

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 29/11/2017 Revision date: :

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Product form : Mixture Product name : N-Nitrosodi-n-propylamine Mix Product code AL0-130207 Product group : Trade product Relevant identified uses of the substance or mixture and uses advised against 1.2. 1.2.1. Relevant identified uses Main use category : Laboratory Use Industrial/Professional use spec Industrial For professional use only 1.2.2. Uses advised against No additional information available 1.3. Details of the supplier of the safety data sheet Phenova 6390 Joyce Dr. Suite 100 80403 Golden, CO - United States T 1-866-942-2978 - F 1-866-283-0269 info@phenova.com - www.phenova.com 1.4. Emergency telephone number Emergency number ChemTel Assistance (US/Canada) 1-800-255-3924 ChemTel Assistance (International) +1 813-248-0585 SECTION 2: Hazards identification Classification of the substance or mixture 2.1. Classification according to Regulation (EC) No. 1272/2008 [CLP] H350 Carc 1B Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Carc.Cat.2: R45 Full text of R-phrases: see section 16 Adverse physicochemical, human health and environmental effects No additional information available Label elements 2.2. Labeling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS08 Signal word (CLP) : Danger Hazardous ingredients : N-Nirosodi-n-propylamine Hazard statements (CLP) : H350 - May cause cancer Precautionary statements (CLP) P280 - Wear protective gloves/protective clothing/eye protection/face protection P308+P313 - IF exposed or concerned: Get medical advice/attention P403+P235 - Store in a well-ventilated place. Keep cool P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation No labeling applicable 29/11/2017 EN (English US) 1/7

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2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Methylene Chloride (Component)	(CAS No) 75-09-2 (EC-No.) 200-838-9 (EC index no) 602-004-00-3	99.8	Carc. 2, H351	
N-Nirosodi-n-propylamine	(CAS No) 621-64-7 (EC-No.) 210-698-0 (EC index no) 612-098-00-8	0.2	Acute Tox. 4 (Oral), H302 Carc. 1B, H350 Aquatic Chronic 2, H411	
Name	Product identifier	Specific of	Specific concentration limits	
N-Nirosodi-n-propylamine	(CAS No) 621-64-7 (EC-No.) 210-698-0 (EC index no) 612-098-00-8	(C >= 0.00	(C >= 0.001) Carc. 1B, H350	

SECTION 4: First aid measures

: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
: Allow victim to breathe fresh air. Allow the victim to rest.
: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
ts, both acute and delayed
attention and special treatment needed
: Use extinguishing media appropriate for surrounding fire.
: Do not use a heavy water stream.
ostance or mixture
: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
: Do not enter fire area without proper protective equipment, including respiratory protection.
sures
upment and emergency procedures
: Evacuate unnecessary personnel.
: Equip cleanup crew with proper protection.
: Ventilate area.
authorities if liquid enters sewers or public waters.
nt and cleaning up
: Take up in absorbent material. Collect spillage.

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6.4. Reference to other sections		
See Heading 8. Exposure controls and personal protection.		
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.	
Hygiene measures	: Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	: Keep container closed when not in use. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.	
Incompatible materials	: Direct sunlight.	
7.3. Specific end use(s)		

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methylene Chloride (75-09-2)		
Belgium	Limit value (mg/m³)	177 mg/m ³ (Chlorure de méthylène; Belgium; Time- weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	50 ppm (Chlorure de méthylène; Belgium; Time- weighted average exposure limit 8 h)
France	VLE (mg/m ³)	356 mg/m³ (Dichlorométhane; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VLE (ppm)	100 ppm (Dichlorométhane; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VME (mg/m³)	178 mg/m ³ (Dichlorométhane; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
France	VME (ppm)	50 ppm (Dichlorométhane; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50 ppm (Dichloromethane (Methylene chloride); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
United Kingdom	WEL TWA (mg/m³)	350 mg/m ³ Dichloromethane; United Kingdom; Time- weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL TWA (ppm)	100 ppm Dichloromethane; United Kingdom; Time- weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m³)	1060 mg/m ³ Dichloromethane; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (ppm)	300 ppm Dichloromethane; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)

8.2. Exposure controls

Appropriate engineering controls

Personal protective equipment

: Either local exhaust or general room ventilation is usually required.

: Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



: Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.
: Chemical goggles or safety glasses. Safety glasses.
: Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
: Wear appropriate mask.
: Do not eat, drink or smoke during use.

N-Nitrosodi-n-propylamine Mix Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment R

according to Regulation (EC) No. 1907/2006 (REACH) with	n its amendment Regulation (EU) 2015/830		
SECTION 9: Physical and chemical p	SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and ch	emical properties		
Physical state	: Liquid		
Color	: Colorless.		
Odor	: characteristic.		
рН	: No data available		
Melting point	: No data available		
Freezing point	: No data available		
Boiling point	: No data available		
Flash point	: No data available		
Auto-ignition temperature	: No data available		
Decomposition temperature	: No data available		
Flammability (solid, gas)	: Non flammable.		
Relative density	: No data available		
Solubility	: No data available		
Explosive properties	: No data available		
Oxidizing properties	: No data available		
Explosion limits	: No data available		
9.2. Other information			
No additional information available			
SECTION 10: Stability and reactivity			
10.1. Reactivity			
No additional information available			
10.2. Chemical stability			
Not established.			
10.3. Possibility of hazardous reactions			
Not established.			
10.4. Conditions to avoid			
Direct sunlight. Extremely high or low temperature	IS.		
10.5. Incompatible materials			
No additional information available			
10.6. Hazardous decomposition products			
No additional information available			
SECTION 11: Toxicological information	on		
11.1. Information on toxicological effects			
Acute toxicity	: Not classified		
Methylene Chloride (75-09-2)			
LD50 oral rat	> 2000 mg/kg (Rat; Literature study)		
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature study)		
N-Nirosodi-n-propylamine (621-64-7)			
LD50 oral rat	480 mg/kg (Rat)		
ATE CLP (oral)	480 mg/kg body weight		
Skin corrosion/irritation	: Not classified		
	Based on available data, the classification criteria are not met		
Serious eye damage/irritation	: Not classified		
	Based on available data, the classification criteria are not met		
Respiratory or skin sensitization	: Not classified		
	Based on available data, the classification criteria are not met		
Germ cell mutagenicity	: Not classified Reced on available data, the classification criteria are not mot		
Carcinogenicity	Based on available data, the classification criteria are not met		
Carcinogenicity	: May cause cancer. May cause cancer		
Poproductive toxicity	-		
Reproductive toxicity	: Not classified		

Based on available data, the classification criteria are not met

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Specific target organ toxicity – single exposure	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity – repeated exposure	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECT	ION 12: Ecological information
12.1.	Toxicity

Methylene Chloride (75-09-2)	
LC50 fish 1	193 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	168.2 mg/l (EC50; 48 h)

12.2. Persistence and degradability			
N-Nitrosodi-n-propylamine Mix			
Persistence and degradability	Not established.		
Methylene Chloride (75-09-2)			
Persistence and degradability	Not readily biodegradable in water. Biodegradable in the soil.		
12.3. Bioaccumulative potential			
N-Nitrosodi-n-propylamine Mix			
Bioaccumulative potential	Not established.		
Methylene Chloride (75-09-2)			
BCF fish 1	2 - 40 (BCF)		
Log Pow	1.25 (Experimental value)		
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).		
N-Nirosodi-n-propylamine (621-64-7)	N-Nirosodi-n-propylamine (621-64-7)		
Log Pow	1.31 - 1.36		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		
12.4. Mobility in soil			
Mathedaya Oblasida (75.00.0)			

Methylene Chloride (75-09-2)		
Surface tension	0.028 N/m (20 °C)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.	
12.5. Results of PBT and vPvB assessment		

No additional information available

12.6.	Other adverse effects	

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations 13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information			
In accordance with ADR / RID / IMDG / IATA / ADN			
14.1. UN number			
UN-No. (ADR)	: 2810		
UN-No. (IATA)	: 2810		
UN-No. (IMDG)	: 2810		
UN-No. (ADN)	: 2810		
14.2. UN proper shipping name			
Proper Shipping Name (ADR)	: TOXIC LIQUID, ORGANIC, N.O.S.		
Proper Shipping Name (IATA)	: Toxic liquid, organic, n.o.s.		
Proper Shipping Name (IMDG)	: TOXIC LIQUID, ORGANIC, N.O.S.		
Proper Shipping Name (ADN)	: TOXIC LIQUID, ORGANIC, N.O.S.		

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Transport document description (ADR)	: UN 2810 TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III, (E)
14.3. Packing group	
Class (ADR)	: 6.1
Classification code (ADR)	: T1
Class (IATA)	: 6.1
Class (IMDG)	: 6.1
Class (ADN)	: 6.1
Classification code (ADN)	: T1
Hazard labels (ADR)	: 6.1
	6
Division (IATA)	: 6.1
Hazard labels (IATA)	: 6.1
	6
Hazard labels (IMDG)	: 6.1
	. U.1
	6
Hazard labels (ADN)	: 6.1
14.4. Packing group	6
Packing group (ADR)	: III
Packing group (IATA)	
Packing group (IMDG)	: 111
Packing group (ADN)	: 111
14.5. Environmental hazards	· · · · · · · · · · · · · · · · · · ·
Other information	: No supplementary information available.
14.6. Special precautions for user	
14.6.1. Overland transport	
Le	
	: 60
Hazard identification number (Kemler No.) Classification code (ADR)	: T1
Classification code (ADR)	
Classification code (ADR) Orange plates	: T1 : 60
Classification code (ADR) Orange plates Special provision (ADR)	<pre>: T1 : 60 2810</pre>
Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR)	 T1 60 2810 274, 614
	 T1 60 2810 274, 614 2
Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR)	 T1 60 2810 274, 614 2 E
Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR)	 T1 60 2810 274, 614 2 E 51
Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC	$ \begin{array}{c} & 11 \\ \hline & 60 \\ \hline & 2810 \\ \hline \\ & 274, 614 \\ \hline \\ & 2 \\ \hline \\ & E \\ & 51 \\ \hline \\ & E1 \end{array} $
Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP	$ \begin{array}{c} & 11 \\ \hline & 60 \\ \hline & 2810 \\ \hline \\ & 274, 614 \\ \hline \\ & 2 \\ \hline \\ & 5 \\ \hline \\ & 5 \\ \hline \\ & 51 \\ \hline \\ & 11 \\ \hline \\ & 2x \end{array} $
Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea	$ \begin{array}{c} & 11 \\ \hline & 60 \\ \hline & 2810 \\ \hline \\ & 274, 614 \\ \hline \\ & 2 \\ \hline \\ & E \\ & 5l \\ \hline \\ & 5l \\ \hline \\ & E1 \\ \hline \\ & 2X \\ \hline \\ & B \end{array} $
Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea Special provision (IMDG)	 11 60 2810 274, 614 2 E 51 51 E1 2X B 1 223, 274
Classification code (ADR) Orange plates Special provision (ADR) Transport category (ADR) Tunnel restriction code (ADR) Limited quantities (ADR) Excepted quantities (ADR) EAC APP 14.6.2. Transport by sea	$ \begin{array}{c} & 11 \\ \hline & 60 \\ \hline & 2810 \\ \hline \\ & 274, 614 \\ \hline \\ & 2 \\ \hline \\ & E \\ & 5l \\ \hline \\ & 5l \\ \hline \\ & E1 \\ \hline \\ & 2X \\ \hline \\ & B \end{array} $

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	In its amendment Regulation (EU) 2015/650
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Toxic if swallowed, by skin contact or by inhalation.
14.6.3. Air transport	
CAO packing instructions (IATA)	: 663
CAO max net quantity (IATA)	: 220L
PCA packing instructions (IATA)	: 655
PCA Limited quantities (IATA)	: Y642
PCA limited quantity max net quantity (IATA)	: 2L
PCA max net quantity (IATA)	: 60L
PCA Excepted quantities (IATA)	: E1
Special provision (IATA)	: A3, A4, A137
ERG code (IATA)	: 6L
14.6.4. Inland waterway transport	
Special provision (ADN)	: 274, 614, 802
Limited quantities (ADN)	: 5L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP, TOX, A
Ventilation (ADN)	: VE02
Number of blue cones/lights (ADN)	: 0
Carriage prohibited (ADN)	: No

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no REACH candidate substance Contains no REACH Annex XIV substances.

15.1.2. National regulations

Water hazard class (WGK)

Germany

: 3 - strongly hazardous to water

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Other information : None.

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