel unwell.			
P370+P378		e powder to extinguish.			
Storage:					
P404	Store in a closed	container.			
Disposal:					
2.2. Other hazards.					
Information not available	2.				
SECTION 2 Comp	ogition/inform	action on ingradianta			
SECTION 3. Comp	osition/inion	nation on ingredients.			
3.1. Substances.					
Contains:					
Contains:					
Identification.	x = Conc. %.	Classification:			
Identification.	x = Conc. %.	Classification:			
Identification.					
Identification.	<b>x = Conc. %.</b> 100	Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350,			
Identification.		Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity,			
Identification.		Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Skin corrosion, category 1B H314,			
Identification.		Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Skin corrosion, category 1B H314, Specific target organ toxicity - single exposure, category 3 H335, Skin sensitization,			
Identification. FORMALDEHYDE CAS. 50-00-0		Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Skin corrosion, category 1B H314,			
Identification.	100	Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Skin corrosion, category 1B H314, Specific target organ toxicity - single exposure, category 3 H335, Skin sensitization,			
Identification. FORMALDEHYDE CAS. 50-00-0 EC. 200-001-8	100	Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Skin corrosion, category 1B H314, Specific target organ toxicity - single exposure, category 3 H335, Skin sensitization,			
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Identification. FORMALDEHYDE CAS. 50-00-0 EC. 200-001-8 INDEX. 605-001-00-5 * There is a batch to bat	100 ch variation.	Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Skin corrosion, category 1B H314, Specific target organ toxicity - single exposure, category 3 H335, Skin sensitization,			
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Identification. FORMALDEHYDE CAS. 50-00-0 EC. 200-001-8 INDEX. 605-001-00-5 * There is a batch to bat	100 ch variation.	Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Skin corrosion, category 1B H314, Specific target organ toxicity - single exposure, category 3 H335, Skin sensitization, category 1 H317			
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Identification. FORMALDEHYDE CAS. 50-00-0 EC. 200-001-8 INDEX. 605-001-00-5 * There is a batch to bat The full wording of haza 3.2. Mixtures.	100 ch variation. rd (H) phrases is giv	Flammable liquid, category 4 H227, Carcinogenicity, category 1B H350, Germ cell mutagenicity, category 2 H341, Acute toxicity, category 3 H301, Acute toxicity, category 3 H311, Acute toxicity, category 3 H331, Skin corrosion, category 1B H314, Specific target organ toxicity - single exposure, category 3 H335, Skin sensitization, category 1 H317			
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## SECTION 4. First aid measures. ... / >>

### 4.2. Most important symptoms and effects, both acute and delayed.

For symptoms and effects caused by the contained substances, see chap. 11.

#### FORMALDEHYDE

FORMALDEHYDE 37% WITH METHANOL 10% - Irritation and corrosion, Allergic reactions, Cough, Shortness of breath, inebriation, Dizziness, Headache, Drowsiness, agitation, spasms, Impairment of vision, narcosis, Coma, Risk of blindness!.

#### 4.3. Indication of any immediate medical attention and special treatment needed.

Information not available.

## SECTION 5. Firefighting measures.

#### 5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

## 5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

#### FORMALDEHYDE

FORMALDEHYDE 37% WITH METHANOL 10% - Mixture with combustible ingredients. Vapours are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.

#### 5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures.

### 6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### 6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

## 6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

## **SECTION 7. Handling and storage.**

## 7.1. Precautions for safe handling.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.



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## SECTION 7. Handling and storage. ... / >>

## 7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

#### 7.3. Specific end use(s).

Information not available.

## SECTION 8. Exposure controls/personal protection.

## 8.1. Control parameters.

Regulatory References:

USA	NIOSH-REL	NIOSH publication No. 2005-149, 3th printing, 2007.
USA	OSHA-PEL	Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000.
USA	CAL/OSHA-PEL	California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs).
	TLV-ACGIH	ACGIH 2016

## FORMALDEHYDE

alue.					
Country	TWA/8h		STEL/15r	min	
	mg/m3	ppm	mg/m3	ppm	
-			0.37 (C)	0.3 (C)	
USA		0.75		2	
USA		0.75		2	
USA		0.016		0.1 (C)	
	- USA USA	Country TWA/8h mg/m3 - USA USA	Country TWA/8h   mg/m3 ppm   - 0.75   USA 0.75   USA 0.75	Country TWA/8h STEL/15r   mg/m3 ppm mg/m3   - 0.37 (C)   USA 0.75   USA 0.75	Country TWA/8h STEL/15min   mg/m3 ppm mg/m3 ppm   - 0.37 (C) 0.3 (C)   USA 0.75 2   USA 0.75 2

## Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

## FORMALDEHYDE

Methods for measurement of the workplace atmosphere have to correspond to the requirements of norm OSHA ID-205.

#### 8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must comply with current regulations. HAND PROTECTION

Protect hands with category III work gloves (OSHA 29 CFR 1910.138).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose class must be chosen according to the limit of use concentration (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84 and OSHA 29 CFR 1910.134.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.



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## **SECTION 9.** Physical and chemical properties.

## 9.1. Information on basic physical and chemical properties.

	Appearance	liqu	iid		
	Colour	•	ourle	ess	
	Odour	pur	ngen	nt	
	Odour threshold.	.0,0	5 - 0	),125 ppm	
	pH.	4			
	Melting point / freezing point.	15		°C.	
	Initial boiling point.	Not	ava	ailable.	
	Boiling range.	93-	96		
	Flash point.	62		°C.	(0 °F)
	Evaporation rate	Not	ava	ailable.	
	Flammability (solid, gas)	Not	ava	ailable.	
	Lower inflammability limit.	Not	ava	ailable.	
	Upper inflammability limit.	Not	ava	ailable.	
	Lower explosive limit.	7		% (V/V).	
	Upper explosive limit.	73		% (V/V).	
	Vapour pressure.	Not	ava	ailable.	
	Vapour density	Not	ava	ailable.	
	Relative density.	1.0	90		
	Solubility	solu	uble	in water	
	Partition coefficient: n-octanol/water	Not	ava	ailable.	
	Auto-ignition temperature.	Not	ava	ailable.	
	Decomposition temperature.	Not	ava	ailable.	
	Viscosity	Not	ava	ailable.	
	Explosive properties	Not	ava	ailable.	
	Oxidising properties	Not	ava	ailable.	
9.2	2. Other information.				
	Molecular weight.	30.	030		

## **SECTION 10. Stability and reactivity.**

### 10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

#### FORMALDEHYDE

FORMALDEHYDE 37% WITH METHANOL 10%: Acqueous solutions are stabilised with methanol but tend to polymerise over time. Storage temperature varies according to concentration. Solutions >25% are also corrosive. Decomposes under the effect of heat.

### 10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

#### FORMALDEHYDE

FORMALDEHYDE 37% WITH METHANOL 10%: Risk of explosion on contact with: nitromethane, nitrogen dioxide (at 180°C/356°F), hydrogen peroxide, phenol, performic acid, nitric acid. It may also polymerise con contact with: strong oxidising agents, alkalis. Can react dangerously with: hydrolchloric acid, magnesium carbonate, sodium hydroxide, perchloric acid and aniline. Forms explosive mixtures with the air.

#### 10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.

FORMALDEHYDE FORMALDEHYDE 37% WITH METHANOL 10%: Avoid exposure to light, sources of heat and naked flames.

#### 10.5. Incompatible materials.

FORMALDEHYDE



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## SECTION 10. Stability and reactivity. ... / >>

FORMALDEHYDE 37% WITH METHANOL 10%: Acids, akalis, ammonia, tannin, strong oxidising agents, phenols and copper, silver and iron salts.

#### 10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

## FORMALDEHYDE

FORMALDEHYDE 37% WITH METHANOL 10%: Carbon oxides.

## **SECTION 11. Toxicological information.**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

### 11.1. Information on toxicological effects.

## FORMALDEHYDE

FORMALDEHYDE 37% WITH METHANOL 10% - Acute oral toxicity, Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach, absorption - Acute inhalation toxicity, Symptoms: mucosal irritations, Cough, Shortness of breath, Inhalation may lead to the formation of oedemas in the respiratory tract., Possible damages:, damage of respiratory tract absorption - Acute dermal toxicity, Symptoms: Blistering, Fissuring absorption - Acute toxicity estimate, Skin irritation, Mixture causes burns - Eye irritation, Mixture causes serious eye damage. Lacrimal irritation due to vapours. Risk of blindness! - Sensitisation, Mixture may cause an allergic skin reaction - Germ cell mutagenicity, CMR effects, Carcinogenicity: Possible carcinogen - Mutagenicity: Evidence of genetic defects. Specific target organ toxicity, single exposure, Target Organs: Eyes, Mixture causes damage to organs - Target Organs: Respiratory system, Mixture may cause respiratory irritation.

## ACUTE TOXICITY.

LC50 (Inhalation - vapours) of the mixture: LC50 (Inhalation - mists / powders) of the mixture: LD50 (Oral) of the mixture: LD50 (Dermal) of the mixture:

FORMALDEHYDE LD50 (Oral). LD50 (Dermal). LC50 (Inhalation).

Carcinogenicity Assessment: 50-00-0 FORMALDEHYDE IARC:1 NTP: Known

SKIN CORROSION / IRRITATION. Corrosive for the skin.

SERIOUS EYE DAMAGE / IRRITATION. Causes serious eye damage.

RESPIRATORY OR SKIN SENSITISATION. Sensitising for the skin.

GERM CELL MUTAGENICITY. Suspected of causing genetic defects.

CARCINOGENICITY. May cause cancer.

REPRODUCTIVE TOXICITY. Does not meet the classification criteria for this hazard class.

STOT - SINGLE EXPOSURE. May cause respiratory irritation.

STOT - REPEATED EXPOSURE. Does not meet the classification criteria for this hazard class.

3,000 mg/l Not classified (no significant component). 100,000 mg/kg 270,000 mg/kg

100 mg/kg Rat 270 mg/kg Rabbit 0.588 mg/l/4h Rat



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US

## SECTION 11. Toxicological information. />>

ASPIRATION HAZARD.

Does not meet the classification criteria for this hazard class.

## **SECTION 12. Ecological information.**

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

#### 12.1. Toxicity.

Information not available.

### 12.2. Persistence and degradability.

FORMALDEHYDE	
Solubility in water.	55000 mg/l
Rapidly biodegradable.	

## 12.3. Bioaccumulative potential.

FORMALDEHYDE	
Partition coefficient: n-octanol/water.	0.35
BCF.	< 1

#### 12.4. Mobility in soil.

FORMALDEHYDE Partition coefficient: soil/water. 1.202

## 12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

#### 12.6. Other adverse effects.

FORMALDEHYDE

FORMALDEHYDE 37% WITH METHANOL 10%: Caustic even in diluted form. Disinfectant effect. Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities. Discharge into the environment must be avoided.

## **SECTION 13. Disposal considerations.**

#### 13.1. Waste treatment methods.

Reuse, when possible. Neat product residues should be considered special non-hazardous waste. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to dangerous goods transport regulations. CONTAMINATED PACKAGING Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## **SECTION 14. Transport information.**

## 14.1. UN number.

ADR / RID, IMDG, IATA: 2209

## 14.2. UN proper shipping name.

ADR / RID:	FORMALDEHYDE SOLUTION
IMDG:	FORMALDEHYDE SOLUTION
IATA:	FORMALDEHYDE SOLUTION



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SECTION 14. Transport information. />>

## 14.3. Transport hazard class(es).

ADR / RID:	Class: 8	Label: 8
IMDG:	Class: 8	Label: 8
IATA:	Class: 8	Label: 8



## 14.4. Packing group.

ADR / RID, IMDG, IATA: III

#### 14.5. Environmental hazards.

ADR / RID: NO IMDG: NO IATA: NO

#### 14.6. Special precautions for user.

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 5 L	Tunnel restriction code: (E)
	Special Provision: -		
IMDG:	EMS: F-A, S-B	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 856
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 852
	Special Instructions:	A803	

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code.

Information not relevant.

## **SECTION 15. Regulatory information.**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.

U.S. Federal Regulations.

 $\frac{\text{TSCA:}}{\text{All components are listed on TSCA Inventory.}}$ 

Clean Air Act Section 112(b): 50-00-0 FORMALDEHYDE

Clean Air Act Section 602 Class I Substances: No component(s) listed.

Clean Air Act Section 602 Class II Substances: No component(s) listed.

Clean Water Act – Priority Pollutants: No component(s) listed.

Clean Water Act – Toxic Pollutants: No component(s) listed.

DEA List I Chemicals (Precursor Chemicals): No component(s) listed.

DEA List II Chemicals (Essential Chemicals):



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## SECTION 15. Regulatory information. ... / >>

SECTION 15. Regu	latory information/>>
No component(s) lis	sted.
EPA List of Lists:	
313 Category Code 50-00-0	FORMALDEHYDE
EPCRA 302 EHS T 50-00-0	PQ: FORMALDEHYDE
EPCRA 304 EHS R 50-00-0	IQ: FORMALDEHYDE
CERCLA RQ: 50-00-0	FORMALDEHYDE
EPCRA 313 TRI: 50-00-0	FORMALDEHYDE
RCRA Code: 50-00-0	FORMALDEHYDE
CAA 112 (r) RMP T 50-00-0	Q: FORMALDEHYDE
State Regulations.	
Massachussetts: 50-00-0	FORMALDEHYDE
Minnesota: 50-00-0	FORMALDEHYDE
New Jersey: 50-00-0	FORMALDEHYDE
New York: 50-00-0	FORMALDEHYDE
Pennsylvania: 50-00-0	FORMALDEHYDE
California: 50-00-0	FORMALDEHYDE
Proposition 65: WARNING! This pro 50-00-0	oduct contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm. FORMALDEHYDE C
International Regulat Substances subject t None.	tions to exportation reporting pursuant to (EC) Reg. 649/2012:
Substances subject t None.	to the Rotterdam Convention:
Substances subject t None.	to the Stockholm Convention:
Candadian WHMIS. Information not ava	īlable.

## **SECTION 16. Other information.**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 4Flammable liquid, category 4Carc. 1BCarcinogenicity, category 1BMuta. 2Germ cell mutagenicity, category 2Acute Tox. 3Acute toxicity, category 3



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## SECTION 16. Other information. />>

Skin Corr. 1B Eye Dam. 1 STOT SE 3 Skin Sens. 1 H227 H350 H341 H301 H311 H311 H314 H318 H335 H317	Skin corrosion, category 1B Serious eye damage, category 1 Specific target organ toxicity - single exposure, category 3 Skin sensitization, category 1 Combustible liquid. May cause cancer. Suspected of causing genetic defects. Toxic if swallowed. Toxic in contact with skin. Toxic in contact with skin. Toxic if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. May cause an allergic skin reaction.
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LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAA 112 ® RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112®)
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: EC Regulation 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REL: Recommended exposure limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TSCA: Toxic Substances Control Act
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

## GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh Registry of Toxic Effects of Chemical Substances
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website



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## SECTION 16. Other information. .../>>

- Hazard Comunication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112® of the Clean Air Act
- Massachussetts 105 CMR Department of public health 670.000: "Right to Know"
- Minensota Chapter 5206 Departemnt Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.