

Version: 1.06 Revision Date 22.06.2017

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name NACOL 12 - 98

INCI Lauryl Alcohol

REACH No. 01-2119485976-15-0000

Substance name (REACH / CLP) dodecan-1-ol

1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses advised against

1.3 Details of the supplier of the safety data sheet

Company SASOL Germany GmbH

Anckelmannsplatz 1 20537 Hamburg

Telephone: +49 40 63684-1000 Telefax: +49 40 63684-3700

Information (Product safety): Telephone: + 49 (0) 23 65 - 49 47 05

Telefax: + 49 (0) 23 65 - 49 92 40

E-mail address msds-info.germany@de.sasol.com

1.4 Emergency telephone number

Emergency telephone number + 49 (0) 5 51 - 1 92 40 (GIZ-Nord Poisons Centre)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation Category 2 Causes serious eye irritation.

Acute aquatic toxicity Category 1 Very toxic to aquatic life.

Chronic aquatic toxicity Category 2 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word Warning



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Hazard statements

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

Precautionary statements

P264 Wash face, hands and any exposed skin thoroughly after handling.

P280 Wear eye protection/ face protection. P273 Avoid release to the environment.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact P305 + P351 + P338

lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a substance in the meaning of regulation (EC) 1907/2006.

COMPONENTS TO BE NAMED IN ACCORDANCE WITH REGULATION (EC) 1907/2006 AS WELL AS OTHER HAZARDOUS INGREDIENTS AND CONTAINED SUBSTANCES WITH WORK PLACE LIMIT VALUES

Dodecan-1-ol

component type: Active ingredient

EC-No.: 203-982-0 Index-No.: CAS-No.: 112-53-8

REACH No.: 01-2119485976-15-0000

Substance name (REACH / CLP): dodecan-1-ol

Eye Irrit. 2 Classification (Regulation

Aquatic Acute (EC) No 1272/2008): H400

Aquatic Chronic H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice If you feel unwell, seek medical advice (show the label where possible). Take off all

contaminated clothing immediately.

If inhaled Remove from exposure, lie down. If breathing is irregular or stopped, administer

artificial respiration. Monitor breathing, give oxygen if necessary. Consult a

H319

physician.

In case of skin contact Wash off with plenty of water.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician.



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If swallowed Consult a physician. Do not induce vomiting without medical advice. Never give

anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Risks: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Indication of any immediate medical attention and special

treatment needed

Treatment: No information available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media Water spray, Dry powder, Foam, Carbon dioxide (CO2)

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

Dangerous gases or fumes may occur in case of fire.

5.3 Advice for firefighters

Special protective equipment

for firefighters

Use personal protective equipment. Wear self-contained breathing apparatus for

firefighting if necessary.

Further information Prevent fire extinguishing water from contaminating surface water or the ground

water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment.

Special precautions In the event of transport accidents, request support from the nearest TUIS centre.

6.2 Environmental precautions

Environmental precautions Avoid subsoil penetration.

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal

binder, sawdust).

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE



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7.1 Precautions for safe handling

Advice on safe handling Wear personal protective equipment.

Advice on protection against

fire and explosion

No special protective measures against fire required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas No special storage conditions required.

and containers

Protect from frost, heat and sunlight.

Further information on storage conditions

Storage class (TRGS 510)

10-13: German Storage Class 10 to 13

Other data

Stable at normal ambient temperature and pressure.

7.3 Specific end use(s)

Specific use(s) This information is not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

National occupational exposure limits

Control parameters / Substance name	Тур	Control parameters	Update	Basis	
EPAL 12 (LAURYL ALCOHOL)	ST ESL	15	12 2010	TX ESL	
		Screening levels that have the odor designations represent the levels of constituents in the air at which the odor would be a nuisance.			
EPAL 12 (LAURYL ALCOHOL)	AN ESL	100	12 2010	TX ESL	
	Screening levels that have the odor designations represent the levels of constituents the air at which the odor would be a nuisance.			esent the levels of constituents in	

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

No data available

DERIVED NO EFFECT LEVEL (DNEL)

Substance name: dodecan-1-ol			
End Use	Exposure routes	Value	Note
Workers	dermal, Acute/short-term exposure - systemic effects	125 mg/kg	based on body weight and day
	Inhalation, Acute/short-term exposure - systemic effects	220 mg/m3	
	dermal, Acute/short-term exposure - local effects		Not relevant / not applicable
	Inhalation, Acute/short-term exposure - local effects		Not relevant / not applicable



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	dermal, long-term exposure - systemic effects	125 mg/kg	based on body weight and day
	Inhalation, long-term exposure - systemic effects	220 mg/m3	
	dermal, long-term exposure - local effects		Not relevant / not applicable
	Inhalation, long-term exposure - local effects		Not relevant / not applicable
Consumers	dermal, Acute/short-term exposure - systemic effects	75 mg/kg	based on body weight and day
	Inhalation, Acute/short-term exposure - systemic effects	65 mg/m3	
	Oral, Acute/short-term exposure - systemic effects	75 mg/kg	based on body weight and day
	dermal, Acute/short-term exposure - local effects		Not relevant / not applicable
	Inhalation, Acute/short-term exposure - local effects		Not relevant / not applicable
	dermal, long-term exposure - systemic effects	75 mg/kg	based on body weight and day
	Inhalation, long-term exposure - systemic effects	65 mg/m3	
	Oral, long-term exposure - systemic effects	75 mg/kg	based on body weight and day
	dermal, long-term exposure - local effects		Not relevant / not applicable
	Inhalation, long-term exposure - local effects		Not relevant / not applicable

PREDICTED NO EFFECT CONCENTRATION (PNEC)

Substance name: dodecan-1-ol			
Environmental Compartment	Value	Note	
Fresh water	0,0028 mg/l		
Marine water	0,00028 mg/l		
intermittent release		Not relevant / not applicable	
treatment plant	0,021 mg/l		
Fresh water sediment	1,1 mg/kg	based on dry weight	
Marine sediment	0,11 mg/kg	based on dry weight	
Soil	0,888 mg/kg	based on dry weight	
food		Not relevant / not applicable	

8.2 Exposure controls

ENGINEERING MEASURES

Provide sufficient air exchange and/or exhaust in work rooms.

PERSONAL PROTECTIVE EQUIPMENT



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ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or

ABEK-P2), in compliance with EN 141.

Hand protection The choice of an appropriate glove does not only depend on its material but also

on other quality features and is different from one producer to the other., 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., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g.

temperature).

gloves suitable for permanent contact:

Material: Nitrile rubber/nitrile latex Break through time: >= 480 min Layer thickness: 0,35 mm

Material: butyl-rubber

Break through time: >= 480 min Layer thickness: 0,5 mm

unsuitable gloves

Material: Natural rubber/natural latex

Eye protection Tightly fitting safety goggles

Skin and body protection Protective suit

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Keep away

from food, drink and animal feedingstuffs.

Protective measures Avoid contact with eyes. Wear suitable gloves and eye/face protection.

ENVIRONMENTAL EXPOSURE CONTROLS

General advice Avoid subsoil penetration.

Do not flush into surface water or sanitary sewer system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state solid; 20 °C; 1.013 hPa

Form Molten form

Colour colourless

Odour characteristic

Odour Threshold No data available

pH Justification:, Not applicable, insoluble

Melting point/range ca. 22 - 25 °C; DIN 53175



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Boiling point/boiling range ca. 255 - 265 °C

Flash point ca. 115 °C; DIN 51758

Evaporation rate Not relevant / not applicable

Justification: Solid

Flammability (solid, gas) not auto-flammable

Lower explosion limit Not applicable

Justification: Solid

Upper explosion limit Not applicable

Justification: Solid

Vapour pressure < 1,000 hPa; 20 °C

Relative vapour densityNot applicable, Justification: Solid **Density**Ca.0,82 g/cm3; 40 °C; DIN 51757

Relative density No data available

Water solubility insoluble

Partition coefficient: n-

octanol/water

log Pow: ca. 5,4; 23 °C; pH: 7,1; OECD Test Guideline 117

Ignition temperature ca. 275 °C; ASTM E 659

Auto-ignition temperature not auto-flammable **Viscosity, dynamic** ca. 9,5 mPas; 40 °C

Explosive properties Constituents do not contain chemical groups associated with explosivity.

Oxidizing properties not expected based on structure and functional groups

9.2 Other data

None known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Note Stable at normal ambient temperature and pressure.

10.2 Chemical stability

Note No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions Hazardous decomposition products formed under fire conditions.

10.4 Conditions to avoid

Conditions to avoid Direct heating, dirt, chemical contamination, sunlight, UV or ionising radiation.

10.5 Incompatible materials to avoid

Materials to avoid No data available;

10.6 Hazardous decomposition products

Hazardous decompositionNo decomposition if stored and applied as directed.



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products

Thermal decomposition Stable under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity LD50 Rat: > 2.000 mg/kg; OECD Test Guideline 401

(literature value)

Based on available data, the classification criteria are not met.

Acute inhalation toxicity LC50 Rat: > 71 mg/l; 1 h

Target Organs: Lungs

Symptoms: Salivation, Drowsiness, Loss of balance, Shortness of breath The data are derived from the evaluations or test results achieved with similar

products (conclusion by analogy). Test substance: Decan-1-ol

Based on available data, the classification criteria are not met.

Acute dermal toxicity LD50 Rabbit: > 2.000 mg/kg;

Category approach (literature value)

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Skin irritation human: not irritating; OECD Test Guideline 404

(literature value)

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Eye irritation Rabbit: irritating; OECD Test Guideline 405

Causes serious eye irritation.

Respiratory or skin sensitisation

Sensitisation Maximisation Test Guinea pig: not sensitizing; OECD Test Guideline 406

(literature value)

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity in vitro In vitro tests did not show mutagenic effects

(literature value) Category approach

Genotoxicity in vivo In vivo tests did not show mutagenic effects

(literature value)

Remarks Based on available data, the classification criteria are not met.

Carcinogenicity

Carcinogenicity The substance has been shown to be not genotoxic, therefore it is not expected to

have a carcinogenic potential.

Category approach

Reproductive toxicity

Reproductive toxicity Rat; Oral; 55-day

NOAEL ((parents)): 2.000 mg/kg (based on body weight and day) NOAEL (F1): 2.000 mg/kg (based on body weight and day)



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(literature value)

RemarksReproductive

toxicity

Based on available data, the classification criteria are not met.

Teratogenicity

NOAEL: 2.000 mg/kg (based on body weight and day); OECD Test Guideline 422

(literature value)

Remarks-Teratogenicity Based on available data, the classification criteria are not met.

STOT - single exposure

Remarks The substance or mixture is not classified as specific target organ toxicant, single

exposure.

STOT - repeated exposure

Remarks The substance or mixture is not classified as specific target organ toxicant,

repeated exposure.

Repeated dose toxicity Rat; Oral; Subchronic toxicity

NOAEL: 2.000 mg/kg (based on body weight and day); OECD Test Guideline 422

(literature value)

Aspiration hazard

Aspiration toxicity Not applicable

Further information

Mild skin irritation **Human experience**

(literature value)

Toxicological information Toxicokinetics

> The substance is poorly absorbed via skin. The substance is metabolised and excreted.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

LC50 (96 h) Pimephales promelas (fathead minnow): > 1 - 10 mg/l; flow-through Toxicity to fish

test; US EPA 1975 (literature value)

Toxicity to fish - Chronic

toxicity

study scientifically unjustified

Toxicity to daphnia and other

aquatic invertebrates

EC50 (48 h) Daphnia magna (Water flea): > 0,1 - 1 mg/l; static test; OECD Test

Guideline 202

Toxicity to daphnia and other aquatic invertebrates - Chronic

toxicity

NOEC (21 d) Daphnia magna (Water flea): > 0,01 - 0,1 mg/l; reproduction rate;

semi-static test; OECD Test Guideline 211

Toxicity to aquatic plants ErC50 (72 h) Desmodesmus subspicatus (Scenedesmus subspicatus): > 0,1 - 1

mg/l; static test; OECD Test Guideline 201

NOEC (72 h) Desmodesmus subspicatus (Scenedesmus subspicatus): 0,085 mg/l

; cell number; static test; OECD Test Guideline 201

Toxicity to bacteria

No data available

Toxicity to soil dwelling

organisms

No data available



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12.2 Persistence and degradability

Biodegradability Readily biodegradable.; > 60 %; 28 d; aerobic; OECD Test Guideline 301D

(literature value)

12.3 Bioaccumulative potential

Bioaccumulation Bioaccumulation is unlikely.

12.4 Mobility in soil

Mobility Adsorption/Soil; Koc: 17980; log Koc: 4,25; calculated

immobile

strong adsorption to soil

The substance and its relevant degradation products decompose rapidly.

12.5 Results of PBT and vPvB assessment

Results of PBT assessmentBased on available data, the classification criteria are not met.

The substance is considered to be toxic to aquatic life, but is not persistant or

bioaccumulating and therefore not classified as PBT.

12.6 Other adverse effects

General advice Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Can be incinerated, when in compliance with local regulations.

waste code of the European

Union: EWC

The waste code must be determined in agreement with the regional waste disposal authority or company. A waste code in accordance with the European Waste Catalogue (EWC) may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

 ADR
 3077

 RID
 3077

 ADN
 3077

 IMDG
 3077

 ICAO/IATA
 3077

14.2 Proper shipping name

ADR ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (1-

Dodecanol)

RID ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (1-

Dodecanol)

ADN ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (1-

Dodecanol)

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (1-



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Dodecanol)

ICAO/IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (1-

Dodecanol)

14.3 Transport hazard class

 ADR
 9

 RID
 9

 ADN
 9

 IMDG
 9

 ICAO/IATA
 9

14.4 Packing group

ADR III
RID III
ADN III
IMDG III
ICAO/IATA III

14.5 Environmental hazards

ADR Environmentally hazardous yes
RID Environmentally hazardous yes
ADN Environmentally hazardous yes
IMDG Marine pollutant yes
ICAO/IATA Environmentally hazardous yes

14.6 Special precautions for user

ADR Hazard Identification Number 90
Labels 9

Tunnel restriction code (-)

IMDG Labels 9

EmS Number 1 F-A EmS Number 2 S-F

ICAO/IATA Labels 9MI

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

Remarks No information available.

SECTION 15: REGULATORY INFORMATION

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

Occupational restrictions Employment restrictions for children and young workers in accordance with Directive 94/33/EC and the respective national provisions are to be observed.

NATIONAL/OTHER REGULATIONS

Legislation on the control of major-accident hazards

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on



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involving dangerous substances

the control of major-accident hazards involving dangerous substances.

list entry in the directive:: ENVIRONMENTAL HAZARDS; E1

Qualifying quantity 1: 100 t; Qualifying quantity 2: 200 t;

NOTIFICATION STATUS

Switzerland. Consolidated Inventory	CH INV	listed (product or constituents are listed)
US. Toxic Substances Control Act	TSCA	listed (product or constituents are listed)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	DSL	listed (product or constituents are listed)
Australia. Industrial Chemical (Notification and Assessment) Act	AICS	listed (product or constituents are listed)
Japan. Kashin-Hou Law List	ENCS (JP)	listed (product or constituents are listed)
Japan. Industrial Safety & Health Law (ISHL) List	ISHL (JP)	listed (product or constituents are listed)
Korea. Existing Chemicals Inventory (KECI)	KECI (KR)	listed (product or constituents are listed)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	PICCS (PH)	listed (product or constituents are listed)
China. Inventory of Existing Chemical Substances	INV (CN)	listed (product or constituents are listed)

Please note: the names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in chapter 3.

15.2 Chemical safety assessment

dodecan-1-ol

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H319 Causes serious eye irritation. H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Safety datasheet sections which have been updated:

- 11. Toxicological information
- 12. Ecological information
- 14. Transport information



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15. Regulatory information

Further information:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This safety datasheet only contains information relating to safety and does not

replace any product information or product specification.

Key or legend to abbreviations and acronyms used in the safety data sheet

Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route

AICS Australian Inventory of Chemical Substances ANSI American National Standards Institute ASTM American Society of Testing and Materials (US)

BCF Bioconcentration factor

CLP Regulation on Classification, Labelling and Packaging of Substances and Mixtures

Deutsches Institut für Normung DIN DNEL Derived No-Effect Level DSL Domestic Substances List EC... Effect concentration ... %

ENCS Existing Notified Chemical Substances (Japan) EWC European Waste Catalogue IATA International Air Transport Association Intermediate Bulk Container IBC

ICAO International Civil Aviation Organization IMDG International Maritime Dangerous Goods IMO International Maritime Organization ISHL Industrial Safety and Health Law (Japan) ISO International Organization for Standardization IUAPC International Union of Pure and Applied Chemistry

KECI Korea Existing Chemicals Inventory

LC... Lethal Concentration, ...% LD.. Lethal Dose, ...%

MARPOL International Convention for the Prevention of Pollution From Ships

NDSL Non-Domestic Substances List NOAEL no observable adverse effect level NOEL/NOEC No Observed-effect level/concentration NZIoC New Zealand Inventory of Chemicals

OECD Organisation for Economic Co-operation and Development

PBT persistent, bioaccumulative, toxic

PICCS Philippine Inventory of Chemicals and Chemical Substances

PNEC Predicted No-Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Règlement concernant le transport international ferroviaire de marchandises dangereuses

TG Test Guideline TRGS

Technische Regeln für Gefahrstoffe TSCA Toxic Substances Control Act very persistent, very bioaccumulative WGK Wassergefährdungsklasse

Annex

Attachments to the safety data sheet and/or lists of the identified uses for the listed substances can be downloaded using the internet links below.

dodecan-1-ol

http://www.sasolgermany.de/fileadmin/doc/productsafety/Annex/00000000100_EN_01.pdf



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