



SAFETY DATA SHEET
According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

1. IDENTIFICATION

Product identifier

Product name SYNOLAN 1000 ISO 46

Other means of identification

Product Code(s) 083425

Number RQ6
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Lubricant.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address TOTAL Specialties USA Inc
1201 Louisiana Street, Suite 1800
Houston, TX 77002
Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

E-mail Address USRMLIN-info@total.com

Emergency telephone number

Company Phone Number +1 (908) 862-9300
Emergency telephone CHEMTREC: +1 800 424 9300 (24h)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Unknown Acute Toxicity

No information available

Hazards not otherwise classified (HNOC)

None known

Other information

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical Name	CAS-No	Weight %
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich	68515-49-1	10-30

** The exact percentage (concentration) of composition has been withheld as a trade secret****

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water and seek medical advice.
Skin contact	Remove contaminated clothing and shoes. Wash off with soap and water. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before reuse.
Inhalation	If symptoms persist, call a physician. Move to fresh air. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract. If breathing is difficult, give oxygen.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. If swallowed, do not induce vomiting - seek medical advice. Drink 1 or 2 glasses of water.

Most important symptoms/effects, acute and delayed

Skin contact Not classified. Avoid contact with skin. May cause slight irritation.

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Eye contact	Not classified. Avoid contact with eyes. May cause slight irritation.
Inhalation	Not classified. Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide (CO₂). ABC powder. Foam. Water spray or fog.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special Hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery.

Other information See Section 12 for additional information.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Methods for cleaning up

Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use mechanical means such as pumps, skimmers and absorbent materials.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

Prevention of fire and explosion

Take precautionary measures against static discharges: Ground/bond containers, tanks and transfer/receiving equipment.

Hygiene measures

Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. When using, do not eat, drink or smoke. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture. Keep in a bunded area. Keep in properly labeled containers.

Materials to Avoid

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined).

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Eye/Face Protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing.

Hand Protection

Protective gloves. Impervious gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection

None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Wash hands before breaks and at the end of workday. Avoid breathing vapors, mist or gas. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. When using, do not eat, drink or smoke. Use personal protective equipment as required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Appearance	limpid
Color	clear
Physical State @20°C	liquid
Odor	Mild Petroleum distillates
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Melting point/range		No information available	
Boiling point/boiling range	> 315 °C > 600 °F		
Flash point	277 °C 530 °F		ASTM D 92 ASTM D 92.
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper	-	No information available	
Lower	-	No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Relative density	< 0.9	@ 15 °C	ASTM D 1298
Density	< 900 kg/m ³	@ 15 °C	ASTM D 1298
Water solubility		Not applicable	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		Not applicable	
Decomposition temperature		No information available	
Viscosity, kinematic	43.2 mm ² /s	@ 40 °C	ASTM D 445
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
Other information			
Specific Gravity	< 0.9	@ 15 °C	ASTM D 1298
Freezing Point		No information available	
Pour point	- 57 °C		ASTM D 97

10. STABILITY AND REACTIVITY

<u>Reactivity</u>	No information available.
<u>Chemical stability</u>	Stable under recommended storage conditions.
<u>Possibility of hazardous reactions</u>	None under normal processing.
<u>Conditions to Avoid</u>	Heat, flames and sparks. Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.
<u>Incompatible Materials</u>	Strong oxidizing agents.
<u>Hazardous Decomposition Products</u>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Information on likely routes of exposure

Principle Routes of Exposure Inhalation, Ingestion, Eye contact, Skin contact.

Numerical measures of toxicity Product Information

ATEmix (oral)	5916 mg/kg
ATEmix (dermal)	5847 mg/kg
ATEmix (inhalation-dust/mist)	1413 mg/l
ATEmix (inhalation-vapor)	79279 mg/l

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich 68515-49-1	LD50 > 60000 mg/kg (Rat)	LD50 > 3160 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Skin contact Not classified. Avoid contact with skin. May cause slight irritation.

Eye contact Not classified. Avoid contact with eyes. May cause slight irritation.

Inhalation Not classified. Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No sensitization responses were observed.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Mutagenicity Contains no ingredient listed as a mutagen.

Reproductive toxicity This product does not present any known or suspected reproductive hazards.

STOT-single exposure None under normal use conditions.

STOT - repeated exposure None under normal use conditions.

Aspiration Hazard Not applicable.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Acute aquatic toxicity - Product Information

No experimental data available

Acute aquatic toxicity - Component Information

No information available

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

No information available

Effects on terrestrial organisms No experimental data available .**Persistence and degradability****General Information** No information available.**Bioaccumulative potential****Product Information** No information available.**logPow** No information available**Component Information**

Chemical Name	log Pow
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich 68515-49-1	8.8

Mobility**Soil** No information available**Water** The product is insoluble and floats on water**Other adverse effects****General Information** No information available**13. DISPOSAL CONSIDERATIONS****Waste treatment****Waste Disposal Methods** Dispose of in accordance with local regulations.

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Contaminated packaging Do not re-use empty containers. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO/IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated
<u>ADR/RID</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

<u>International Inventories</u>	All the substances contained in this product are listed or exempted from listing in the following inventories: U.S.A. (TSCA) Europe (EINECS/ELINCS/NLP) Canada (DSL/NDSL) Korea (KECL) Philippines (PICCS) Australia (AICS) China (IECSC)
---	--

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06

Revision Date: 2015-10-13

Version 2.01

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:***

Chemical Name	Weight %	California Prop. 65
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich - 68515-49-1	10-30	Developmental

U.S. State Right-to-Know Regulations

No information available

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	Health Hazard 1	Flammability 1	Instability 0	Physical and chemical hazards - Personal protection b
HMIS	Health Hazard 1	Flammability 1	Physical Hazard 0	

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

Revision Date: 2015-10-13

Revision Note *** Indicates updated section

Abbreviations, acronyms

Version GNAM



SDS # : 083425

SYNOLAN 1000 ISO 46

Date of the previous version: 2015-07-06**Revision Date:** 2015-10-13**Version** 2.01

Legend

Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH - National Institute for Occupational Safety and Health

TLV - Threshold Limit Values

PEL - Permissible Exposure Limits

IDHL - Immediately Dangerous to Life or Health concentrations

TWA - Time Weight Average

STEL - Short Term Exposure Limits

S* - Skin notation

TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet

Version GNAM