

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** NUSAN 30 E.C.  
**Other means of identification** None.  
**Recommended use** Ag Product - Crop Protection  
**Recommended restrictions** None known.  
**Manufacturer/Importer/Supplier/Distributor information**  
**Manufacturer**  
**Company name** Wilbur-Ellis Company LLC  
**Address** 16300 Christensen Rd. Ste 135  
Tukwila, WA 98188  
United States  
**Telephone** Branded Products Information (800) 500-1698  
**E-mail** SDS@wilburellis.com  
**Emergency phone number** Chemtrec - Domestic (800) 424-9300  
Chemtrec - International +1 703-741-5970

## 2. Hazard(s) identification

**Physical hazards** Flammable liquids Category 4  
**Health hazards** Acute toxicity, oral Category 4  
Acute toxicity, dermal Category 4  
Acute toxicity, inhalation Category 2  
**Environmental hazards** Not classified.  
**OSHA defined hazards** Not classified.  
**Label elements**



**Signal word** Danger  
**Hazard statement** Combustible liquid. Harmful if swallowed. Harmful in contact with skin. Fatal if inhaled.  
**Precautionary statement**  
**Prevention** Keep away from heat, sparks, open flames, and hot surfaces. - No smoking. Do not breathe vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves and protective clothing. Wear protective gloves, eye protection, and face protection. Wear respiratory protection.  
**Response** IF SWALLOWED: Call a poison center or doctor or doctor if you feel unwell. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Specific treatment is urgent (see this label). Rinse mouth. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media as described in Section 5 for extinction.  
**Storage** Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.  
**Disposal** Dispose of contents and container in accordance with government regulations.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** 61% of the mixture consists of component(s) of unknown acute oral toxicity. 61% of the mixture consists of component(s) of unknown acute dermal toxicity. % of the mixture consists of component(s) of unknown acute inhalation toxicity.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
TCMTB 150		21564-17-0	50 - < 60
2-butoxyethanol		111-76-2	20 - < 30
Solvent Naphtha (Petroleum), Heavy Aromatic		64742-94-5	10 - < 20
Other components below reportable levels			10 - < 20

Percentage ranges of composition to protect confidentiality or due to batch variation.

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if you feel unwell.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Combustible liquid.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapors or spray mist. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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**Methods and materials for containment and cleaning up**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

**Environmental precautions****7. Handling and storage****Precautions for safe handling**

Keep away from open flames, hot surfaces and sources of ignition. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Wash contaminated clothing before reuse.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3
Solvent Naphtha (Petroleum), Heavy Aromatic (CAS 64742-94-5)	PEL	50 ppm 400 mg/m3
		100 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
2-butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
Solvent Naphtha (Petroleum), Heavy Aromatic (CAS 64742-94-5)	TWA	200 mg/m3	Non-aerosol.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	TWA	24 mg/m3
		5 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
2-butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

2-butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

2-butoxyethanol (CAS 111-76-2)

Skin designation applies.

**US - Tennessee OELs: Skin designation**

2-butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

Solvent Naphtha (Petroleum), Heavy Aromatic (CAS 64742-94-5)

Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

2-butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

2-butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Chemical respirator with organic vapor cartridge and full facepiece.

**Skin protection****Hand protection**

Wear appropriate chemical resistant gloves.

**Other**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**

Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance**

Brown liquid.

**Physical state**

Liquid.

**Form**

Liquid.

**Color**

Brown.

**Odor**

Not available.

**Odor threshold**

Not available.

**pH**

Not available.

**Melting point/freezing point**

Not available.

**Initial boiling point and boiling range**

Not available.

**Flash point**

145.0 °F (62.8 °C) Pensky-Martens Closed Cup

**Evaporation rate**

Not available.

**Flammability (solid, gas)**

Not available.

**Upper/lower flammability or explosive limits****Flammability limit - lower (%)**

Not available.

**Flammability limit - upper (%)**

Not available.

**Explosive limit - lower (%)**

Not available.

**Explosive limit - upper (%)**

Not available.

**Vapor pressure**

Not available.

**Vapor density**

Not available.

**Relative density**

Not available.

**Solubility(ies)****Solubility (water)**

Not available.

**Partition coefficient (n-octanol/water)**

Not available.

**Auto-ignition temperature**

Not available.

<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	8.68 lb/gal
<b>Flammability class</b>	Combustible IIIA estimated
<b>Specific gravity</b>	1.04

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Fatal if inhaled.
<b>Skin contact</b>	Harmful in contact with skin.  2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Harmful if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

<b>Acute toxicity</b>	Fatal if inhaled. Harmful in contact with skin. Harmful if swallowed.
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Components	Species	Test Results
2-butoxyethanol (CAS 111-76-2)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Guinea pig	7.3 ml/kg, 4 Days
		0.3 ml/kg, 24 Hours
	Rabbit	1060 mg/kg, 24 Hours
		841 mg/kg, 24 Hours
		560 ml/kg, 24 Hours
	Rat	450 ml/kg, 24 Hours
		> 2000 mg/kg, 24 Hours
		<b>Inhalation</b>
<i>Vapor</i>		
LC50	Rabbit	400 ppm, 7 Hours
LC50	Rat	486 ppm, 4 Hours
<b>Oral</b>		
LD100	Rabbit	695 mg/kg
LD50	Dog	> 695 mg/kg
	Guinea pig	1414 mg/kg

Components	Species	Test Results
		1200 mg/kg
	Mouse	2005 mg/kg
		1519 mg/kg
	Rat	530 - 2800 mg/kg
		1746 mg/kg
Solvent Naphtha (Petroleum), Heavy Aromatic (CAS 64742-94-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	-	> 2000 mg/kg
		> 2000 mg/kg, 24 Hours
	Rabbit	> 4000 mg/kg, 24 Hours
	Rat	> 2000 mg/kg, 24 Hours
<b>Inhalation</b>		
LC50	-	> 7.5 mg/l, 6 Hours
<i>Aerosol</i>		
LC50	Rat	> 7.5 mg/l, 6 Hours
		> 5.2 mg/l, 4 Hours
LC50	Rat	> 2.7 mg/m3, 4 Hours
<i>Vapor</i>		
LC50	Rat	> 0.1 mg/l, 8 Hours
<b>Oral</b>		
LD100	Rat	5000 mg/kg
LD50	Rat	5800 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

#### Respiratory or skin sensitization

**Respiratory sensitization** Not available.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

2-butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

#### US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not available.

**Chronic effects** May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents and container in accordance with government regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings, if applicable, even after container is emptied.

## 14. Transport information

<b>DOT</b>	
<b>UN number</b>	NA1993
<b>UN proper shipping name</b>	Combustible Liquid, N.O.S. (Ethylene Glycol Butyl Ether, Solvent Naphtha (Petroleum), Heavy Aromatic)
<b>Transport hazard class(es)</b>	
<b>Class</b>	Combustible Liquid
<b>Subsidiary risk</b>	-
<b>Packing group</b>	PG III
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
Not established.

**DOT**



## 15. Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.  This product is exempted from TSCA because it is solely for FIFRA regulated use.
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**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

2-butoxyethanol (CAS 111-76-2)

Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**

No

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
CERTAIN GLYCOL ETHERS	111-76-2	20 - < 30

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**US state regulations****US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

2-butoxyethanol (CAS 111-76-2)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

Issue date 02-23-2016



**Revision date**

09-26-2017

**Version #**

02

**NFPA ratings**

Health: 4

Flammability: 2

Instability: 0

**NFPA ratings**



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