

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS ID: Cdar 4640 new SDSDF-001 Issue date: 9/3/2024 Revision date: 10/17/2024 Supersedes: 9/5/2024 Version: 2.0

SECTION 1: Identification		
1.1. Identification		
Product form Trade name	: Mixture : K100 D+	
1.2. Recommended use and restrictions on use		
Recommended use Restrictions on use	<ul><li>Fuel additives</li><li>All other uses not recommended above</li></ul>	
1.3. Supplier		
Husky Corporation 2325 Husky Way Pacific, Missouri 63069 United States of America T 636-825-7200 <u>SDS@Husky.com</u>		
1.4. Emergency telephone number		
Emergency number	: For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA) CCN 828910	
SECTION 2: Hazard(s) identification		
2.1. Classification of the substance or mixtu	ıre	

## **GHS US classification**

Flammable liquids Category 3 Acute toxicity (oral) Category 4 Acute toxicity (dermal) Category 3 Acute toxicity (inhalation:dust,mist) Category 3 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 1 Specific target organ toxicity (single exposure) Category 1 Flammable liquid and vapor Harmful if swallowed Toxic in contact with skin Toxic if inhaled Causes skin irritation Causes serious eye damage Causes damage to organs (visual organ, central nervous system) May cause drowsiness or dizziness May cause respiratory irritation

Specific target organ toxicity – Single exposure, Category 3, Narcosis Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

## GHS US labeling

Hazard pictograms (GHS US)

Signal word (GHS US) Hazard statements (GHS US) DangerFlammable liquid and vapor Harmful if swallowed

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	Toxic in contact with skin or if inhaled Causes skin irritation Causes serious eye damage May cause respiratory irritation May cause drowsiness or dizziness
Precautionary statements (GHS US)	<ul> <li>May cause drowsiness or dizziness</li> <li>Causes damage to organs (visual organ, central nervous system)</li> <li>Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.</li> <li>Keep container tightly closed.</li> <li>Ground/Bond container and receiving equipment.</li> <li>Use explosion-proof electrical/ventilating/lighting equipment.</li> <li>Do not breathe vapors, spray, mist, gas.</li> <li>Wash hands, forearms and face thoroughly after handling.</li> <li>Do not eat, drink or smoke when using this product.</li> <li>Use only outdoors or in a well-ventilated area.</li> <li>Wear protective gloves/protective clothing/ep protection/face protection.</li> <li>IF exposed or concerned: Immediately call a POISON CENTER or doctor</li> <li>If swallowed: Call a POISON CENTER, a doctor if you feel unwell.</li> <li>Rinse mouth.</li> <li>If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</li> <li>If skin irritation occurs: Get medical advice/attention.</li> <li>Wash contaminated clothing before reuse.</li> <li>If inhaled: Remove person to fresh air and keep comfortable for breathing.</li> <li>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), Dry sand, Extinguishing powder to extinguish.</li> <li>Store in a well-ventilated place. Keep container tightly closed.</li> <li>Keep cool.</li> </ul>
	Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## 2.3. Other hazards which do not result in classification

No additional information available.

## 2.4. Unknown acute toxicity (GHS US)

No additional information available.

## **SECTION 3: Composition/Information on ingredients**

## 3.1. Substances

## Not applicable

## 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Butan-1-ol	CAS-No.: 71-36-3	20 – 40	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS US classification
2-Butoxyethanol	CAS-No.: 111-76-2	20 – 40	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Primary alkyl alcohol*	CAS-No.: Trade Secret	10 – 30	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
Cyclic Secondary Amine*	CAS-No.: Trade Secret	< 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret Full text of hazard classes and H-statements : see section 16

#### **SECTION 4: First-aid measures** 4.1. Description of first aid measures First-aid measures general : If exposed: Call a physician immediately. First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-tomouth. First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious : Lay in a stable manner on victim's side. Induce artificial respiration with mask fitted with one-way valve or other suitable device; not mouth-to-mouth. Call a physician immediately. First-aid measures after skin contact Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. First-aid measures after eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately transport the casualty to an eye doctor / hospital. Continue rinsing during the transport with isotonic saline solution, alternatively with water. First-aid measures after ingestion ÷ Rinse mouth. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a POISON CENTER or doctor/physician. 4.2. Most important symptoms and effects (acute and delayed) Symptoms/effects after inhalation Toxic if inhaled. Symptoms/effects after skin contact Toxic in contact with skin. Irritation (itching, redness, blistering). ÷ Symptoms/effects after eye contact : Serious damage to eyes. Symptoms/effects after ingestion Harmful if swallowed. Most Important Symptoms/Effects Irritation to eyes, skin and respiratory tract. Depression of the central nervous system,

## 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

headaches, dizziness, drowsiness, loss of coordination.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## **SECTION 5: Fire-fighting measures**

5.1. Suitable (and unsuitable) extinguishing	g media
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>Dry chemical, CO2, dry sand, or alcohol-resistant foam.</li><li>Do not use a heavy water stream.</li></ul>
5.2. Specific hazards arising from the chem	nical
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	<ul> <li>Flammable liquid and vapor.</li> <li>Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.</li> <li>Toxic fumes may be released. Carbon monoxide. Carbon dioxide.</li> </ul>
5.3. Special protective equipment and prec	autions for fire-fighters
Firefighting instructions	: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. No action shall be taken without appropriate training or involving any personal risk. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Use extinguishing media appropriate for surrounding fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equip	ment and emergency procedures		
General measures	<ul> <li>Avoid all personal contact including breathing in the vapors, spray, mist, gas. Do not take actions involving personal risks. Absorb spillage to prevent material-damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.</li> </ul>		
6.1.1. For non-emergency personnel			
Protective equipment	: Wear recommended personal protective equipment.		
Emergency procedures	: Evacuate the danger area. If outdoors, move to an area upwind of the danger area. If possible without taking personal risks, remove ignition sources, ventilate area. No open flames, no sparks, and no smoking. Prevent other non-emergency personnel from entering the danger area. Do not breathe vapors, spray, mist, gas. Avoid contact with skin, eyes and clothing.		
6.1.2. For emergency responders			
Protective equipment	: Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
Emergency procedures	: Evacuate personnel to a safe area. Ventilate spillage area. Stop leak if safe to do so.		
6.2. Environmental precautions			

Do not let the product reach soil, drains, sewers, or surface and ground water.

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

For containment

: Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations. Notify authorities if product enters sewers or public waters.	
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## 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage	•
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	<ul> <li>Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing vapors, spray, mist, gas. Do not get in eyes, on skin, or on clothing. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools.</li> <li>Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.</li> </ul>
7.2. Conditions for safe storage, inclu	ung any incompatibilities
Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	<ul> <li>Store in a cool, dry place. Protect from sunlight. Store in a well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Keep container closed when not in use. Stored containers should be periodically checked for general condition and leakage.</li> </ul>
Incompatible materials	: Halogens. Strong acids, strong bases and strong oxidants. Amines. Ammonia. Acid chlorides. Metals.

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

K100 D+		
No additional information available.		
Cyclic Secondary Amine		
No additional information available.		
Primary alkyl alcohol		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	200 ppm	
ACGIH OEL STEL	250 ppm	
Remark (ACGIH)	TLV® Basis: Headache; eye dam; dizziness; nausea. Notations: Skin; BEI	
Regulatory reference ACGIH 2024		
USA - ACGIH - Biological Exposure Indices		
BEI	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: End of shift - Notations: B, Ns	
Regulatory reference	ACGIH 2024	

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Primary alkyl alcohol	
USA - OSHA - Occupational Exposure Lim	its
OSHA PEL TWA	260 mg/m <sup>3</sup>
	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Butan-1-ol (71-36-3)	
USA - ACGIH - Occupational Exposure Lir	nits
Local name	n-Butanol
ACGIH OEL TWA	20 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Lim	its
Local name	n-Butyl alcohol
OSHA PEL TWA	300 mg/m <sup>3</sup>
	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
2-Butoxyethanol (111-76-2)	
USA - ACGIH - Occupational Exposure Lir	nits
Local name	2-Butoxyethanol (EGBE)
ACGIH OEL TWA	20 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Lim	its
Local name	2-Butoxyethanol
OSHA PEL TWA	240 mg/m <sup>3</sup>
	50 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
8.2. Appropriate engineering controls	
Appropriate engineering controls	: Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safet showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Take measures to reduce or limit air emissions and releases to soil and the aquatic environmen

## 8.3. Individual protection measures/Personal protective equipment

## Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hand protection:					
, , , ,	ves as described by OSHA's ber, Nitrile rubber, Polyvinyl	hand protection regulations in 2 chloride (PVC)	9 CFR 1910.138	3. The following	materials are suitable for
Туре	Material	Permeation Thickness (mm)		n)	Penetration
Eye protection:					
Туре	Field of application Characteristics		S		
Safety glasses				With side shields	
Skin and body protection:					
Body protection should be chosen depending on activity and possible exposure. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact					
Respiratory protection:					
Use NIOSH approved respirator if ventilation is inadequate. SCBA for emergency responders. Must be used in accordance with an OSHA complaint respiratory protection program.					
<b>D</b>					

## Personal protective equipment symbol(s):



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

## 9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Appearance	: Liquid.
Color	: Yellow Clear Transparent
Odor	: Sweet Ether-like Mild odor
Odor threshold	: No data available
рН	: 8.5
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 64 °C / 147.2 °F
Flash point	: 25.5 °C / 78 °F
Relative evaporation rate (butyl acetate=1)	: 0.41
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 4 mm Hg
Relative vapor density at 20°C	: No data available
Relative density	: 0.85 (20 °C / 68 °F)
Solubility	: Water: 100 %.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Lower explosion limit: 3.1 vol % (50 °C / 122 °F)
	Upper explosion limit: > 16.1 vol % (50 °C / 122 °F)
Explosive properties	: No data available
Oxidizing properties	: No data available

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## 9.2. Other information

No additional information available.

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Flammable liquid and vapor.

#### 10.2. Chemical stability

Stable under normal conditions of use.

#### 10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

## 10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Incompatible materials.

### 10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agents. Acid chlorides. Amines. Ammonia. Metals. Halogens.

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon monoxide. Carbon dioxide.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral):Acute toxicity (dermal):Acute toxicity (inhalation):	Harmful if swallowed. Toxic in contact with skin. Inhalation:dust,mist: Toxic if inhaled.
K100 D+	
ATE US (oral)	334.872 mg/kg body weight
ATE US (dermal)	793.884 mg/kg body weight
ATE US (dust, mist)	0.519 mg/l/4h
Cyclic Secondary Amine	
LD50 oral rat	1900 mg/kg
LD50 oral	1050 mg/kg
LD50 dermal rabbit	≈ 500 mg/kg body weight
LD50 dermal	310 mg/kg
LC50 Inhalation - Rat (Vapours)	3.01 mg/l/4h
Primary alkyl alcohol	
LD50 oral rat	1187 – 2769 mg/kg body weight
LD50 dermal rabbit	17100 mg/kg body weight

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Primary alkyl alcohol			
LC50 Inhalation - Rat	> 20 mg/l/4h		
Butan-1-ol			
LD50 oral rat	2290 mg/kg		
LD50 dermal rabbit	3430 mg/kg		
LC50 Inhalation - Rat (Vapours)	> 17.76 mg/l/4h		
2-Butoxyethanol			
LD50 oral rat	1414 mg/kg body weight		
LD50 dermal rat	> 2000 mg/kg body weight		
LC50 Inhalation - Rat [ppm]	550 ppm/4h		
Skin corrosion/irritation	: Causes skin irritation. pH: 8.5		
Cyclic Secondary Amine			
рН	11		
Skin corrosion/irritation, rabbit	Corrosive		
2-Butoxyethanol			
Skin corrosion/irritation, rabbit	Mildly irritating		
Serious eye damage/irritation	: Causes serious eye damage. pH: 8.5		
Cyclic Secondary Amine			
рН	11		
Butan-1-ol			
Serious eye damage/irritation, rabbit	Corrosive		
2-Butoxyethanol			
Serious eye damage/irritation, rabbit	Moderately irritating		
Respiratory or skin sensitization	: Not classified		
2-Butoxyethanol			
Guinea pig maximization test	Not sensitive		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Cyclic Secondary Amine			
IARC group	3 - Not classifiable		
2-Butoxyethanol			
IARC group	3 - Not classifiable		
Reproductive toxicity	: Not classified		
Cyclic Secondary Amine			
NOAEL (animal/male, F0/P)	60 mg/kg body weight		

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Cyclic Secondary Amine	
NOAEL (animal/female, F0/P)	600 mg/kg body weight
STOT-single exposure	: Causes damage to organs (visual organ, central nervous system). May cause drowsiness or dizziness. May cause respiratory irritation.
Primary alkyl alcohol	
STOT-single exposure	Causes damage to organs (visual organ, central nervous system).
Butan-1-ol	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.
STOT-repeated exposure	: Not classified
2-Butoxyethanol	
NOAEL (dermal,rat/rabbit,90 days) > 150 mg/kg body weight	
Aspiration hazard Viscosity, kinematic	: Not classified : No data available
Cyclic Secondary Amine	
Viscosity, kinematic	2.228 mm <sup>2</sup> /s
Butan-1-ol	
Viscosity, kinematic	3.641 mm <sup>2</sup> /s
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion Most Important Symptoms/Effects	<ul> <li>Toxic if inhaled.</li> <li>Toxic in contact with skin. Irritation (itching, redness, blistering).</li> <li>Serious damage to eyes.</li> <li>Harmful if swallowed.</li> <li>Irritation to eyes, skin and respiratory tract. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.</li> </ul>

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Cyclic Secondary Amine	
LC50 - Fish [1]	179 mg/l
EC50 - Crustacea [1]	45 mg/l
LC50 - Fish [2]	180 mg/l
EC50 72h - Algae [1]	28 – 80 mg/l
NOEC (chronic)	5 mg/l
NOEC chronic fish	> 1 mg/l
NOEC chronic crustacea	5 mg/l
NOEC chronic algae	30.9 mg/l
Primary alkyl alcohol	
LC50 - Fish [1]	15400 mg/l

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Primary alkyl alcohol			
EC50 96h - Algae [1]	≈ 22000 mg/l		
NOEC (chronic)	208 mg/l		
NOEC chronic fish	446.7 mg/l		
Butan-1-ol			
LC50 - Fish [1]	1376 mg/l		
EC50 - Crustacea [1]	1328 mg/l		
EC50 96h - Algae [1]	225 mg/l		
ErC50 algae	225 mg/l		
NOEC (chronic)	4.1 mg/l		
NOEC chronic crustacea	4.1 mg/l		
2-Butoxyethanol			
LC50 - Fish [1]	1474 mg/l		
EC50 - Crustacea [1]	≈ 1800 mg/l		
NOEC (chronic)	100 mg/l		
NOEC chronic fish	≥ 100 mg/l		
12.2. Persistence and degradability			
Cyclic Secondary Amine			
Persistence and degradability	Readily biodegradable. 93 % biodegradation 25 d.		
Primary alkyl alcohol			
Persistence and degradability	Readily biodegradable.		
12.3. Bioaccumulative potential			
Cyclic Secondary Amine			
BCF - Fish [1]	< 2.8		
BCF - Other aquatic organisms [1]	٤		
Partition coefficient n-octanol/water (Log Pow)	-0.84 (20 °C / 68 °F); pH 10.3		
Bioaccumulative potential	Bioaccumulation unlikely.		
12.4. Mobility in soil			

No additional information available.

## 12.5. Other adverse effects

No additional information available.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions. U.S RCRA (Resource Conservation Recovery Act) - D Waste- Characteristic Waste Codes. D001: IGNITABLE WASTE.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.
Ecological waste information	: Avoid release to the environment.

## **SECTION 14: Transport information**

DOT	IMDG	ΙΑΤΑ
14.1. UN number		
1992	1992	1992
14.2. Proper Shipping Name		
Flammable liquids, toxic, n.o.s. (1-butyl alcohol, primary alkyl alcohol)	FLAMMABLE LIQUID, TOXIC, N.O.S. (1-butyl alcohol, primary alkyl alcohol)	Flammable liquid, toxic, n.o.s. (1-butyl alcohol primary alkyl alcohol)
14.3. Transport hazard class(es)		
3 (6.1)	3 (6.1)	3 (6.1)
rammale Light 3		
14.4. Packing group		
Ш	III	Ш
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No

## 14.6. Special precautions for user

DOT	
UN-No.(DOT)	: UN1992
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49	: 60 L
CFR 173.27)	
DOT Quantity Limitations Cargo aircraft only (49	: 220 L
CFR 175.75)	
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## IMDG

Special provision (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Flammable toxic liquid which is not specified by name in this class or, on account of its characteristics, in some other class. Toxic if swallowed, by skin contact or by inhalation.

ΙΑΤΑ		
PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y343
PCA limited quantity max net quantity (IATA)	:	2L
PCA packing instructions (IATA)	:	355
PCA max net quantity (IATA)	:	60L
CAO packing instructions (IATA)	:	366
CAO max net quantity (IATA)	:	220L
ERG code (IATA)	:	3P

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Se and 40 CFR Part 372.	ection 313 or 1 itie III of the Superfund An	nendments and Reauthorization Act (SARA) of 1986	
Methyl alcohol	CAS-No 67-56-1	10 - 30%	

Methyl alcohol	CAS-No. 67-56-1	10 – 30%
Butan-1-ol	CAS-No. 71-36-3	20 – 40%

# Primary alkyl alcohol Listed on EPA Hazardous Air Pollutant (HAPS) CERCLA RQ 5000 lb

Butan-1-ol (71-36-3)	
CERCLA RQ	5000 lb

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 15.2. International regulations

## CANADA

#### **Cyclic Secondary Amine**

Listed on the Canadian DSL (Domestic Substances List)

#### Primary alkyl alcohol

Listed on the Canadian DSL (Domestic Substances List)

## Butan-1-ol (71-36-3)

Listed on the Canadian DSL (Domestic Substances List)

2-Butoxyethanol (111-76-2)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available.

#### National regulations

## **Cyclic Secondary Amine**

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### Primary alkyl alcohol

Listed on INSQ (Mexican National Inventory of Chemical Substances)

### Butan-1-ol (71-36-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

## 2-Butoxyethanol (111-76-2)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### 15.3. US State regulations

MARNING: This product can expose you to Primary alkyl alcohol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

## **SECTION 16: Other information**

#### Issue date: 9/3/2024

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date : 10/17/2024

Full text of hazard classes and H-statements	
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of hazard classes and H-statements	
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H370	Causes damage to organs

Abbreviations and acronyms		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Abbreviations and acronyms	
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.